



**FOR PUBLICATION**

**DERBYSHIRE COUNTY COUNCIL**

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

**MONDAY 2 DECEMBER 2024**

**Report of the Executive Director - Place**

**Derbyshire County Council Climate Change Strategy: Annual Review of  
Progress (2024)**

## **1. Purpose**

1.1 This report provides an annual review of progress on the delivery of the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025) (the “Climate Change Strategy”), and seeks the Committee’s support to note the progress being made against:

- Each target and action within the Climate Change Strategy.
- Derbyshire County Council’s (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.

## **2. Information and Analysis**

### **Background**

2.1 As set out in the Corporate Environment Policy and the Climate Change 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 Climate Change Strategy was developed in early 2021 and approved by Cabinet on 14 October 2021 (Minute No. 166/21 refers). This report provides an annual review of progress made during 2024 against delivery of the Climate Change Strategy and the Council’s net zero targets.

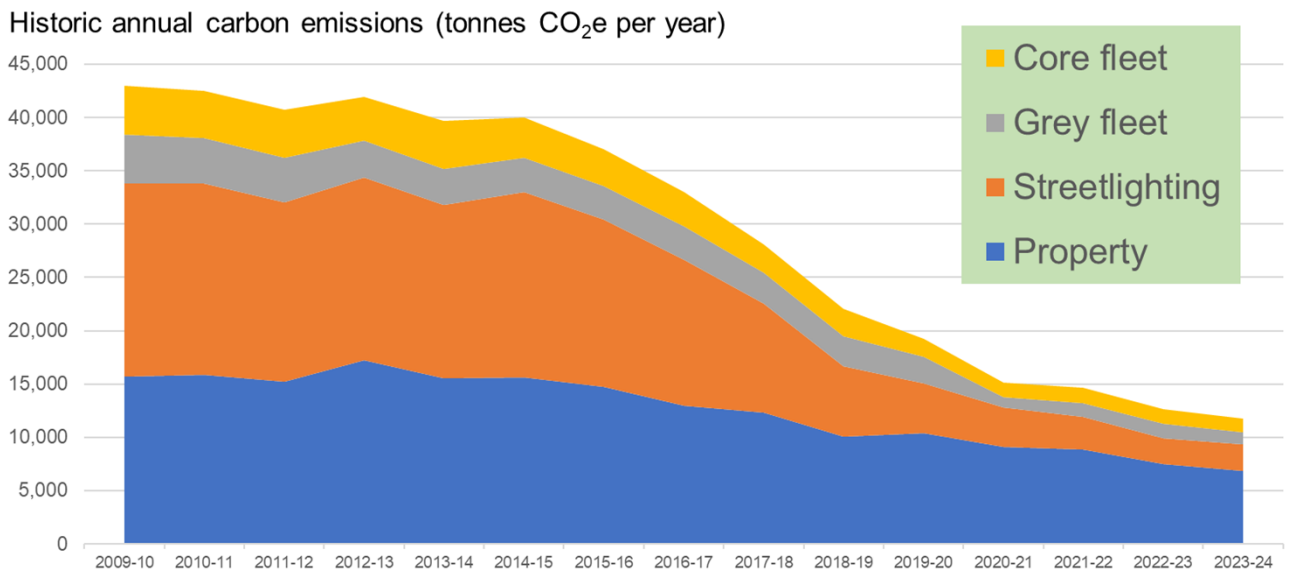
**Progress against Net Zero Targets – Council Emissions**

2.3 Council emissions are recorded and reported as tonnes of carbon dioxide and equivalent greenhouse gases (CO<sub>2</sub>e). The Council’s net zero target includes four sources of emissions:

- 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 7% between 2022-23 and 2023-24**, from 12,624 tonnes to 11,759 tonnes of CO<sub>2</sub>e. This demonstrates a **73% reduction in these emissions since the 2009-10 baseline year**, where emissions were 42,965 tonnes.

2.5 Figure 1 presents the considerable emissions reductions achieved 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 for 2023-24 against the previous year and the baseline year (2009-10), and Table 2 outlines progress to reduce emissions.

**Table 1: Summary of Council emissions (in CO<sub>2</sub>e)**

<b>Emissions source</b>	<b>Emissions in 2023-24</b>	<b>Change since previous year (2022-23)</b>	<b>Change since baseline year (2009-10)</b>
Corporate property	6,846 tonnes	8% reduction	56% reduction
Streetlighting	2,455 tonnes	3% increase	86% reduction
Core fleet	1,305 tonnes	6% reduction	72% reduction
Grey fleet	1,353 tonnes	15% reduction	75% reduction
<b>Total</b>	<b>11,759 tonnes</b>	<b>7% reduction</b>	<b>73% reduction</b>

**Table 2: Explanation of Council emissions and key activities**

<b>Emissions Source</b>	<b>Progress to reduce emissions</b>
<b>Corporate Property</b>	<p>Despite a 11% reduction in energy use from the Council’s corporate property between 2022-23 and 2023-24, carbon savings were only 8% because of a rise in the carbon intensity of UK grid electricity, which is beyond the Council’s control. If grid electricity had continued to decarbonise at the same rate as previous three years, the emissions from corporate property would have been 17% lower in 2023-24 than in 2022-23. This places a risk on the Council’s decarbonisation plans.</p> <p>The carbon savings achieved from corporate property during 2023-24 are as a result of a continued focus on property rationalisation and improved monitoring and control of energy use. Further steady emission reductions in future years are expected from ongoing property rationalisation and improved energy management.</p> <p>However, achieving savings at the magnitude needed to achieve net zero by 2032, or sooner, will not be possible without investment in renewable energy generation and decarbonisation of heat through building fabric improvements and the replacement of gas boilers with heat pumps. The Council’s current budget constraints mean that the ability to invest in such projects is uncertain and demonstrates a heavy reliance on the availability, suitability, and accessibility of external funding.</p>

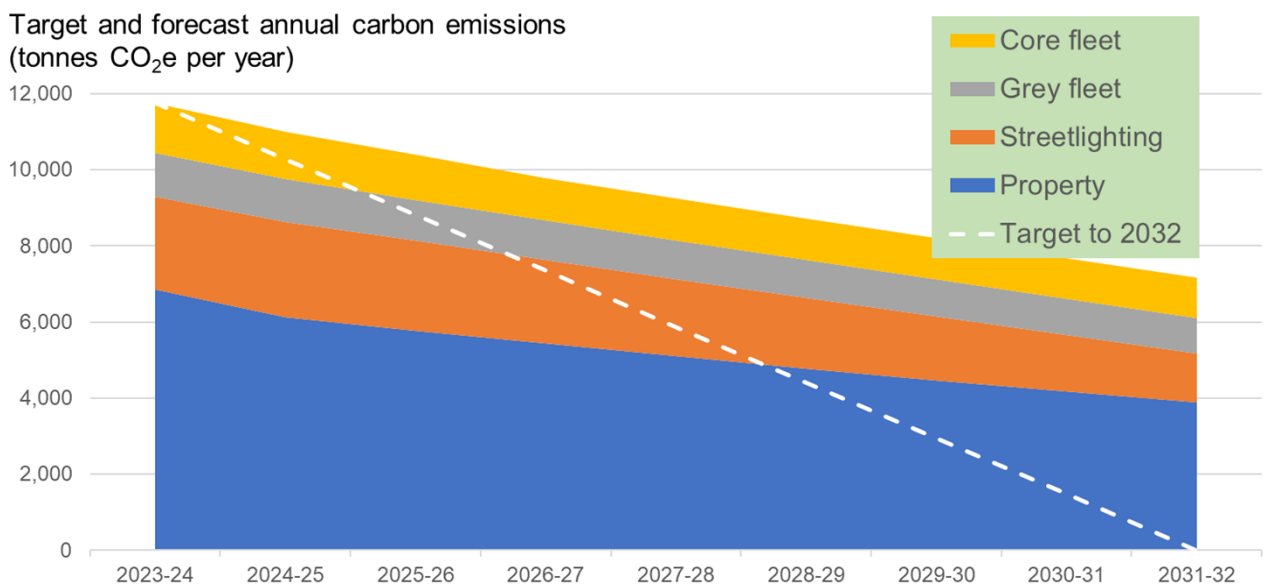
	<p>The Council has had some success in securing external funding, such as through the Public Sector Decarbonisation Fund (PSDS), but a much greater level of external funding will be needed if Council budgets are not able to support the level of decarbonisation needed. At present, the only external funding available to the Council for the decarbonisation of heat in corporate buildings is through the PSDS, which is highly competitive, is only applicable where existing boilers are at end of life, and requires having robust feasibility studies and match funding in place.</p> <p>The Council is now able to measure the energy use for electric vehicle charging at corporate buildings. This is currently around 0.4% of total electricity use but will rise over time.</p>
<b>Streetlighting</b>	<p>Despite electricity use for streetlighting being 4% lower in 2023-24 than in 2022-23, carbon emissions rose by 3%, again due to the increase in the carbon intensity of UK grid electricity.</p> <p>The streetlighting LED replacement programme is nearing completion with 99.4% of the Council's 89,000 streetlighting assets now converted to LED. The delivery of the remaining predominantly complex projects continues to progress, which includes the installation of passively safe lighting columns.</p> <p>A small further increase in streetlighting emissions (c.2%) is expected for 2024-25 due to the Council adopting new streetlighting assets. In future years any increased energy consumption should be offset by continuing improvements in LED light efficiency, grid decarbonisation and smarter controls.</p>
<b>Core Fleet</b>	<p>Good progress has been made with replacing the Council's Heavy Goods Vehicles (HGVs) with Clean Air Zone (CAZ) compliant vehicles and only a small number of non-compliant vehicles remain.</p> <p>The Council is continuing to review all fleet vehicles at the time of replacement, replacing them with the smallest and most fuel efficient alternative and prioritising electric vehicles where possible.</p>
<b>Grey Fleet</b>	<p>The reduction in grey fleet miles and emissions is significant in the light of increased demand for services in parts of Children's Services and Adult Social Care and Health. There has been a large focus on reducing grey mileage in all departments, with initiatives in place to identify services and individual employees which would benefit from using a core-</p>

	<p>fleet electric vehicles as well as behaviour change projects to encourage car share, route optimisation and alternative transport options.</p> <p>It is not clear whether further reductions in miles travelled will be possible due to high levels of demand in some service areas, so the focus will need to continue to be on a transition to electric vehicles for business mileage – both core fleet and promoting EVs as personal vehicles.</p>
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2.7 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, based on:

- modest ongoing and planned initiatives (as detailed in Table 2).
- anticipated changes in carbon conversion factors, which are influenced by national factors, such as the amount of renewable energy generated across the country.
- gradual increases in vehicle efficiency and EV ownership levels.

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. To reach this target and follow the linear line requires emissions to fall by 1,470 tonnes per year – a 13% reduction next year and greater percentage reductions in following years.



**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 2 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 7,160 tonnes CO<sub>2</sub>e by 2031-32**. Over 50% of these residual emissions will be from the Council's corporate estate.
- 2.10 Reducing Council emissions by the necessary amount to achieve net zero by 2032, or sooner, requires the following:
- a. A step-change in emissions reduction performance, particularly for decarbonising heat in buildings and the reduction in travel together with the electrification of travel by car and vans.
  - b. The development and implementation of plans to tackle residual emissions through renewable energy generation on and used in Council-owned buildings (replacing or reducing the need for grid electricity in these buildings), and by offsetting emissions through renewable energy generation (solar and/or wind power) on Council-owned land (and then the energy sold to the grid or a nearby user) and nature-based activities such as tree planting.
  - c. National delivery of government policy, which the Council has little or no control over, but is intrinsic to achieving net zero targets, e.g. the national target for fully decarbonising the electricity grid.
- 2.11 Supplementary work continues 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 continue to be impacted by the Council's current financial situation. Any reduction in 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 Green Finance) and delivery options continue to be assessed to understand the implications of the Council taking different approaches to tackling the four emission sources, particularly for decarbonisation of the corporate estate where high levels of investment are required.
- 2.13 The Council is, since May 2024, a constituent member of the East Midlands Combined County Authority (EMCCA) with Derby City Council, Nottinghamshire County Council and Nottingham City Council. With Net Zero and Environment being a priority workstream for EMCCA,

it is anticipated that there will be a greater level of collaboration and funding available over time for projects that support the decarbonisation of the region. Regional priorities and initial projects are starting to emerge, which includes the development of a Local Area Energy Plan for the EMCCA region that will set out a pathway for decarbonisation of the region's energy system. The Council is working with its partners across EMCCA to ensure the benefits from the new combined authority are maximised for the Council and the people of Derbyshire.

### **Council Scope 3 Emissions**

- 2.14 Scope 3 emissions are indirect emissions that occur in the upstream and downstream activities of an organisation including purchased goods and services, commuting, waste disposal, hired vehicles, leased assets and water supply.
- 2.15 As Scope 3 emissions are thought to typically account for 85-95% of any organisation's total emissions, understanding them is important to ensure emissions are reduced whilst also delivering cost savings and wider co-benefits.
- 2.16 Two types of data set have been assessed to establish the scale and nature of the Council's Scope 3 emissions, with the findings summarised in Appendix 2:
- Volumetric data (e.g. litres, tonnes, miles) where it is available ("bottom-up" analysis)
  - Spend data, based on the amount of money spent on suppliers grouped by the type of products or services provided to the council ("top-down" analysis).
- 2.17 Bottom-up analysis has been possible for a small number of areas where the Council has good records of weights, volumes or amounts of items consumed, principally refrigerant gases, fuel for emergency generators, business travel and waste produced at Council sites. Energy consumed by Council-maintained schools is also counted in this category.
- 2.18 Top-down analysis was provided by data from the Oxygen Finance Carbon Insights Tool using the Council's published 'transparency spend' data (payments of over £500) and applying a carbon intensity factor based on the activity undertaken through a contract. This analysis highlights the areas where the Council's purchasing activities are likely to have the highest emissions.

2.19 Key findings from an assessment of Scope 3 emissions for the past four years are as follows:

- Scope 3 emissions continue to account for approximately 95% of the Council’s total emissions, most of which is from the goods and services that the Council buys.
- Scope 3 emissions reduced by 29% between 2022-23 and 2023-24 (from 340,000 tonnes to 240,000 tonnes). This is due to both reduced spend and suppliers taking steps to reduce their own carbon emissions.
- The three service areas with the highest Scope 3 emissions (72-82% of the total) are health and social care, waste and environment, and highways and transport.
- A list has been compiled of the most significant Scope 3 suppliers and work is ongoing to engage with these suppliers and seek to mandate or ask for carbon reduction within contracts.

### **Progress against net zero targets – Derbyshire emissions**

2.20 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 local authority areas. 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 2022 calendar year, so does not represent any changes over the past two years and is provided in Table 3.

**Table 3: Derbyshire’s emissions for 2022 and compared to previous year (2021) and baseline year (2005)**

Source of emissions	2005 (kt CO <sub>2</sub> e)	2021 (kt CO <sub>2</sub> e)	2022 (kt CO <sub>2</sub> e)	Change (2021-2022) (kt CO <sub>2</sub> e)	% change (2021 to 2022)	% change (2005 to 2022)
Industry	4,309	3,677	3,557	-120	-3%	-17%
Commercial	968	532	541	+9	+2%	-44%
Public sector	245	118	107	-11	-10%	-56%
Domestic	2,032	1,253	1,074	-178	-14%	-47%
Transport	2,077	1,836	1,880	+44	+2%	-10%
Agriculture	882	766	748	-18	-2%	-15%
Waste management	479	280	320	+40	+14%	-33%
<b>Total</b>	<b>10,992</b>	<b>8,461</b>	<b>8,226</b>	<b>-236</b>	<b>-3%</b>	<b>-25%</b>

- 2.21 The data shows that, following a post-covid increase in emissions between 2020 and 2021, there was a 3% reduction in Derbyshire's emissions between 2021 and 2022. This is in line with national trends.
- 2.22 Waste emissions increased by 14% between 2021 and 2022 (due to an increase in landfill emissions) and emissions from commercial sources and transport increased by 2%. All other sectors had reduced emissions between 2021 and 2022, the largest reductions being public sector (10%) and domestic (14%). Most of these changes are consistent with national trends, except the rise in commercial emissions in Derbyshire, and the reason for this is not known.
- 2.23 The total emissions reduction for the County between 2005 and 2022 is 25%. In comparison, the UK's total emissions reduced by 43% during the same period. This difference is mostly due to industry's contribution to Derbyshire's overall emissions, which was 42% in 2005 and 44% in 2022. Of these industrial emissions, Derbyshire's large industrial installations, such as the mineral products industry, account for almost 70%. In comparison, industry accounted for 21% of the UK's emissions in 2005 and 17% in 2022. Furthermore, emissions from industry have reduced by 54% between 2005 and 2021 when looking at the whole UK, whereas they have only reduced by 17% for Derbyshire's industry over the same period.
- 2.24 The Council is involved in a wide range of projects that are supporting a continued reduction in the County's emissions. This includes forming a '*A collaboration to achieve Net Zero Memorandum of Understanding (MoU)*' with the County's mineral products industry in April 2023. The MOU includes a commitment for the Council and the mineral products industry to "*work together to accelerate near-term action to reduce carbon emissions through renewable energy generation and supply; efficient industrial processes, technology, and logistics; carbon capture, usage, and storage; and securing private / public sector investment in net zero infrastructure*". Since its formation, this partnership has been lobbying government for systemic change on aspects that have an impact on the industry's ability to decarbonise, such as planning policy restrictions and national grid constraints that impede renewable energy project development. This work has also included strengthened areas of collaboration with the mineral products industry on topics such as green skills and employment and sustainable transport.
- 2.25 Decarbonisation of the energy system is also a key factor in reducing the County's emissions and the Council is taking steps to support an acceleration in this work. This includes the publication of a Spatial Energy Study in 2022, which sets out opportunities for renewable and

low carbon energy generation and use across Derbyshire and being a project partner in the development of a Local Area Energy Plan (LAEP) for the EMCCA region. This is a major piece of work and once developed, the data driven and evidence based LAEP will provide a decarbonisation route for the region's energy system and help to support local and national net zero ambitions and targets.




2.26 Furthermore, through the EMCCA, new funding is emerging for projects related to housing decarbonisation and urban resilience. The Council is working closely with EMCCA's other constituent authorities to ensure the benefits to the region from investment in climate change projects is maximised and collaboration with and across all sectors is encouraged.

### **Review of Strategy Targets and Actions**

2.27 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

2.28 There are **27 targets** within the Strategy, with progress against each of these summarised in Table 4. 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, the Council is therefore 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 Table 4.

	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 4: Summary of progress made against each target in the Climate Change Strategy**

<b>COUNCIL ESTATE AND OPERATIONS</b>		
<b>Target</b>	<b>Status</b>	<b>Summary of Progress</b>
By 2022 all Derbyshire streetlighting will be replaced by LEDs		The streetlighting LED replacement programme is nearing completion with 99.4% of the Council’s 89,000 streetlighting assets now converted to LED. The delivery of the remaining predominantly complex projects continues to progress, which includes the installation of passively safe lighting columns with LED technologies. The LED replacement programme has generated average energy cost savings (at today’s prices) for the Council of £6m per year since 2016.
The Council will switch its existing electricity tariff to a 100% renewable electricity tariff by 2023 with an optional buy-in for schools.		The Council is contracted to its current energy supplier through the Crown Commercial Service (CCS) Framework until 2028. The cost of Renewable Energy Guarantees of Origin (REGOs) on top of the standard tariff, which would not guarantee increased renewable energy generation locally or nationally, from the current supplier would be around £85,000 per year for all properties (excluding schools) based on current expected prices (for 2025-26). There are no <a href="#">Power Purchase Agreement (PPA)</a> options available from the current supplier as of Sept 2024. PPAs offer a better option than a renewable tariff as it directly relates to local renewable energy generation but requires longer term commitment and higher costs. The situation continues to be monitored.
Reduce emissions from heating buildings to less than 700tCO <sub>2</sub> e by 2032.		<p>Energy use across the corporate estate reduced by 11% between 2022-23 and 2023-24, the largest proportion of this reduction was from heating fuels (gas, oil and propane). Most of the emissions reductions have resulted from rationalisation of the corporate estate. The Council’s Asset Review process is identifying further buildings for disposal, which will further reduce heating demand.</p> <p>A review of poorly performing buildings has identified further savings that can be achieved through retrofit projects if funding is available. However, the Council’s budget pressures are having an impact on this with proposals for capital projects to install heat pumps at</p>

		<p>suitable locations paused. Furthermore, along with many other councils across the UK, the Council has been unsuccessful with recent applications 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, wastage and opportunities to reduce use. However, to achieve the target will require a significant investment in the decarbonisation of heating systems by switching from fossil fuels to cleaner renewable alternatives.</p>
<p>Quadruple existing microgeneration of renewable energy on Derbyshire County Council's estate to 200 MWh by 2032.</p>		<p>40 Council owned buildings (including schools) currently have solar panels installed with an annual output of 278 MWh for 2023-24, of which 94 MWh is from non-school sites.</p> <p>Due to the Council's budget pressures, proposals to install £1m of new solar panels on corporate buildings during 2024-25 has been paused. However, alternative funding strategies are being progressed, specifically through leasing out existing roof space on corporate buildings to an external partner and purchasing the renewable energy generated via a PPA. In these arrangements the Council would not own the solar panels but would retain the option to buy the installation(s) in the future. Work is in progress to undertake a pilot project on three sites which could generate an additional 112 MWh of renewable energy per annum by 2025, thereby achieving the overall target.</p>
<p>Replace 20 Derbyshire County Council vans or cars per year in the core fleet with zero emission vehicles (ZEV) or low emission vehicles (LEV) from 2022.</p>		<p>A core fleet replacement programme is run continuously and refreshed annually providing the opportunity to target vans/cars that may transition from diesel to zero or low emission vehicles by 2032. Currently the Council's fleet has five electric vans and ten electric pool cars. 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 needs to include additional charge points at County Hall and at the six Council depots where scheduled replacement vehicles are sited. Collaborative work between Fleet, Corporate Property, Sustainable Travel and the service areas that require the replacement vehicles is</p>

		<p>ongoing to progress delivery of the replacement programme. 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 being installed at strategic hubs where dedicated electric fleet vehicles can be located.</p>
<p>Replace all Derbyshire County Council HGVs with low emission vehicles by 2032.</p>		<p>Following the delivery of 10 new gritting vehicles in September 2023, an additional 15 new replacement gritting vehicles have been delivered and will be in service for the winter season 2024. Additionally, three new smaller HGVs have been put into service with Highways and Corporate Property, all being Euro 6 CAZ compliant. The Council now operates 73 HGVs within its fleet. 68 of these HGVs are Clean Air Zone (CAZ) compliant with plans to dispose of the five remaining non-CAZ compliant HGVs in 2025-26. Four of these vehicles sit within the Library Service and are to be replaced with smaller low emission light commercial vehicles (LCVs) and electric cars/vans with the remaining HGV in Highways to be disposed of without replacement. Work to explore the use of hydrotreated vegetable oil (HVO) diesel from bunkered tanks at depots is to be carried out in 2025-26, which can reduce emissions by up to 85%.</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>A review of Scope 3 emissions was completed and 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. A top-down analysis of spend data has identified the areas of council activities likely to have the largest carbon emissions. Appendix 2 provides a summary of this analysis. This allows the Council to identify the areas of spend and groups of suppliers that are most significant, thereby establishing the areas, contracts and suppliers to focus on. Due to the scale and complexity of Scope 3 emissions, a target date of 2050, or sooner, is currently proposed, in line with UK net zero commitments. A further review and update, if necessary, of the target date will be included as part of the development of a new Climate Change Strategy for the Council from 2026 onwards.</p>

<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.</p>		<p>The Council undertook a detailed scoping project in 2023, which involved consultation with Derbyshire Schools and school leaders, to identify what support schools require to help them on their climate change journey. The findings from this study have been used to shape a proposed strategic approach to supporting schools with tackling climate change. A report on the proposed approach was supported by the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction in July 2024 and the next steps are now being progressed, which includes developing a more coordinated approach to supporting school decarbonisation across service areas, and strengthened messaging and signposting to external advice, funding and support.</p> <p>The Council has a school estate decarbonisation programme. This has been impacted by the Council's budget pressures, although has delivered boiler replacements to eight of the Council's most energy inefficient maintained schools over the past 12 months.</p> <p>Through the ModeShift Stars programme all schools have access to officer support and resources that support schools in creating, developing and delivering sustainable travel plans and active travel initiatives. The Schools Catering Service has also been developing a range of sustainability initiatives, including on food waste reduction and sustainable procurement.</p>
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**LOW CARBON ECONOMY**

Target	Status	Summary of Progress
<p>Reduce manufacturing and construction emissions by 70% by 2035 (against 1990 levels) through energy efficiency improvements and</p>		<p>National data from the <a href="#">Climate Change Committee</a> 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 recently through the Green Entrepreneurs Fund. Large scale Carbon Capture, Utilisation and Storage (CCUS) is being proposed through the Peak Cluster project, which</p>

<p>expansion of Carbon Capture, Utilisation and Storage (CCUS) technologies, and promotion of fuel switching.</p>		<p>would enable the removal of an estimated quarter of Derbyshire’s annual emissions. If approved, construction would begin in 2026 with operations from 2030.</p>
<p>All commercial efficiency renovations complete by 2030 to be in line with UK government’s industrial and commercial energy consumption reduction target of 20%.</p>		<p>Data from the <a href="#">Department for Energy Security and Net Zero</a> shows that emissions from Derbyshire’s commercial sector have reduced by 44% and emissions from industry have reduced by 17% since the 2005 baseline year.</p> <p>Energy efficiency improvements in commercial buildings are largely driven by national legislation and investment. For example, the requirement for commercial buildings to have 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 further 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>Undertake a feasibility assessment to understand the opportunities for renewable energy developments across the County and support the development of commercial</p>		<p>This target has been achieved through:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• The development of a Derbyshire Spatial Energy Study (published in September 2022) to identify the scope for medium to large scale renewable technologies, to help guide planning policy and decision making.</li> </ul>

<p>scale developments where appropriate, by 2023.</p>		<ul style="list-style-type: none"> <li>• The commissioning of a Local Area Energy Plan (LAEP) for the region. When complete in 2027 this will set out a pathway for decarbonisation of the region's energy system.</li> </ul>
<p>24,000 skilled green jobs to be created in Derbyshire by 2030 to help reach net zero emissions and enable our local economy to grow and flourish.</p>		<p>PwC's <a href="#">Green Jobs Barometer</a> presents a regional view of the status of green jobs in Great Britain. The latest data from 2023 shows that 2.2% of all jobs created in the East Midlands have been categorised as green. This makes the East Midlands the 5<sup>th</sup> highest out of 12 regions in the UK and at a similar level to the previous year. Additionally, as part of the Council's support for growing the green skills sector, a quarterly analysis of green skills, jobs and vacancies in Derbyshire is carried out, this indicates a continuing growth in this job market. The latest quarterly analysis (Q1 2024-25) indicates that 3.9% of all job vacancies in that quarter required green skills, which compares with 3.6% for England.</p> <p>This evidence is enabling the Council to better understand the demand for green skills and areas where supply and demand are misaligned, thereby strengthening the case for partnership working with other organisations, such as the Midlands Net Zero Hub (MNZH), to maximise the green skills and employment opportunities for the County. The Council's Green Entrepreneurs Fund has also supported reskilling for the green economy through scholarship grants for individuals.</p> <p>The Council has also been part of the collaboration between East Midlands Chamber and Bolsover District Council's Green Skills Roundtable discussions to support a partnership between employers, further education colleges and local authorities to support the growth and effective upskilling of employees in green skills, especially those in high demand such as the housing retrofit sector. As part of this, the Council is supporting Bolsover District Council in the delivery of a Net Zero Building Retrofit Skills Plan for the region.</p> <p>Green skills and employment are also an area of focus of EMCCA and the Council continues to work closely with partners to develop this important regional workstream.</p>

<p>All new commercial building developments to be net zero carbon by 2030, and all commercial and industrial properties to be net zero by 2050</p>		<p>UK Net Zero Building Standards to due to be finalised and implemented in 2025 and, in the meantime, the Government has introduced an interim uplift of standards that subject new commercial developments to energy and ventilation 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.</p>
<p>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>		<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 is supporting the development of a pipeline of skilled construction workers through training provided by Chesterfield College and Derby University.</p> <p>The Council promotes the MNZH's 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 DESNZ, providing opportunities for upskilling the local retrofit workforce across a range of areas that include heat pump installation and heat network development.</p>

		The Council is also supporting Bolsover District Council in the creation of a Net Zero Building Retrofit Skills Plan, which is assessing the scale and shape of the current retrofit supply chain and identifying the necessary steps to develop local supply chain capacity to be able to deliver net zero targets across the region.
<b>DECARBONISING THE DOMESTIC SECTOR</b>		
<b>Target</b>	<b>Status</b>	<b>Summary of Progress</b>
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>Although the Council has no direct obligation or duty under the Future Homes Standard, the inclusion of ambitious targets within Local Plans will continue to be encouraged. The Climate Change Planning Guidance and associated assessment metric, developed in collaboration with the district and borough councils, is also being used to inform the measures that may be implemented to reduce the climate change impact of new developments. These resources 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>
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 two-year Home Energy Advice Team (HEAT) pilot project, funded by Government, is providing</p>

		<p>support and advice on energy efficiency retrofitting to private homeowners who do not fall into the low-income category across Derbyshire and Nottinghamshire. This HEAT programme supports homeowners in the 'able to pay' market to make the correct decisions around the installation of energy efficiency measures and low carbon heating for typical house architypes.</p> <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.</p>
<p>All owner occupiers and renters to have access to education and training programmes to decarbonise their homes by 2025.</p>		<p>In partnership with other councils across Derbyshire and Nottinghamshire, funding has been secured to deliver advice and support to residents on energy efficiency retrofitting – the HEAT project, as referenced above. This project includes the development of Derbyshire and Nottinghamshire focussed guidance, case studies and advice, and a revision of the <a href="#">'Everybody's Talking About Climate Change'</a> website to provide location-specific information on retrofit which will complement information available nationally.</p> <p>Through the HEAT project workshops and webinars are also available to raise awareness and support homeowners understanding of typical energy efficiency measures, low carbon heating options, advice for installers and impartial advice for 'hard to treat' homes.</p> <p>The Council also provides online energy advice and signposts to external support to help residents reduce their fuel bills and increase the energy efficiency of their homes.</p>
<p>At least 20% of domestic buildings to have PV installed by 2030.</p>		<p>Research from <a href="#">MCS</a> shows that, domestic rooftop solar panel levels across Derbyshire vary across districts, with the highest level being in Derbyshire Dales (9% of homes having solar panels installed) and the lowest level being in the High Peak (4% of homes having</p>

	<p>solar panels installed). Installation rates have fallen slightly during 2024 after a peak in growth between 2022 and 2023.</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. Introduced as part of the Building Regulations 2021 uplift, the Future Housing Standards aim to ensure new homes are zero carbon ready. A pivotal aspect of this is the integration of solar PV systems, which need to be mandated as a standard feature in new housing developments to meet this 20% target.</p> <p>Delivery of the Council's Homes Fit for the Future Action Plan, the HEAT project, and the partnership with MNZH and EMCCA on home retrofit upskilling support an increase the uptake in PV installations.</p>
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**TRANSPORT, TRAVEL AND INFRASTRUCTURE**

Target	Status	Summary of Progress
All new cars and vans in the County to be zero emission vehicles by 2030.		<p>In March 2024 there were 13,719 electric vehicles registered in Derbyshire and a further 5,087 plug-in hybrids. This represents approximately 3.2% of all cars and vans currently registered in the County.</p> <p>In 2023-24 the sale of electric and plug-in hybrid cars in the UK was similar to the previous year at 17.8% of all new car registrations in the UK<sup>1</sup>. The number of electric vans as a proportion of all new vans in the UK slowed in 2024 compared to the previous year<sup>2</sup>.</p>

<sup>1</sup> <https://www.zap-map.com/ev-stats/ev-market#:~:text=What%20is%20the%20electric%20car,%3B%20a%20growth%20of%2018%25>.

<sup>2</sup> <https://www.fleetnews.co.uk/news/market-share-for-electric-vans-falls-despite-registrations-increasing#:~:text=In%20April%2C%20battery%20electric%20van,net%20zero%2C%20says%20the%20SMMT>.

		<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 144,000 properties across Derbyshire by 2035.</p>		<p>Data from the Department for Transport shows that, at the end of April 2024 there were 617 publicly available EV charging points in Derbyshire, up from 274 in July 2022. This equates to 59 publicly available EV charging points per 100,000 of population in Derbyshire, compared to an average of 96 in the UK as a whole. This difference is partly due to the County's largely rural nature, meaning that suitable sites can be challenging to identify.</p> <p>A study into potential demand across the County and an assessment of preferred locations and types of charge points needed to meet demand has been completed through an online survey and in collaboration with all Derbyshire district and borough councils. The findings have now been incorporated into a detailed delivery plan and will see an estimated 2,500 lamp post chargers, 700 on-street residential chargers as well as a number of rapid chargers being installed across the County, starting in 2025.</p> <p>Research suggests that only 2% of UK homes have charge points installed, this equates to an estimated 7,000 homes in Derbyshire. The updated Building Regulations for England (introduced in June 2022) is starting to facilitate a growth in charging infrastructure at private properties. UK Government funding is being made available for households with no off-street parking, using cross pavement type charging, although at present no government guidance has been issued to councils on how they should respond to requests or what liabilities, maintenance and insurance is required by councils for this type of charging.</p>

<p>Double the number of people in Derbyshire cycling at least twice in a 28-day period:</p> <ul style="list-style-type: none"> <li>• Cycling for leisure: from 10.1% in 2015-16 to 20.2% in 2030-31</li> <li>• Cycling for travel: from 5.3% in 2015-16 to 10.6% in 2030-31</li> </ul>		<p>Data on cycling trends is collected through the Sport England <a href="#">Active Lives Survey</a>. This data shows that, between 2021-22 and 2022-23 (the most recent data available), 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 3.8% to 4% during the same period.</p> <p>However, the Council is directly supporting this work through increasing the length and condition of the Key Cycle Network, increasing the number of schools participating in Modeshift Stars programme (and therefore implementing cycle to school initiatives) and, together with partners, developing and delivering the region's Local Cycling and Walking Infrastructure Plan (LCWIP).</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>The Department for Transport's bus passenger figures for 2023-24 will not be available until the end of 2024. However, the figure for 2022-23 was 16.8m, up from 14.2m the previous year, and provisional data from bus operators indicates that there has been a further rise in 2023-24.</p> <p>During 2023-24 and 2024-25 there has been considerable activity to implement Bus Service Improvement Plan (BSIP) projects. This has included enhancement to over 25 existing bus routes through providing increased frequencies, longer hours of operation, lengthened routes to new destinations and extended hours of operation. New innovative services have also been introduced including the Peak Sightseer open top bus in the Peak District aimed at tourists accessing the national park. Other projects have included introducing a flat £1.50 fare for young people aged 11-19 who have a b line card, bus priority measures at traffic signals to improve reliability and journey times, upgrades to transport hubs including the complete rebuilding of Alfreton bus station, more real time information signs at bus stops and improvements to online information provision.</p>

		<p>Following the successful bid for Zero Emission Bus Regional Areas (ZEBRA) funding 57 electric buses will be introduced on to a variety of services operated by Stagecoach from its Chesterfield depot during 2025.</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>A Hydrogen Fuelled Waste Collection project has been completed that included the conversion of two refuse collection trucks powered by a hydrogen and diesel blended fuel and a mobile hydrogen refuelling point established at South Derbyshire District Council's waste depot in Swadlincote. This project was completed in June 2024 and included a cost benefit analysis of the operational use of hydrogen as a fuel for local authority heavy transport use. This pilot project concluded that although hydrogen is a safe and operationally feasible alternative fuel to diesel for refuse trucks, the cost of hydrogen and the refuelling infrastructure required is not commercially feasible without additional funding.</p> <p>Some of the region's leading organisations have formed an industrial partnership called East Midlands Hydrogen. This consortium, co-chaired by EMCCA, is an inland hydrogen cluster that aims to accelerate the development and attract investment to support the growth of hydrogen production, distribution and industrial use across the region.</p> <p>In Derby City work continues on a scheme to partner with the private sector to deploy hydrogen powered buses on services between Derby and surrounding Derbyshire market towns.</p>
<p>Reduce HGV emissions in the County by 50% by 2035 against baseline.</p>		<p>UK government data for 2021 (the most recent data available) shows that emissions from HGVs was 21 MtCO<sub>2</sub>e and accounted for 19% of total road transport emissions. This showed no reduction from the previous year, although emissions have fallen by 21% since 2005.</p> <p>The Council is engaging with relevant groups through EMCCA and East Midlands Hydrogen to tackle this transport issue. The Council is also collaborating with the County's</p>

		mineral products industry to explore solutions to reduce HGV emissions through a reduction in vehicle mileage and the use of more sustainable vehicles.
<b>WASTE</b>		
<b>Target</b>	<b>Status</b>	<b>Summary of Progress</b>
Reduce household waste production by 20% by 2025 against 2015 baseline.		<p>During 2024 there has been a small increase in overall household waste arisings, this is mainly due to post-Covid “new normal” resident behaviours and work styles i.e. more working from home thereby generating more household waste.</p> <p>The Council, as Waste Disposal Authority, runs campaigns and, where possible, does so in partnership with Waste Collection Authorities (WCAs) and contractors. The Council has promoted several initiatives through social media (vape recycling, re-use initiatives for items such as paint). The Council has also opened its first re-use shop at the Bolsover Household Waste Recycling Centre (HWRC), which has diverted 40.85 tonnes of waste into re-use since opening in March 2024. Furthermore, the Council in partnership with AWM (the Council’s Waste Disposal Contractor) has made available Virtual Reality headsets for WCAs and schools, providing virtual and augmented reality content relating to waste management activities.</p> <p>The Council is and will continue to work closely with WCAs to design and deliver collaborative 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), which includes household waste and business waste collected by local authorities, sent to landfill in Derbyshire has reduced from 27.5% in 2014-15 to 1.4% as of June 24.




No more food and garden waste sent to landfill by 2030.

Whilst 98.6% of all LACMSW waste in Derbyshire is currently being diverted from landfill, diverting all food and garden waste from landfill by 2030 requires either 100% availability of, and participation in, food waste collections, or 100% diversion of the waste into Energy from Waste (EfW). Based on current and planned local EfW infrastructure, the latter is not considered realistic within the target timescale.

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 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.









\* 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.

2.29 There are **32 priority actions** within the Strategy, with the current delivery status of each of these provided in Table 5. 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

2.30 Table 5 shows that, at the end of Q2 2024-25, 19 (59%) of the priority actions are on track or complete, with the remaining 13 (41%) under close monitoring and review due to some risk to achieving timetable and/or outcome.

**Table 5: Status of each priority target in the Climate Change Strategy**

<b>COUNCIL ESTATE AND OPERATIONS</b>		
<b>Ref</b>	<b>Priority Action</b>	<b>Status</b>
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.	
<b>LOW CARBON ECONOMY</b>		
<b>Ref</b>	<b>Action</b>	<b>Status</b>
10	Develop a Renewable Energy Strategy/Spatial Energy Study 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	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.	
<b>DECARBONISING THE DOMESTIC SECTOR</b>		
<b>Ref</b>	<b>Action</b>	<b>Status</b>
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.	
<b>TRANSPORT, TRAVEL AND INFRASTRUCTURE</b>		
<b>Ref</b>	<b>Action</b>	<b>Status</b>
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.	
<b>WASTE</b>		
<b>Ref</b>	<b>Action</b>	<b>Status</b>
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

- 2.31 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 full in the detail provided above and are contributing to the Council's climate change and wider sustainability objectives.

### Strengthening the Council's Approach to Tackling Climate Change

- 2.32 The Council's **Corporate Environment Policy** has been reviewed and updated to reflect recent changes to legislation, national policy and environmental standards, and the Council's current corporate commitments and ambitions with regards to tackling climate change, conserving the natural environment and wider sustainable development. This update has also included a stronger alignment of the policy with the United Nations Sustainable Development Goals (UN SDGs). The next review and update of the Corporate Environment Policy will be in 2026.
- 2.33 Good progress is being made in **reducing the Council's grey (business) mileage**. This includes identifying those services that undertake particularly high levels of grey mileage and co-developing interventions and projects with these services to reduce the mileage. Specific projects have included the provision of dedicated EV pool cars and the associated charging infrastructure for Children's Services teams based at the Clay Cross Hub. This has been accompanied by a behaviour change programme to encourage use of the EVs and to improve journey planning. Four other locations have been identified by Children's Services and Adult Social Care and Health for dedicated EVs and charging infrastructure and will be progressed once the benefits from the Clay Cross Hub project have been analysed. Other work has included promoting sustainable travel options (public transport, active travel etc) at the new Chesterfield Quad to reduce the pressure on car parking and deliver sustainability benefits.
- 2.34 The Climate Change Team and Corporate Property's Energy Team have co-designed a stakeholder engagement and behaviour change programme called **Energy Champions** to support a reduction in energy consumption across the corporate estate. This has involved a group of employee volunteers coming together from across the Council to promote and encourage energy efficiency with colleagues, assist in implementing energy saving initiatives, and act as local key contacts for energy-related issues within a particular building. This initiative has also been rolled out to the Council's maintained schools and provides both on-going energy monitoring data and bespoke carbon and energy

management advice, helping school staff to financially plan and mitigate against high energy costs and reduce the school's carbon emissions.

- 2.35 Recognising that there are likely to be residual emissions from the Council's estate and operations that cannot be reduced to zero by the Council's net zero target date of 2032, or sooner, work has been undertaken to review the options available to the Council to **offset any residual emissions**. This has included a review of renewable energy opportunities, nature-based solutions (such as tree planting) and more novel and innovation options, such as biochar, Carbon Capture, Utilisation and Storage (CCUS) and enhanced rock weathering. This work is being used to develop an Offsetting Framework and Action Plan for the Council during 2025, setting out the preferred solutions and implementation requirements (such as funding, timescales, partnership working etc.).
- 2.36 A comprehensive **climate change training** programme for employees and Elected Members continues to be delivered. An online climate change induction module was made part of the standard induction process for new employees in 2023 and added as mandatory training requirement for all existing employees in 2024. As of 5 November 2024, 5,955 employees had completed the induction module with over 90% rating it as "Good" or "Excellent". Facilitated "Climate Change – Everybody's Business" workshops continue to be delivered approximately nine times per year and are open to all employees. Bespoke training workshops have also been delivered to Live Life Better Derbyshire and the Learning and Development team to integrate climate action more deeply into their activities.
- 2.37 The Council's **Graduate Cohort**, who are based in various services across the Council, have been working together on a group project for two days per month during 2024 to review and update the Council's Climate Change Engagement Plan and to develop and deliver four engagement-focussed projects that align with the Council's climate change and nature positive ambitions and objectives. These projects include engaging with schools on food waste reduction and identifying effective ways of engaging with the agricultural sector on nature recovery and conservation.
- 2.38 **Adapting to Climate Change** is a high rated risk on the Strategic Risk Register, emphasising that more and urgent action is needed to address the risks associated with a changing climate, particularly the increased frequency and severity of severe weather events (flooding, heatwaves, drought, storms etc.). A project has been undertaken to review and capture the climate change risks facing the Council. This

included a series of workshops with services to establish key risks and identify measures to adapt and build resilience within service delivery. The findings are being used to develop an implementation plan for 2025 onwards and will inform the Council's first national reporting to government on adaptation in late 2024. The Council has also been leading discussions with the city, county, district and borough councils across EMCCA and the Environment Agency, to scope a programme of collaborative work on climate risk and adaptation across the region. This would enable regional vulnerabilities to be better understood and projects and areas of focus (including potential funding streams) to be defined.

### **Supporting County-Wide Decarbonisation**

- 2.39 The Council continues to collaborate with other local authorities across the EMCCA region through the Innovate UK funded two-year **Fast Followers project**, which aims to accelerate progress on the region's net zero ambitions and is designed to complement and feed into the Net Zero and Environment workstream of EMCCA. This includes the development of consistent and strengthened climate change messaging and support to citizens and businesses across the region through a series of events, the development of technical guides on low carbon technologies and approaches, and the piloting of a Green Rewards app in parts of the County to engage citizens in undertaking sustainable behaviours and consumer choices.
- 2.40 The Council continues to support the County's network of **community energy groups**, recognising that these groups have a significant role to play in decarbonising Derbyshire. This includes supporting Derbyshire Dales Community Energy in developing a more joined-up approach to community energy across the County, following a grant awarded to the group from the Council's Derbyshire Grants scheme in 2022-23. The Council also actively supports these groups and their projects by promoting events and progress, signposting groups to funding opportunities and providing written support to bids to the Community Energy Fund for community energy feasibility studies.

### **Enhancing and Protecting the Natural Environment**

- 2.41 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 15 October 2024, 558,496 trees have been added to the online Million Trees totaliser.

- 2.42 Following a successful bid to Defra's Nature for Climate Programme in 2023, the Council is leading the establishment of the **Derbyshire Heartwood Community Forest**, which is being created over a geographic area of approximately 289 square miles between the National Forest to the south and the Greenwood Community Forest in Nottinghamshire. The Heartwood Community Forest joins the existing network of 13 England's Community Forests, all of which are located in and around towns and cities, providing urban, economic and social regeneration, championing green infrastructure and creating high-quality environments for millions of people. Work is underway to develop a Forest Plan that will set out how the Heartwood Community Forest will be managed and maintained in the future, and also to undertake the first planting season of new trees on publicly accessible land by March 2025.
- 2.43 **Local Nature Recovery Strategies (LNRS)** are a new, England-wide system of spatial strategies that will establish priorities and map proposals for specific actions to drive nature's recovery and provide wider environmental benefits, as set out by Government in the Environment Act 2021. The Council is responsible for preparing a Local Nature Recovery Strategy for Derbyshire, including the city of Derby. Work is ongoing to prepare the LNRS in partnership with other organisations, communities and residents. When in place (programmed for completion by Summer 2025) the LNRS will provide a blueprint for nature recovery across Derbyshire and help to prioritise where and how to invest and where action should take place.

## Conclusion

- 2.44 To date, the Council has made good progress towards its net zero target of 2032, or sooner, with a 73% reduction in Council emissions achieved between 2009-10 and 2023-24 and the majority of actions in the Climate Change Strategy complete or on track to be delivered within the allocated timescales. However, the speed of the Council's emissions reduction is at risk of slowing and data modelling (using information on current and planned activities) suggests that there may be a shortfall in the necessary emissions reduction of 7,160 tonnes CO<sub>2</sub>e 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.
- 2.45 Supplemental work continues to explore how the further reductions necessary might be achieved, to understand the resource implications of doing so, and how this may be impacted by the Council's budget challenges. This work includes reviewing alternative external funding

mechanisms and models and prioritising any investment on those areas that provide the greatest levels of carbon reduction, lead to whole-life cost savings, and deliver co-benefits to the Council and the residents of Derbyshire. Work is also underway to understand the role that offsetting plays in the Council's net zero journey, and how nature-based solutions in particular can be deployed to deliver both carbon and wider co-benefits.

2.46 With regards to Derbyshire's emissions, it is recognised that the County is not decarbonising at the same rate as most other parts of the UK, largely due to the impact of industrial emissions on the County's overall emissions profile. Whilst the decarbonisation of large industry is heavily reliant on national funding and policy, the Council is committed to working in partnership with key sectors, including the mineral products industry, to decarbonise energy systems, industrial processes and transport. The development of a LAEP for the entire EMCCA region will also help to support Derbyshire's decarbonisation by providing a costed route-map to achieving a net zero regional energy system.

2.47 Work is to commence in early 2025 to develop a new Climate Change Strategy for the Council for 2026 onwards. To enable the Council to maintain its path to net zero, adequate funding and resources will need to accompany the new strategy and it is anticipated that much of this will need to be secured from external sources. As such, the new strategy will be designed in a way that provides an investible framework and maximises the synergies and opportunities provided by other Council priorities, such as the preparation and delivery of the LNRS for Derbyshire and the priorities that are beginning to emerge through the EMCCA Net Zero and Environment Workstream.

### **3. Consultation**

3.1 Not applicable.

### **4. Alternative Options Considered**

4.1 **Option 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 Climate Change Strategy in place and did not 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. This option is not recommended.

## **5. Implications**

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

## **6. Background Papers**

6.1 [Derbyshire County Council Climate Change Strategy: Achieving Net Zero \(2021-2025\)](#)

6.2 [Climate Change Engagement Plan \(2021-2025\)](#)

## **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 each target and action within the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025).
- b) 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.

## **9. Reason for Recommendations**

9.1 To ensure that the Committee 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. Projects 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 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 2023-24 (tonnes)	Accuracy / confidence level
<b>1) Bottom-up calculations – calculated from quantities</b>			
Water supply and wastewater collection / treatment	Not all sites have water meters and while some are read automatically others require manual reading. Average figures have been used to estimate water use where a meter reading couldn't be taken.	40-60 tonnes	Low
Hire vehicles	Data supplied by the main car hire provider (which may not always have accurate mileage figures). Figures based on averages for 2021-22 to 2022-23.	100-120 tonnes	Medium
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 claimed in 2023-24.	3.6 tonnes	High
Hotel stays for Council business	Data is available for bookings made through the travel agency used by the Council.	1.0 tonnes	High

<b>Activity</b>	<b>Data source and calculation methodology</b>	<b>Estimated annual carbon emissions for 2023-24 (tonnes)</b>	<b>Accuracy / confidence level</b>
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.	Not currently available	N/A
Waste produced at Council sites	This is a complex area covered by several contracts. Work was undertaken to map and analyse data available for 2022-23, which is unlikely to have changed significantly.	Approx 550 tonnes (based on last year)	Medium
Council maintained schools - electricity and other fuel use	Billed energy data.	10,358	High
Disposal and treatment of municipal waste	The Council is the statutory authority and collects data on waste tonnages and processing routes. A figure was estimated for 2022-23 and has not been re-assessed this year due to a full data set not yet being available.	Approx 64,520 tonnes (based on last year's data)	Low
Sub-metered energy use by tenants of council buildings	The Council does not have access to this data and it would typically be reported by tenants as their Scope 1 and 2 emissions.	N/A	N/A
<b>2) Top-down estimates – based on spend</b>			
Health and social care	Based on published spend and carbon intensity factors.	104,000 tonnes	Very low

<b>Activity</b>	<b>Data source and calculation methodology</b>	<b>Estimated annual carbon emissions for 2023-24 (tonnes)</b>	<b>Accuracy / confidence level</b>
Waste and environment	Based on published spend and carbon intensity factors.	59,000 tonnes	Very low
Highways & Transport	Based on published spend and carbon intensity factors.	36,000 tonnes	Very low
Legal & Financial	Data is difficult to interpret as it includes financial transfers which are not related to procurement.		Very low
Buildings	Based on published spend and carbon intensity factors.	23,000 tonnes	Very low
Corporate	Based on published spend and carbon intensity factors.	5,000 tonnes	Very low
ICT & BPO	Based on published spend and carbon intensity factors.	2,000 tonnes	Very low
Culture & Leisure	Based on published spend and carbon intensity factors.	1,000 tonnes	Very low
Misc*	Based on published spend and carbon intensity factors.	400 tonnes	Very low

\* includes general health and safety, security, fire safety, testing, asylum and migration services