



FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

CABINET

12 January 2023

Report of the Executive Director - Place

Derbyshire County Council Climate Change Strategy: Annual Review of Progress

(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 The Derbyshire County Council Climate Change Strategy: Achieving Net Zero (2021-2025) (the “Strategy”) was approved by Cabinet on 14 October 2021 (Minute No. 166/21 refers) and published shortly thereafter. This report provides an annual summary of progress against delivery of the Strategy and the Council’s net zero targets and is asking Cabinet to note:

- Relevant national and regional policy, legislation and governance changes and updates over the past 12 months that might have implications on the Council's climate change programme – see Section 4.1 to 4.2 and Appendix 2.
- 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 – see Section 4.3 to 4.15.

- The progress being made against each target and action within the Strategy – see Section 4.17 to 4.21, and Appendix 3.
- Details on other key projects, initiatives and schemes that are contributing to the Council's climate change and wider sustainability agenda and objectives – see Section 4.22 to 4.34.

4. Information and Analysis

Policy, Legislation and Governance Updates

- 4.1 Since approval and publication of the Strategy in October 2021, there have been a number of changes to the national and regional economy and political environment, and also new national strategy, legislation and policy launched. This includes the publication of the Environment Act in November 2021, the publication of new Building Regulations in June 2022, the development of proposals for an East Midlands Devolution Deal, and the impact of rising energy costs and the cost-of-living pressures. These are summarised in Appendix 2.
- 4.2 While these changes and activities do not have an impact on the content of the Strategy, including the actions and targets within it, they influence the environment in which councils deliver their climate change ambitions and commitments and will therefore influence and shape delivery going forward. Furthermore, the Council, as with all organisations, is currently dealing with the consequences of increasing energy costs, and it is unlikely that this volatility is going away anytime soon. High energy costs mean that it is more important than ever for energy use to be reduced and strengthens the business case for investment in energy reduction and efficiency projects, technologies and behaviours for the Council and Derbyshire.

Progress against Net Zero Targets – Council Emissions

- 4.3 Council emissions are recorded 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, and are therefore included in the annual Council emissions reporting:
- Corporate property (gas, electricity, solid fuel, oil)
 - Streetlighting (electricity)
 - Core fleet
 - Grey fleet

4.4 Emissions data for 2021-22 shows that total CO₂e from these four sources **fell by 64.2% from 42,965 tonnes CO₂e to 15,378 tonnes CO₂e between 2009/10 and 2021/22.**

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

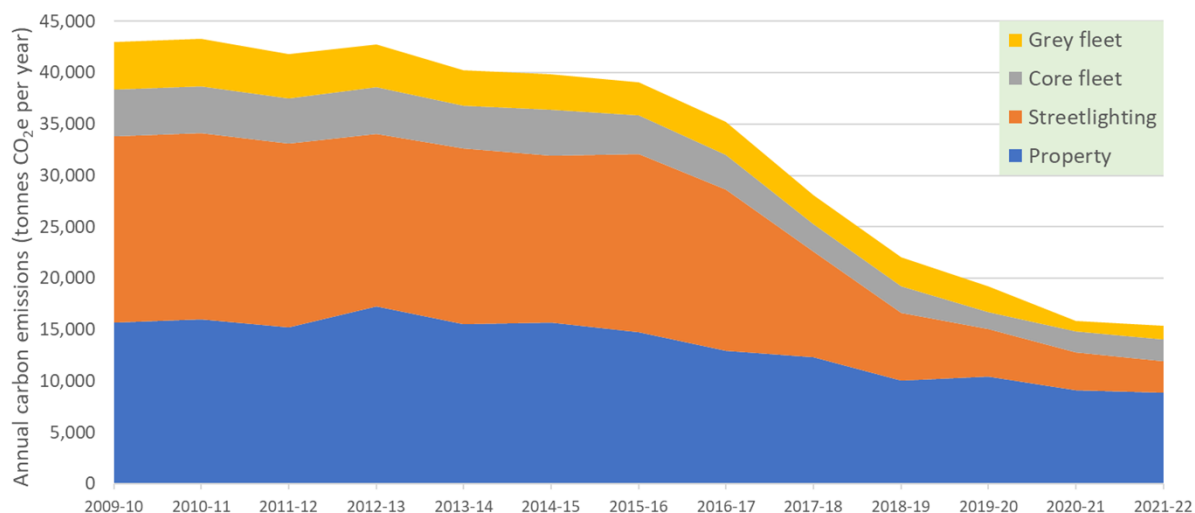


Figure 1: Council emissions reductions since 2009-10 baseline

4.6 Table 1 summarises the latest data for the four emissions sources reported for 2021-22, as well as a summary of the work being undertaken and planned to reduce emissions going forward.

Table 1: Summary of Council emissions and key activities

Emissions Source	Progress to reduce emissions
Corporate Property	<p>There has been a 43% reduction in emissions from Corporate Property since the 2009-10 baseline year.</p> <p>Emissions from energy use in Corporate Property were 8,861 tonnes CO₂e in 2021-22, which is a 3% reduction on the previous year.</p> <p>Moving forward, there are four planned approaches to reducing emissions from Corporate Property:</p> <ul style="list-style-type: none"> • Property rationalisation • Energy management • Building mounted photovoltaic electricity generation • Retrofitting to reduce energy consumption
Streetlighting	<p>There has been an 83% reduction in emissions from streetlighting since the 2009-10 baseline year.</p>

	<p>Emissions from energy used in streetlighting and traffic lights were 3,070 tonnes CO₂e in 2021-22, which is a 16% reduction on the previous year. 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>Moving forward, the streetlighting LED replacement programme is nearing completion and a small increase in energy consumption is forecast as new streetlighting is adopted and smart infrastructure (digital traffic lights) is installed. This is forecast to be offset by small increases in the efficiency of LED lights used, and the 'greening of the grid'.</p>
Core Fleet	<p>There has been a 53% reduction in emissions from core fleet since the 2009-10 baseline year.</p> <p>Emissions from core fleet use were 2,140 tonnes CO₂e in 2021-22, which is a 6% increase on the previous year. The increase in emissions is due to improvements in data collection methods and the lifting of COVID restrictions. All core fleet now has telematic data collection, giving confidence in mileage figures, a significant improvement from previous data.</p> <p>Moving forward, vehicles will continue to be replaced by the most energy efficient alternatives available which still fulfil their purpose, with the priority being to replace vehicles not meeting Clean Air Zone requirements. The installation of new charging infrastructure for electric vehicles at Council offices and depots is also being explored and will be needed to reduce emissions from core fleet to net zero.</p>
Grey Fleet	<p>There has been a 71% reduction in emissions from grey fleet since the 2009-10 baseline year.</p> <p>Emissions from grey fleet use were 1,307 tonnes CO₂e in 2021-22, which is a 32% increase on the previous year. The increase in emissions is due to the resumption of business travel following the lifting of Covid restrictions. However, this is still below the figure for 2019-20, likely due to continued use of virtual meetings.</p> <p>Moving forward, emissions reductions are expected through an increase in the number of staff using electric pool vehicles and the gradual increase in the efficiency of staff vehicles. Introduction of the EV salary sacrifice scheme (expected in early 2023) should assist further.</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 planned initiatives, 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 an increase in homeworking. These projections are presented in Figure 2 to 2031-32 against a linear trajectory (the dotted line) to reach net zero by 2031-32, in line with the Council’s current target.

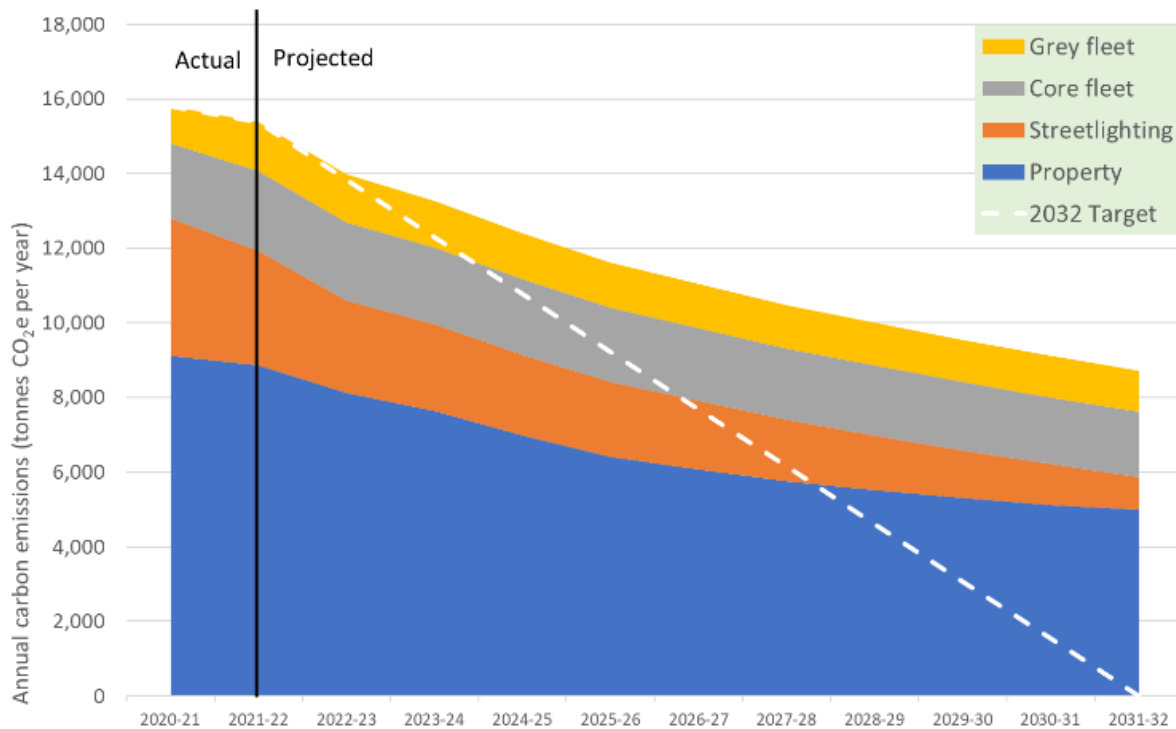


Figure 2: Council emission reduction projections (based on confirmed and planned activities)

4.8 Despite the progress made to-date to reduce the Council’s emissions, and the ongoing and planned work detailed above 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 8,710 tonnes CO₂e by 2031-32**. Almost 60% of these residual emissions will be from the Council’s Corporate Estate. Some of these residual emissions are likely to be offset through renewable energy generation on Council-owned buildings and land, and by carbon sequestration through activities, such as tree planting.

4.9 However, the focus needs to remain on reducing emissions, particularly through the reduction and electrification of travel by car and light

commercial vehicles and the decarbonisation of heat in buildings. The latter has significant challenges as the Government has not set a net zero date for gas and the age and character of council buildings and the difficulty of retrofitting whole heating systems presents considerable constraints.

4.10 Further steps are now being taken to address the challenges associated with reducing emissions from Corporate Property. This includes endorsement by the Council's Climate Change and Environment Programme Board (CCEPB) in July 2022 for the commissioning of external specialist support to review the Council's Corporate Property carbon reduction policies, plans and projects, verify the work conducted to-date on developing plans to decarbonise the Corporate Estate, and help with the preparation of a Carbon Reduction Strategy (Corporate Property) to 2032. The formulated Carbon Reduction Strategy will inform a Carbon Reduction Programme of projects and make the case for any new resources that are identified to enable the Strategy's effective delivery.

4.11 Based on a series of assumptions, including a potential scenario that might emerge from the planned Carbon Reduction Strategy (Corporate Property) referenced above, emissions reductions to 2031-32 have been modelled again to present a more ambitious scenario where there is greater investment and speed of action, which would reduce the potential shortfall in the **necessary emissions reduction to 5,610 tonnes CO₂e by 2031-32**. This is shown in Figure 3. The assumptions are that:

- For Corporate Property: Energy efficiency retrofitting and small-scale renewable energy generation projects on the Corporate Estate are trebled compared to the existing plans.
- For Streetlighting: No further modelling at this stage as the LED replacement programme is almost complete. However, we are currently looking at further opportunities to reduce energy usage through streetlights as an invest to save proposition.
- For Core Fleet: There is an increase in the number of fleet vehicles replaced by electric vehicles from 5 per year currently to 30 per year from 2023-24, and all fleet cars and vans to be electric by 2032. This assumes that there is an increase in the number and location of charge points and that suitable electric vehicles are readily available on the market.
- For Grey Fleet: There is a small increase in the number of electric pool cars and high mileage users are gradually switched to EVs from 2023-24 onwards.

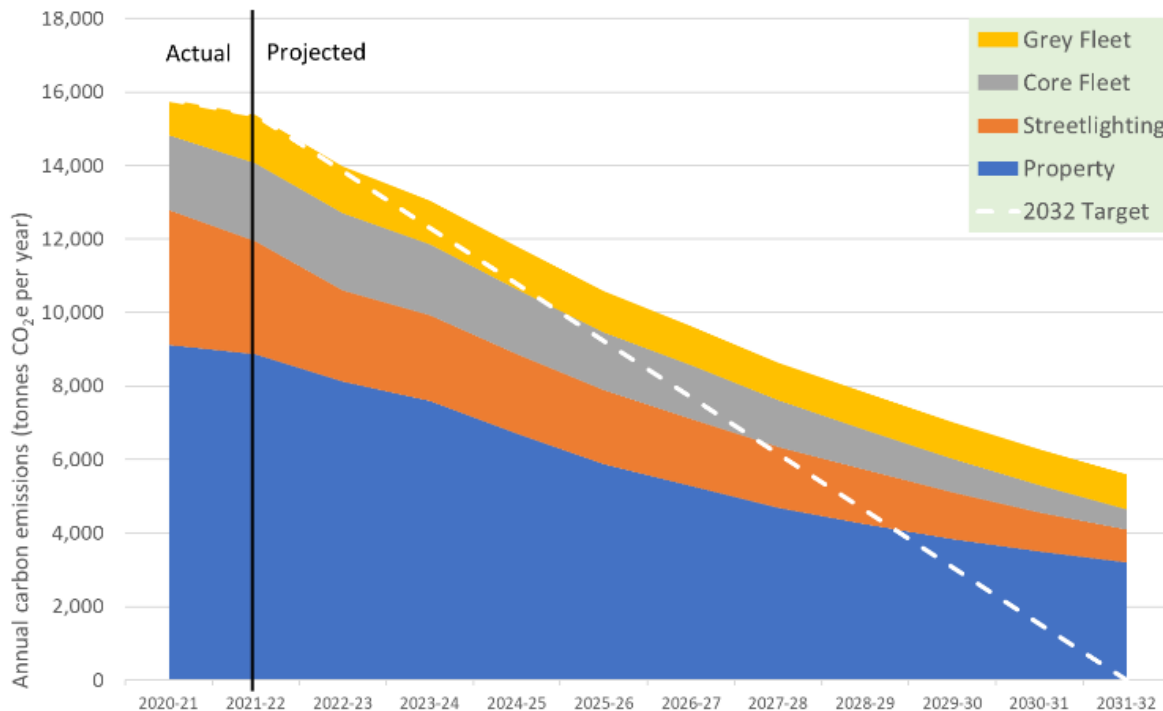


Figure 3: Council emissions reduction (based on greater investment and speed of action)

- 4.12 Work is to be carried out over the next six months to explore this scenario, and others, to provide further details on the resource and wider implications of taking different forms and levels of action to reduce emissions. This includes continuing to review progress against other relevant councils and identifying areas of good practice that could be replicated.
- 4.13 Whilst it is difficult to compare the Council's emissions reduction performance to-date against other councils due to absence of standard reporting rules meaning that councils measure and report on emission differently, the Council recognises that some councils are putting in place measures which we have, as yet, not and we are looking at each of these measures. It is noted that, typically, those councils achieving the greatest speed and scale of emissions reduction are those that are committing to large scale, on-going carbon reduction plans, such as estate-wide property refurbishment and heat decarbonisation projects (such as Cambridgeshire County Council), or large-scale off-site renewables projects (such as Cornwall Council).

Progress against net zero targets – Derbyshire emissions

- 4.14 The Council has a target for County-wide emissions to reach net zero by 2050. Data is provided by the Department for Business, Energy and

Industrial Strategy (BEIS), which reports annually on emissions arising within each Council's geographic area. BEIS groups emissions by source, including industrial and business users, the public sector, homes, transport and agriculture, and around 99% of emissions are outside the County Council's direct control. The latest data relates to 2020 and is provided in Table 1. **The data shows there was a 9% reduction in County emissions between 2019 and 2020.**

Commercial, industrial, waste and transport emissions fell by 6-18% from the previous year, attributable in part to covid lockdowns. Other sectors show smaller year-on-year decreases (3-4%).

4.15 **The total emissions reduction for the county between 2005 and 2020 is 34%.** For comparison, a reduction in emissions of 47% is needed by 2025 (compared to the 2005 baseline) for the county to be on-track for the 2050 net zero target.

Table 1: BEIS Emissions data for Derbyshire

Source of emissions	Emissions in 2019 (kt CO ₂ e)	Emissions in 2020 (kt CO ₂ e)	Change (kt CO ₂ e)	% change (2019 to 2020)	% change (2005 to 2020)
Industry	3,635	3,367	268	-7%	-27%
Commercial	248	225	24	-10%	-59%
Public Sector	106	101	5	-4%	-53%
Domestic	1,256	1,216	40	-3%	-40%
Transport	1,918	1,582	336	-18%	-24%
Agriculture	695	676	19	-3%	N/A – no baseline
Waste Management	320	301	19	-6%	N/A – no baseline
Total	8,179	7,468	711	-9%	-34%

4.16 Alongside these figures, BEIS also produces projections for national emissions up to 2040 based on current rates of change. When the Strategy was written, the most recent projections, produced in 2019, were applied to Derbyshire data to indicate the reductions likely to be achieved under 'business as usual', taking into account agreed Government policies and funding. This latest data 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. BEIS is due to publish updated forecasts in Autumn 2022 and this data will be incorporated into Council reporting once the implications are understood.




Review of Strategy Targets and Actions




4.17 The Strategy sets out targets and actions split by five themes:

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

4.18 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.




4.19 There are **27 targets** within the Strategy, with progress against each of these summarised 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, 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




COUNCIL ESTATE AND OPERATIONS		
Target	Status	Summary of Progress
By 2022 all Derbyshire streetlighting will be replaced by LEDs		The LED streetlighting replacement programme is 99% complete with just under 900 streetlights left to convert, some of which will now be carried out in 2023 due to supply chain issues affecting lighting columns. In addition, there are 411 cast iron lighting columns yet to be converted to LED and are subject to funding being secured.
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 2022 indicate that the procurement of a renewable energy tariff for 2023-24 will not be feasible due to energy market pressures, price rises and insufficient supply capacity. This will be monitored and revisited ahead of the 2024-25 financial year.
Reduce emissions from heating buildings to less than 700tCO ₂ e by 2032.		The Council’s Asset Review process is identifying buildings for disposal, which will reduce heating demand. Retrofit projects to reduce heating demand are being developed for poorly-performing sites, based on a rigorous review process. These initial projects are expected to reduce emissions from heating Council buildings from 6,230 tCO ₂ e in 2021-22 to 4,460 tCO ₂ e by 2025. During 2023 a wider




		programme of works focussing on practicable actions to improve poorly-performing buildings will be developed. However, the scale of the challenge will require deeper action and advice is being sought on good practice and innovation from outside the Council. This will help to identify a realistically achievable target and the scale of investment needed to achieve it.
Quadruple existing microgeneration of renewable energy on Derbyshire County Council's estate to 200 MWh by 2032.	✓	28 Council-owned sites (including schools) have solar panels with an estimated annual output of 131 MWh, of which nearly 50 MWh is from non-school sites. The Asset Review has identified non-school sites with the apparent roof space to install solar PV systems of reasonable scale. The anticipated total output is 450 – 460 MWh, so the 2032 target would be met even if not all projects come to fruition. The ambition is to exceed this target and funding is currently being sought as a capital strategy bid. Further sites are likely to emerge as the Asset Review is completed.
Replace 20 Derbyshire County Council vans per year in the core fleet with zero emission vehicles (ZEVs) from 2022.	🟡	Five electric vans have been ordered this year for fleet workshops. Work is progressing to identify Council offices, depots and sites for EV charging infrastructure installation to assist with the shift to electric fleet vehicles.
Replace all Derbyshire County Council HGVs with low emission vehicles by 2032.	✓	The Council currently has 76 HGVs within its fleet. 56 of these vehicles are Clean Air Zone (CAZ) compliant. Of the 20 non-CAZ compliant vehicles, 15 new vehicles have been ordered, with 5 still to be reviewed for replacement. Therefore, the target will be met early.
Baseline all Council Scope 3 emissions by 2023 and set a target date to achieve net zero Scope 3 emissions for the Council.	✓	A review has been undertaken on the most significant sources of Scope 3 emissions and on the availability and quality of data. Data is not currently collected for all sources; some may require new clauses in contracts to make data collection compulsory. An external review of procurement data is also being considered, to identify the goods, services and contracts with the highest carbon footprint. Once the scale of the footprint is known a target net zero date will be established and this will be achieved by the end of 2023, thereby achieving the target set.




Achieve net zero emissions across all schools in Derbyshire by 2050, and set a more ambitious net zero target for schools within the Derbyshire County Council portfolio.	✓	The Council is undertaking a scoping project, which involves consultation with Derbyshire Schools and school leaders about what support and services they need and want to help them on their climate change journey. This will help to establish a strategic approach across the council for Climate Change Schools Support. The project is due for completion in Spring 2023 and will inform the development of appropriate targets for a net zero schools' portfolio.
LOW CARBON ECONOMY		
Target	Status	Summary of Progress
Reduce manufacturing and construction emissions by 70% by 2035 (against 1990 levels) through energy efficiency improvements and expansion of Carbon Capture, Utilisation and Storage (CCUS) technologies, and promotion of fuel switching.	✓	National data from the Climate Change Committee, shows that emissions from manufacturing and construction have fallen by an average of 3% per year since 1990, although there are signs of a small bounce back since the Covid pandemic. There are a few CCUS schemes operating in the UK and most focus on large coastal industrial clusters. Local support to manufacturing businesses includes DE-Carbonise, the University of Nottingham's Energy for Businesses (both linked to ERDF funding), and the Green Entrepreneurs Fund.
All commercial efficiency renovations complete by 2030 to be in line with UK government's industrial and commercial energy consumption reduction target of 20%.	🟡	The Government's plans to uplift the Standard Assessment Procedure (SAP) score for non-domestic rented buildings to B by 2030 will provide impetus to improve the energy efficiency of these buildings but depend on enforcement by district and borough councils through the planning process. There is currently no such requirement for owner-occupied non-domestic buildings. The recently developed Climate Change Planning Guidance and the Council's engagement with the D2N2 (Derby, Derbyshire, Nottingham and Nottinghamshire) LEP (Local Enterprise Partnership) on commercial and industrial energy use will help to drive improvements, but achievement of the target is ultimately dependent on enforcement of the Government's SAP score legislation.
Undertake a feasibility assessment to understand the opportunities for renewable	✓	This target has been achieved through: <ul style="list-style-type: none"> • Feasibility assessments by APSE Energy on the technical, legal, procurement, financial and planning requirements and implications for solar


<p>energy developments across the county and support the development of commercial scale developments where appropriate, by 2023.</p>		<p>PV sites on Council-owned land. A business case has been completed for a site with the most potential for immediate deployment, which will be subject to a capital strategy bid.</p> <ul style="list-style-type: none"> • The development of a Renewable Energy Spatial Study for Derbyshire (completed in September 2022) to identify the scope for medium to large scale renewable technologies, to help guide planning policy and decision making.
<p>24,000 skilled green jobs to be created in Derbyshire by 2030 to help reach net zero emissions and enable our local economy to grow and flourish.</p>		<p>PWC's Green Jobs Barometer presents a regional view of the status of green jobs in Great Britain. The East Midlands is ranked 7th of the 12 regions. 1.2% of jobs advertised in the East Midlands currently have 'green' elements, which is average for the UK but below the 6% required to meet the Government's targets for Green Growth. This data will be updated again in late 2022. The Midlands Net Zero Hub has identified specific opportunities for growth in the wind, alternative fuels and building services industries, and is developing mechanisms to support this growth. Derbyshire Economic Partnership produced the COVID-19 Recovery Strategies 2021-25 which sets out priorities to protect and grow Derbyshire's economy. Green jobs are also supported by the Green Entrepreneur Fund.</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>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.</p>
<p>Net zero focussed education, training courses and apprenticeships available at every academic and training</p>		<p>Midlands Net Zero Hub is coordinating work in this area and has funded research into training gaps and growth for low carbon businesses and is also leading the region's approach to the new Home Decarbonisation Skills Training Competition. Ongoing research by University of Derby and East Midlands Chamber of</p>

institution in Derbyshire by 2028, e.g. net zero building retrofit, renewable energy engineering, heat pump installation.		Commerce is mapping the skills needs expressed by SMEs (small-medium enterprises) and large businesses. The Green Entrepreneurs Fund has also provided scholarships for individuals to improve their skills for the net zero economy.
DECARBONISING THE DOMESTIC SECTOR		
Target	Status	Summary of Progress
All new residential buildings to be zero carbon by 2025.		The government's forthcoming Future Homes Standard will require all new homes to be zero carbon ready by 2025. Work through the Vision Derbyshire Programme 'Living and Working Sustainably' includes Climate Change Planning Guidance and an associated assessment metric. The guidance, metric, and a related report on the scale of the developable renewable energy resource in Derbyshire, are being used to identify the measures that may be implemented to reduce the climate change impact of 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 to assist in achieving the 2025 target. The next step is to support borough and district councils to develop design guides supporting housebuilders to design homes which are in-keeping with local character whilst enabling the inclusion of net zero measures.
All existing owner occupier domestic properties EPC rating C by 2035.		Work has begun in collaboration with borough and district councils to engage with residents to understand what support they need to enable them to retrofit their own homes and to co-design and co-deliver a programme of activities which will support homeowners to make their homes fit for the future. However, the scale of the challenge is significant, with an estimated 210,000 homes in Derbyshire requiring some form of retrofitting to reach an EPC rating C. Current national fundings model and supply chain capacity do not support the scale and speed of action needed and work is beginning to explore how partners across the County can address this market failure.
All owner occupiers and renters to have access to education and		As part of the Council's work with the district and borough councils, community engagement activities are exploring what advice and support is needed by




training programmes to decarbonise their homes by 2025.		residents and how this might be delivered. Given the current energy crisis and increase in cost of living, any information campaign will include simple energy advice to help people cut the cost of energy bills.
At least 20% of domestic buildings to have PV installed by 2030.		Approximately 4% of Derbyshire homes currently have rooftop PV installed. The Derbyshire Renewable Energy Study, the Climate Change Planning Guidance and assessment metric identify the scale and location of the available, developable renewable energy resources. These documents provide a strong evidence base to support local plan development policies, which in turn will support the installation of PV on existing buildings and seek to require its inclusion in future development proposals. Revisions to national Building Regulations are now needed to further facilitate the progress required. Planning guidance seeks to encourage borough and district councils to include policies in their Local Plans to support the installation of PV.
TRANSPORT, TRAVEL AND INFRASTRUCTURE		
Target	Status	Summary of Progress
All new cars and vans in the country to be zero emission vehicles by 2030.		This target aligns with the national target. In June 2022 there were 8,270 electric vehicles in Derbyshire and a further 2,900 plug-in hybrids. National data shows 34% of cars registered in 2021 were battery electric or hybrid. Electric vehicle sales increased by 76% from 2020, and early data shows an increase of 49% so far in 2022. The Council can only influence progress towards this national target and, as part of this influence, is working with partners to increase the availability of public and domestic charge-points across the County.
Deliver 1000 EV charging points for public use by the end of 2025 in collaboration with partners. Support the installation of electric vehicle chargers at		At the end of July 2022 there were 274 publicly available EV charging points in Derbyshire, up from 249 in April 2022. 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. The next stage is to complete soft market testing with all known charging point operators (CPOs) invited to participate. This will be used to inform a formal procurement exercise in early






<p>144,000 properties across Derbyshire by 2035.</p>		<p>2023 to appoint a CPO (or multiple CPOs) to work towards the delivery of the overall target.</p> <p>The development and implementation of Climate Change Planning Guidance and updated Building Regulations for England (introduced in June 2022) will facilitate a growth in charging infrastructure at private properties.</p>
<p>Double the number of people cycling regularly as a mode of transport from 106,000 in 2016 to 212,000 by 2030.</p>		<p>The latest figures provided by Sports England for people who cycle at least twice a month are 98,800 for Derbyshire. This covers the period November 2020 to November 2021. This is a reduction since 2016, potentially impacted by a reduction in all forms of travel during the Covid pandemic. The Council is undertaking work to promote and facilitate an increased uptake in cycling, including Smart Rider cycle safety schemes for school children and adult cycle training, undertaking a range of feasibility studies (funded through the DfT Capability Fund) to support the D2N2's Local Cycle and Walking Infrastructure Plan, the Rural Action Derbyshire's Wheels to Work programme, updating Key Cycle Network information and seeking funding support to build capacity and develop business cases for active travel schemes in market towns.</p>
<p>Reverse the decline in bus travel and increase total journeys to 30 million per year by 2023 (from 21 million in 2019).</p>		<p>Bus passenger numbers continue to recover following the dramatic reduction seen during the Covid pandemic. As of July 2022, overall patronage levels were just over 80% of pre-pandemic levels, which equates to approximately 16.8m annually.</p> <p>Delivery of the Bus Service Improvement Plan (BSIP) aims to grow bus patronage and increase bus mode share, focussing on making bus travel more affordable, environmentally sustainable, convenient and connected. However, the Council is still waiting for the allocated £47m BSIP funding to be released from the Department for Transport (DfT).</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>Through the D2N2 LEP a Hydrogen Fuelled Waste project is being progressed, which will include a hydrogen refuelling point established at Toyota's HQ in Burnaston, South Derbyshire. The D2N2 Low Carbon Mobility Task Force is also looking at hydrogen fuel, vehicle and technology opportunities for the region. Derbyshire's minerals industry is also exploring hydrogen technologies.</p>









Reduce HGV emissions in the county by 50% by 2035 against baseline.		Statistics from the ONS show that in 2021-22 only 0.6% of all HGVs in Derbyshire were non-diesel powered. UK data from BEIS for 2019 shows that emissions from HGVs have fallen from a high of 23.5MtCO ₂ e in 2005 to 21.4MtCO ₂ e in 2019 (a reduction of 9%), demonstrating that more action is needed. The Council is engaging with relevant groups through the D2N2 LEP to tackle this issue and also with the county's minerals product industry to explore collaborative efforts to reduce HGV emissions through a reduction in vehicle mileage and the use of more sustainable vehicles.
WASTE		
Target	Status	Summary of Progress
Reduce household waste production by 20% by 2025 against 2015 baseline.		Household waste has increased by 7.44% between 2014-15 and 2020-21. This was driven by a 3.08% increase in population and 4.23% increase in waste generated per head of population. A significant proportion of this waste growth (6.36%) occurred between 2019-20 and 2020-21 and is likely to have been caused by COVID pandemic related behaviour change. Prior to 2019 waste per capita had reduced by 1.46% since the previous year. 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 are currently being promoted to encourage food waste reduction and the plan is to promote more messages when resources permit. The Council is continuing to work closely with WCAs to design and deliver initiatives.
Less than 10% municipal solid waste to be sent to landfill by 2035, with 100% waste diverted by 2050.		The percentage of Local Authority Collected Municipal Solid Waste (LACMSW) sent to landfill has reduced from 27.5% to 15.8% 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>		<p>Achieving this objective 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. At present two of the eight district councils offer no food waste collection service and of the six that do, five offer it on a fortnightly basis co-mingled with garden waste. The Environment Act 2021 has introduced a requirement for all Waste Collection Authorities to offer a free, weekly food collection service. The draft timetable is to introduce this by 2024, subject to secondary legislation. If this legislation comes into force the target is likely to be met.</p>
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4.20 There are **32 priority actions** within the Strategy, with progress on the delivery of each of these summarised below. A review of priority action performance is also carried out on a quarterly basis, and this quarterly review, which includes a 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, the Portfolio Holder, and the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction.








-  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

COUNCIL ESTATE AND OPERATIONS			
Ref	Priority Action	Target date to be completed by (end of calendar year)	Status
1	Identify land for renewable energy generation and carry out pre-feasibility assessments to identify whole life project costs.	2023	
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.	2023	
3	Deliver Public Sector Decarbonisation Schemes and evaluate to inform further work.	2023	
4	Identify buildings to be retained and undergo energy efficiency retrofit.	2023	
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.	2025	

6	Develop a Sustainable Procurement Framework using the UK government's green procurement guidance to embed environmental requirements and Social Value into all contracts.	2022	
7	Review the commissioning principles across all teams to ensure that climate change is embedded across our services and partner working.	2022	
8	Carry out a feasibility study to identify low carbon energy procurement options.	2023	
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.	2022	
LOW CARBON ECONOMY			
Ref	Action	Target date to be completed by (end of calendar year)	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.	2022	
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.	2025	
12	Liaise with Distribution Network Operators (DNOs) and D2N2 LEP to understand grid capacity/constraints for generation opportunities.	2025	
13	Deliver the Derbyshire Green Entrepreneurs scheme and provide additional support for reducing environmental impacts, driving innovation, and curating sustainable growth for smaller businesses.	2021	

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.	2022	
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.	2025	
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.	2022	
DECARBONISING THE DOMESTIC SECTOR			
Ref	Action	Target date to be completed by (end of calendar year)	Status
17	Conduct an updated feasibility assessment on the low carbon heat and renewable energy opportunities within the county.	2023	
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.	2025	
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.	2023	

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.	2022	
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.	2023	
22	Develop an information sharing campaign to educate homeowners and renters on how to improve the energy efficiency of their property.	2023	
TRANSPORT, TRAVEL AND INFRASTRUCTURE			
Ref	Action	Target date to be completed by (end of calendar year)	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.	2025	
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.	2022	
25	Support the implementation of the Derbyshire Cycling Plan and the Local Cycling and Walking Infrastructure Plan.	2022	

26	Support actions for increasing the uptake of active transport to reduce emissions particularly within marginalised groups, and improve health and wellbeing for all.	2022	
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.	2022	
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.	2023	
WASTE			
Ref	Action	Target date to be completed by (end of calendar year)	Status
29	Identify solutions to increase the diversion of organic waste including food, soiled materials, carpets, organic textiles, etc. from landfill.	2023	
30	Undertake a cross authority behaviour change campaign to promote reduction in waste and resource consumption in the home and businesses.	2022	
31	Work with local producers and businesses to restrict the use of single use products and support the market for remanufactured goods.	2024	
32	Explore the potential for partnering with local charities and organisation to segregate and redistribute good quality products from HWRC	2025	

4.21 In addition to the 32 priority actions listed above, the Strategy includes a series of 120 'Long List' supplementary actions, initiatives and projects, which it is anticipated the County Council will either lead or support. As part of this annual review and following feedback from the Improvement and Scrutiny Committee for Climate Change, Biodiversity and Carbon Reduction, this Long List has been reviewed and rationalised, with the new proposed Long List of 30 actions to be delivered by the end of 2025, and a summary of progress, provided in Appendix 3. The Climate Change and Environment Programme Board endorsed this new long list on 3 November 2022, and the status and performance of this list will be reported on a quarterly basis as part of the Climate Change Performance Dashboard.

Summary of additional activities

4.22 This section provides an overview of the additional key projects, initiatives and schemes 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 agenda and objectives.

4.23 **Climate Change Team Development:** Over the past 12 months, the Council has recruited three new posts to the core Climate Change Team: two Climate Change Project Officers and a Corporate Responsibility and Sustainability Practitioner Apprentice. The Derbyshire Environmental Studies Service (DESS) has also transferred from the Council's Conservation, Heritage and Design Service to the Climate Change Team, providing an opportunity to further embed climate change and sustainability into the Council's work with schools and young people.

4.24 **Climate Change Training:** A comprehensive package consisting of three levels of climate change and sustainability training is now available for Council employees. A 30-minute introductory e-learning unit and a two-hour more detailed 'Climate Change: Everybody's Business' training session is available to all employees. Carbon Literacy Training provides an in-depth, eight-hour training programme which is externally accredited. Moving forwards online hour-long modules are being developed on specific climate change issues. Employees will be able to create individualised training packages to suit their needs.

4.25 **Single Use Plastics Policy and Action Plan:** To support the Council's Sustainable Procurement Policy (approved by Cabinet 16 June 2022 [Minute No. 116/22 refers]), a Single Use Plastics (SUPs) Policy and Action Plan have been developed and is now being implemented. This

includes the development of a guide for staff to reduce the amount of SUPs being procured by the Council.

- 4.26 **Climate Change Risk, Adaptation and Resilience:** With Council services and infrastructure continuing to be under strain from the impact of the coronavirus pandemic and economic pressures, it is imperative that the Council understands the risks to services, infrastructure, people, and communities 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 to services within the Council and ensure any necessary measures to adapt to the risks posed are understood and implemented. This project is focusing on Council services and functions, with opportunities for collaboration with partners on a County-wide or regional approach to resilience also being explored.
- 4.27 **Climate Change Engagement:** A Climate Change Engagement Plan has been produced setting out how the Council will engage with its residents and communities to deliver relevant actions set out in the Climate Change Strategy. The Plan was approved by the Leader of the Council in October 2021. In addition, the Council continues to support and engage environmental community groups through a number of channels responding to queries and requests for support and through a climate communications service provided through membership of the Local Authority Energy Partnership.
- 4.28 **Derbyshire Natural Capital and Biodiversity Strategy:** In September 2021, the Council commissioned external specialist consultants to develop a Natural Capital and Biodiversity Strategy for Derbyshire. The Strategy will help inform investment and natural capital decision making and place-shaping by the Council, as well as the County's district and borough councils. The strategy identifies the priority areas for the protection, restoration, and enhancement of natural capital assets to maximise the economic, social, and environmental benefits that result. The project is due for completion by the end of 2022, after which the findings will be disseminated to all project partners and wider relevant stakeholders, and a delivery programme will be established and implemented.
- 4.29 **Vision Derbyshire Climate Change Strategy and Action Plan:** A joint Vision Derbyshire Climate Change Strategy (2022-2025) has been developed that sets out what needs to be done to reduce emissions across the County to net zero by 2050, and how Derbyshire councils can work together to achieve this through a series of joint ambitions and priorities. The Strategy was endorsed by the Vision Derbyshire Joint

Committee on 4 April 2022 and approved by Cabinet on 7 April 2022. All eight of the County's district and borough councils have also either formally approved, supported or endorsed the Strategy.

- 4.30 **Renewable Energy Spatial Study:** In December 2021, the Council commissioned external specialist consultants to deliver a spatial renewable energy study to support the delivery of the Council's net zero ambitions and direct the development of informed and comprehensive local plan policies across the County. The study provides the information and evidence to assist in the development of policy and decision making, ensuring that as far as possible, future development in Derbyshire takes full account of the need to contribute towards a rapid move to a net zero emissions society. The study was completed in September 2022 and is now being reviewed by the Council, as well as the district and borough councils to help strategically assess sites and applications as part of both the Local Plan and Development Management process respectively.
- 4.31 **Energy Strategic Framework:** The Council is developing a Strategic Framework for Council action to deliver net zero energy in Derbyshire. It will set out where and how the Council should act in the complex and multi-faceted net zero energy agenda and will set out a series of energy policy objectives where the Council's involvement is warranted in leading or contributing to their delivery.
- 4.32 **Achieving a Net Zero Derbyshire with the Mineral Products Industry:** The Council is working with Derbyshire's mineral products industry to identify and collaborate on the development and delivery of opportunities to achieve a net zero sector whilst maximising the economic and social value provided by the sector to the County and wider UK. Themes being explored for partnership working include alternative fuels, network capacity and constraints issues and education and skills.
- 4.33 **Decarbonising Derbyshire's Housing:** The Council is leading a project with the district and borough councils to engage with residents to co-design and co-deliver a programme of work to support homeowners to improve the energy efficiency and therefore reduce the cost of their own homes to make them fit for the future. The Vision Derbyshire Programme is providing oversight for this work. A summary of the outcomes of the initial consultation will be produced in early 2023.
- 4.34 **Derbyshire Youth Network Climate Change Action Plan:** A consultation was launched in 2022 through the Derbyshire Youth Network seeking the views of young people on climate change and how

they could take climate action. The consultation received 1,481 responses which were analysed to produce an action plan. Delivery of the action plan will create foundations and a framework to support young people to develop the knowledge, skills and confidence to take real life actions that can inspire and be replicated across the County and region.

Conclusion

- 4.35 To-date, the Council has made good progress towards its net zero target of 2032, or sooner, with a 64.2% reduction in Council emissions achieved between 2009-10 and 2021-22. However, the speed of reduction is now 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 8,710 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.
- 4.36 Delivery of the Strategy has had a strong first year, with a significant number of targets and actions on track to meet or exceed the desired outcomes, and action 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 performance.

5. Consultation

- 5.1 Not applicable.

6. Alternative Options Considered

- 6.1 **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.

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 – Summary of policy and legislation updates since October 2021.
- 9.3 Appendix 3 – Revised Long List Actions and Performance – to be delivered by the end of 2025.

10. Recommendations

That Cabinet:

- a) Notes the contents of the report relating to relevant national and regional policy, legislation and governance changes over the past 12 months that might have implications on the Council's climate change programme.
- 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.
- c) Notes the progress being made against each target and action within the Strategy.
- d) 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 The delivery of some of the priority areas of work within the Strategy will have financial implications for the Council. These will be considered on a project-by-project basis.
- 1.2 Following approval at Full Council on 2 February 2022, the Council's climate change programme now has confirmation of its budget for 2022-23 to 2026-27. A summary of which follows:
 - Base Budget: The climate change programme holds a base budget of £0.503m per year for staff costs and project development and delivery.
 - A further allocation of £0.350m per year for 2022-23 and 2023-24, a total of £0.700m, is allocated for accelerated project development and delivery. This is to be drawn down from the Earmarked Reserve Fund (see below).
 - Reserve Fund: The Revenue Budget Report 2020-21 secured approval for a sum of £4m from the Business Rates Pilot to support capital borrowing to meet the requirements of changes to the vehicle fleet and approaches to help reduce emissions from buildings. This is held by Place in an Earmarked Reserve.
- 1.3 Approval for the allocation of funds from the Reserve is managed by Finance Business Partners and the Climate Change and Environment Programme Board (CCEPB), through the delegated authority of the Executive Director for Place.

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 will be 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 will be 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 will be 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 will be 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)

7.1 Environmental Sustainability

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 will be considered on a project-by-project basis.








Summary of Policy and Legislation Updates since October 2021









- 2.1 The UK Government published its **Net Zero Strategy: Build Back Greener** in October 2021, which coincided with the publication of the Council's Strategy. The Government's Strategy sets out a plan for a transition to a net zero economy that will take place over the next three decades. It focuses on the establishment of a clean, reliable power system as the foundation of a productive net zero economy, with a fully decarbonised power system by 2035, subject to security of supply. Low carbon job and skills creation, as well as innovation, also forms a central part of the strategy.
- 2.2 The **Environment Act 2021** became law in November 2021 and forms the UK's new framework of environmental protection. The Environment Act gives the Secretary of State the power to set legally binding, longer-term, environmental targets lasting at least 15 years, across a variety of areas relating to the environment, including four priority areas: water, air quality, biodiversity and waste/resource efficiency. This includes new legally binding targets for one of the most harmful pollutants, fine particulate matter (PM2.5). The Act has also established an Office for Environmental Protection as a new environmental watchdog. This new body is tasked with holding the Government and other public bodies to account and ensure that environmental laws are complied with.
- 2.3 Updated **Building Regulations for England** took effect in June 2022, primarily focused on new non-domestic buildings but also including policies for existing non-domestic buildings and new and existing housing. The regulations are early enablers for the government's Future Homes Standard and Future Buildings Standard – planned for 2025 – for which a key part is that all new builds are capable of being net zero in terms of operational carbon when the grid decarbonises.
- 2.4 'Net Zero, Energy and Environment' is one of a series of key themes being progressed under the **East Midlands Devolution Deal** between the Government and four of the Local Authorities of the East Midlands comprising Derby, Derbyshire, Nottingham & Nottinghamshire. Through this, an ambition to adopt shared endeavours and approaches to tackling climate change across the region is clear, and can build on existing ambitious strategies and work on energy, climate change adaption, waste and local nature recovery and biodiversity strategies. In recognition of this opportunity, the Government will make an investment in the East Midlands area of up to £9 million via a net







zero capital funding pot this Spending Review that will enable the East Midlands area to drive their net zero ambitions. This investment is subject to agreement of a business case from the area.

- 2.5 The rising **cost of living** is combining with existing disadvantage and vulnerability within communities to put many households at greater risk of both immediate hardship and reduced opportunity and wellbeing. Furthermore, research conducted by the County Council's Network (CCN) and the Society of County Treasurers indicates that England's 40 largest councils will increasingly be under-pressure to achieve costs savings as inflation is predicted to add over £1.5bn to costs. County authorities are expected to be particularly exposed to these rising costs because of the nature of delivering services in large rural areas. Councils must continue to support their communities and strengthen and maintain a collaborative approach to tackling the rising cost of living between partners in the private, public and voluntary sectors.







Revised Long List Actions and Performance – to be delivered by the end of 2025



COUNCIL ESTATE AND OPERATIONS		
Ref	Action	Status
LL1	Decarbonising Schools: Undertake a baselining exercise with all schools in Derbyshire to identify their existing emissions and ongoing work to reduce energy consumption. For all schools within the Derbyshire County Council Portfolio agree a target date to reduce emissions to net zero, between 2030 and 2040.	
LL2	Policy Review: Review all relevant existing Derbyshire County Council policies and update, where required, to ensure they consider carbon reduction and climate resilience and do not contradict our Climate Change Strategy and direction.	
LL3	Renewable Energy Generation: Maximise opportunities for renewable energy generation on Council property and work with partners, such as Midlands Net Zero Hub, to deliver collaborative projects and access funding streams.	
LL4	Efficient Buildings: Install lighting and heating controls, as well as water efficiency measures, across the estate to improve energy and water efficiency and continue to embrace the use of new technology to create a more agile, flexible, and mobile workforce.	
LL5	Behaviour Change (Internal): Undertake awareness raising and behaviour change campaigns to ensure all staff know how to make energy efficient choices in the home and workplace. Include climate-conscious behaviour into Job Descriptions, Employment Terms and Conditions and as part of the staff annual performance review.	
LL6	Behaviour Change (External): Provide ongoing up-to-date information on activities to reduce energy use and on taking wider action to tackle climate change on the Derbyshire County Council website. Work with communities to co-design and co-deliver specific actions within the Climate Change Strategy.	
LL7	Council Fleet Vehicles: Review core fleet requirements in each department to understand the current and potential future use of the core and grey fleet considering company EVs; hire vehicles; inter-departmental sharing of core vehicles, use of Vehicle Management System (VMS).	

	Deliver a programme to replace Derbyshire County Council's HGVs in 2024 with Clean Air Zone (CAZ) compliant vehicles combined with use of satellite navigation, awareness of driver style and use of a VMS. Use the collective purchasing power of Derbyshire's councils when purchasing fleet vehicles.	
LL8	Scope 3 emissions: Map the Council's level of influence against different levels of emitters to prioritise and focus action, and estimate emissions from 'Working at home'.	
LL9	Project Scoping and Impact Assessments: Carry out Climate Impact Assessments on all Derbyshire County Council infrastructure projects from 2022 identifying the whole carbon lifecycle and resilience to climate change. Ensure low carbon and resilient options are embedded in scope of works for new developments for client partners.	
LL10	Procurement: Consider opportunities for a joint procurement approach across local authorities in Derbyshire to purchase low carbon services including electric vehicle charging infrastructure and building upgrades.	
LOW CARBON ECONOMY		
Ref	Action	Status
LL11	Low Carbon Heat: Work with industrial partners to identify opportunities for waste heat recovery to serve low-carbon heating schemes, and to explore opportunities for the electrification of heat and heat pump technologies in non-residential buildings.	
LL12	Planning: Work with local authority partners and developers to better understand the integration of whole life carbon assessment into non-residential new developments, and to identify focus areas for energy efficiency improvements and renewable energy generation installations in the County's existing non-residential building stock.	
LL13	Minerals Industry: Work with the minerals industry to identify partnership projects for the transition to a low carbon sector.	
LL14	Community Energy: Work with community groups to develop community energy schemes and help secure funding from the Local Enterprise Partnership (LEP) for local energy projects.	
LL15	Grid Capacity and Demand: Work with the DNOs and other partners to identify priority zones for low carbon development, to support the energy transition, and to	

	reduce additional stresses placed on power networks due to increased electrification (transport, heat etc.) and increased penetration of renewables.	
LL16	Business Support: Continue investing in the Derbyshire Green Entrepreneurs Fund, explore other mechanisms (such as a revolving fund) and secure external funding where relevant, to support Derbyshire businesses in improving the carbon and energy consumption in operational performance and to drive innovation and curate sustainable growth.	
LL17	Skills and Training: Develop a comprehensive apprentice training programme developed in conjunction with university partners, kick-started by placing requirements on directly commissioned works.	
DECARBONISING THE DOMESTIC SECTOR		
Ref	Action	Status
LL18	Retrofitting Project Pipeline: Work with the district and borough councils, Midlands Net Zero Hub and the D2N2 LEP to identify a programme of 'shovel ready' projects and partnership frameworks for retrofitting domestic properties and to enable a more rapid, collaborative and timely response to funding opportunities.	
LL19	Planning: Continue to work with the borough and district councils and developers to explore increasing requirements within Local Plans and wider planning policies for zero carbon homes and so that new housing developments are resilient a changing climate.	
LL20	Domestic Retrofit Skills, Employment and Training: Carry out analysis to understand the capacity of the construction and retrofit sectors to retrofit all homes across Derbyshire to EPC rating C or above by 2035. Work with local authority and academic partners, as well as industry, to continue to strengthen and develop local skills, capacity, frameworks and expertise in domestic energy efficiency retrofitting, and develop a Regional Energy Skills Strategy to inform investor-ready programmes to receive support from the National Skills Fund.	
LL21	Funding Support: Support residents in responding quickly to government financial support for home improvement and explore the feasibility of a council-managed local green homes fund to provide access to homeowners for financial support with energy efficiency improvements, as well as passing on savings from bulk retrofit contracts.	

TRANSPORT, TRAVEL AND INFRASTRUCTURE

Ref	Action	Status
LL22	Active Travel: Develop partnerships and seek funding for training and support to increase number of young people who can cycle confidently and regularly. Ensure cycle proofing is embedded in design of future infrastructure developments and increase the use of active travel (cycling and walking) for first and last mile transport use by utilising a more connected approach across different service offerings.	
LL23	Bus Services and Infrastructure: Through delivery of the Bus Service Improvement Plan and working with local and regional partners, such as Midlands Connect, work collaboratively to: <ul style="list-style-type: none"> • Introduce measures to present the bus services in Derbyshire as a singular coordinated network. • Install electronic real time information signs and LED lighting at all key bus stops and interchanges. • Implement targeted punctuality improvement infrastructure measures to make bus journeys quicker and more reliable. • Continue investment in new buses to improve vehicle emissions standards and introduce low carbon buses such as electric or hydrogen. 	
LL24	Planning: Reinvigorate travel planning and behavioural change activities linked to new housing and commercial developments and ensure public transport routes and gateways are developed to access rural areas, including the Peak District National Park.	
LL25	Taxi Operators: Support taxi operators in embracing alternative technologies and infrastructure by supporting applications for grant funding and expanding the public charging network.	
LL26	Technology: Track developments in transport technology to ensure rapid deployment of low carbon solutions.	
LL27	EV Charging Infrastructure: Work with partners to accelerate the shift to electric vehicles through improving charging point infrastructure and promoting the uptake in these vehicles, with a particular focus on facilitating a growth in charging infrastructure in areas where there is little or no commercial viability (such as on-street charging).	

WASTE		
Ref	Action	Status
LL28	Strategy Development and Implementation: In the development of the new Derbyshire Waste Strategy integrate circular economy principles and set ambitious targets for increased reuse and recycling.	
LL29	Council Waste and Resources: Establish task groups within each Department to promote good waste reduction, recycling and recovery practices within service delivery and contracting activities. Produce six monthly reports on waste produced across the estate and make this available to all staff to enable better understand of the impact of waste reduction measures.	
LL30	Partnership Working: Continue to work with local, regional and national partners on improving levels of waste diversion through effective public engagement and behaviour change. Work with local businesses to explore embedding circular economy practices within operations and explore opportunities for collaboration with research groups and universities.	