



FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

CABINET

11 January 2023

Report of the Executive Director - Place

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

(Cabinet Member for Strategic Leadership, Culture, Tourism and Climate Change)

1. Divisions Affected

1.1 County-wide.

2. Key Decision

2.1 This is not a Key Decision.

3. Purpose

3.1 This report provides an annual summary of progress against delivery of the Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025) and the Council's net zero targets, and is asking Cabinet to note:

- 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).

4. Information and Analysis

Background

- 4.1 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.
- 4.2 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

- 4.3 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)
- 4.4 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 12,624 tonnes. This demonstrates a **71% reduction since the 2009-10 baseline year** where emissions were 42,965 tonnes.
- 4.5 Figure 1 presents emissions reductions since the baseline year (2009-10).

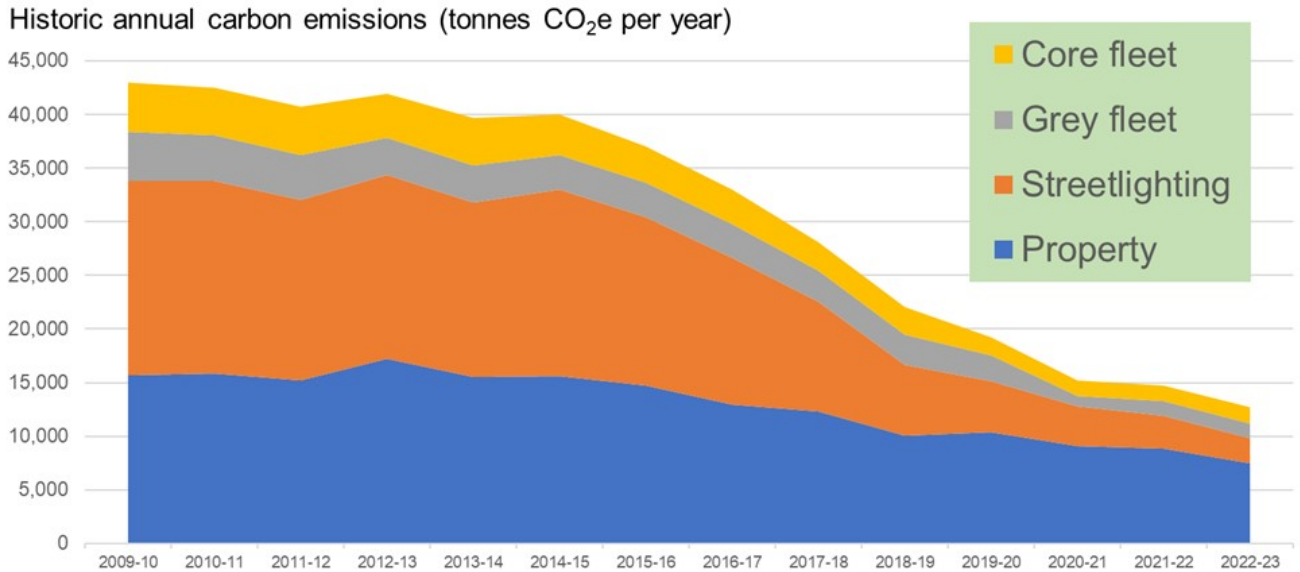


Figure 1: Council emissions reductions since 2009-10 baseline

4.6 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 |
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| 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 and improved monitoring and control of energy use.</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. Some further modest emission reductions in future years are expected from ongoing property rationalisation and improved energy management.</p> |

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| | <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 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 2,388 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</p> |

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| | <p>electricity. In future years the increased consumption should be offset by continuing improvements in LED light efficiency, grid decarbonisation and smarter controls.</p> |
| <p>Core Fleet</p> | <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 improve the classification of vehicles 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 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,</p> |

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| | and which consequently require home charging, are being explored. |
| 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 and the impact of services continuing to be affected by the impacts of COVID-19.</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> |

- 4.7 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.
- 4.8 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.

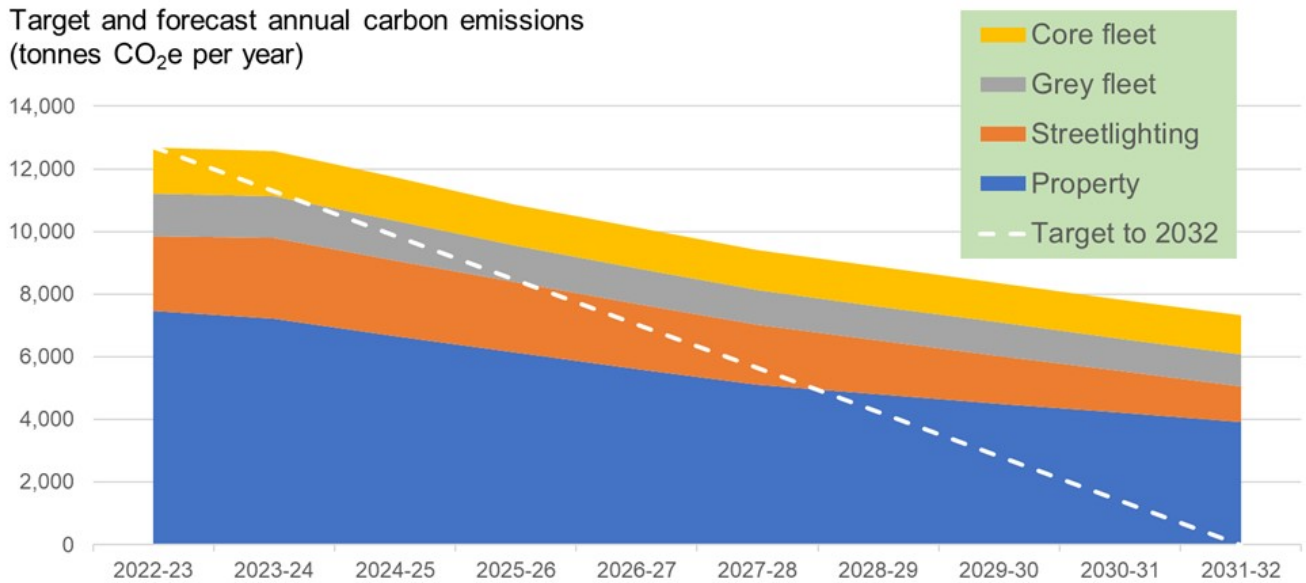


Figure 2: Council emission reduction projections (based on confirmed and planned activities)

4.9 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.

4.10 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.

4.11 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.

- 4.12 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.
- 4.13 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

- 4.14 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"*.
- 4.15 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.
- 4.16 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.
- 4.17 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

- 4.18 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.
- 4.19 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.
- 4.20 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.
- 4.21 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.
- 4.22 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% |

4.23 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

4.24 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

4.25 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.

4.26 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 | | |
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| 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 to less than 700tCO ₂ e by 2032. |  | 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 reduce heating demand. Current forecasts from this review suggest a further saving of 8 |



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| | | <p>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> |
| <p>Quadruple existing microgeneration of renewable energy on Derbyshire County Council's estate to 200 MWh by 2032.</p> | <p></p> | <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> |
| <p>Replace 20 Derbyshire County Council vans per year in the core fleet with zero emission vehicles (ZEVs) from 2022.</p> | <p></p> | <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 six Council depots where scheduled replacement vehicles are sited. Discussions between</p> |



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| | | <p>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> |
| Replace all Derbyshire County Council HGVs with low emission vehicles by 2032. |  | <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> |
| Baseline all Council Scope 3 emissions by 2023 and set a target date to achieve net zero Scope 3 emissions for the Council. |  | <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 |  | <p>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</p> |



| <p>schools in Derbyshire by 2050 and set a more ambitious net zero target for schools within the Derbyshire County Council portfolio.</p> | | <p>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.</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 expansion of Carbon Capture, Utilisation and Storage (CCUS) technologies, and promotion of fuel switching.</p> |  | <p>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.</p> |
| <p>All commercial efficiency renovations complete by 2030 to be in line with UK government's industrial and commercial energy</p> |  | <p>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 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</p> |



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| consumption reduction target of 20%. | | <p>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> |
| 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>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. |
| 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>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> <p>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</p> |

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| | | 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.</p> <p>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, providing opportunities for upskilling the local retrofit workforce across a range of areas that include heat pump installation and heat network development.</p> |




| DECARBONISING THE DOMESTIC SECTOR | | |
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| 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> <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</p> |

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| | | 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-to-face and online information and support to homeowners as well as measures to grow the supply chain for housing retrofit activities.</p> |

| TRANSPORT, TRAVEL AND INFRASTRUCTURE | | |
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| 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 144,000 properties across Derbyshire by 2035.</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 largely 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> <p>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</p> |

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| | | 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 number 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 journeys to 30 million per year by 2023 (from 21 million in 2019). |  | 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 levels were estimated at around 80% of pre-pandemic levels. Patronage data is taken from Department for Transport (DfT) bus statistics. |




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| | | <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: 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. 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 2035 against baseline.</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 products industry to explore collaborative efforts to reduce HGV emissions through a reduction in vehicle mileage and the use of more sustainable vehicles.</p> |

| WASTE | | |
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| 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*. |  | <p>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.</p> |
| 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. 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 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</p> |

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| | | 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. |
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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.











4.27 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








4.28 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. |  |

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| 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 | | |
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| 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. |  |

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| 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

- 4.29 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

- 4.30 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.
- 4.31 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.
- 4.32 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.
- 4.33 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.

4.34 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

4.35 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.

4.36 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.

4.37 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

- 4.38 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.
- 4.39 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.
- 4.40 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.
- 4.41 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.

- 4.42 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

- 4.43 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.
- 4.44 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.

4.45 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.

5. Consultation

5.1 Not applicable.

6. Alternative Options Considered

6.1 **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 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. This option is not recommended.

7. Implications

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

8. Background Papers

8.1 None identified.

9. Appendices

9.1 Appendix 1 – Implications.

9.2 Appendix 2 – Scope 3 Emissions Analysis.

10. Recommendations

That Cabinet:

- 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.

11. Reason for Recommendations

- 11.1 To ensure that Cabinet is informed of progress against delivery of the Council's Climate Change Strategy: Achieving Net Zero and the net zero targets.

12. Is it necessary to waive the call in period?

- 12.1 No.

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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 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 are not 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 |