



Derby City Council

CLIMATE CHANGE ACTION PLAN 2025 - 2027



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1.0 Climate Change Action Plan 2025 – 2027: Introduction

This is the Council's second Climate Change Action Plan, building on the progress and the lessons learnt from our first Plan which covered the period 2022 – 2024. Our first Plan was designed to bring together all the things we are doing across the Council to reduce our carbon emissions and to prepare the Council for more extreme weather events.

We have set ourselves the highly challenging target of reducing our own Scope 1 and 2 carbon emissions to net zero by 2035 and to work towards net zero for Derby, alongside partners across the city. The science showing the need for this rapid and highly ambitious reduction is clear; how we approach this locally will have far reaching implications for each one of us in transitioning to net zero living.

Further information about Scope 1, 2 and 3 emissions can be found in table 1.

We acknowledge that as the local Council we have a pivotal role to play to help ensure that Derby contributes to addressing this extremely urgent global issue, recognising the fact that locally we are experiencing more extreme weather events caused by a warming climate, especially in the form of more widespread and severe flooding and extreme temperature events in summer. The effects of climate change will disproportionately effect those in our society who are most vulnerable and who are the least able to adapt to these events. We will take action to address climate change for our entire population, with additional focus on those that are most likely to be affected and least likely to be able to cope with the impact of climate change. We also need to recognise and acknowledge the opportunities that will come from our net zero transition in the form of renewable energy, new specialist jobs, more energy efficient homes and a cleaner, greener, healthier environment for us all.

Climate change should not sit with any single political portfolio or Council service because it cuts across all areas of the organisation's work and involves every colleague and Councillor.

Our Council Plan 2022-2025 sets out our priorities and outcomes for the future. One of the Council Plan's four key themes is: 'Green city - protecting and enhancing our environment'. Focus for this theme is on: cleaner air and lower CO2 emissions; sustainable waste and transport; and enhancing our green and blue spaces. In the face of climate change, we will lead communities and partners to make a difference. We must work together as a city to tackle the climate emergency, promoting more sustainable ways of living.

There is collective responsibility for organisations and communities to take action on climate change for Derby. The Derby Sustainability Board is a partnership of key stakeholders from across the city, ranging from public bodies such as the NHS, to large corporate organisations, small and medium sized businesses, community and voluntary organisations and community groups.

While the Council, through its civic role, facilitates the Board, it does not run it. Partners come together voluntarily at least four times per year to make change in our city in the face of a global climate crisis, supporting the UN Sustainable Development Goals.

Table 1: description of what Scope 1, 2 and 3 emissions refer to.

Scope	Description of carbon emissions source(s)
1	Direct emissions from sources directly controlled by Derby City Council, e.g., emissions from Council-controlled gas boilers and from Council-owned vehicles.
2	Indirect emissions from purchased energy and street lighting which is within the wider control of Derby City Council.
3	All other indirect emissions (not included in Scope 1 and 2) that occur in the value chain of the reporting company. This includes emissions from the products and services bought in by the Council, e.g. construction and social care.

2.0 Progress

2.1 Key achievements from the 2022-2024 Climate Change Action Plan (CCAP)

The first iteration of our CCAP was a starting point for the Council to begin its journey to net zero, engaging with services to identify priorities and refining our internal monitoring and reporting processes. The Plan contained 106 actions and largely focused on what the Council could do regarding its own emissions.

Eight key achievements of the 2022-2024 Plan include:

1. 5,560 street lighting assets upgraded to energy efficient LEDs, saving 329 tonnes of carbon emissions per year.
2. Energy surveys completed for Council's top 23 energy consuming sites, and no/low-cost measures to mitigate this identified.
3. Introduction of a Climate Change Impact Assessment tool to improve consideration of climate impacts within key decisions.
4. Additional short-term staff resource - Employment of a Climate Change Projects Officer, providing home energy efficiency support to residents across Derby, and an Intelligence Officer to work on net zero procurement and Scope 3 carbon emissions.
5. Re-establishment of in-house climate change training for colleagues and Councillors; delivery began in November 2023.
6. Establishment of a Community Climate Forum, in partnership with Derby Climate Coalition, to re-establish a mechanism for ongoing communication and collaboration on climate action with bi-monthly meetings which commenced in October 2023.
7. Numerous projects in parks and throughout the city, including planting 12,162 trees, increasing numbers of planters, wildflower areas, development of sustainable urban drainage systems, wildlife support including otter holts, bird and bat boxes.
8. Publishing developer and householder planning guides on Biodiversity Net Gain.

2.2 Our carbon footprint

To evaluate the progress we are making in absolute terms, we are monitoring our carbon footprint. In 2020, when this exercise was last undertaken, the carbon emissions from the Council's energy and fuel use for 2019/20 amounted to 11,476 tonnes (including Derby Homes). For the latest figure covering the 2022/23 financial year, carbon emissions have reduced to 9,726 tonnes – a drop of 15%, which can partly be attributed to a reduction in the carbon intensity of electricity, but also to our investment in energy efficiency measures and the closure of certain buildings including the Queen's Leisure Centre.

Additional factors which also helped to reduce our Scope 1 and 2 emissions over the period include the increased adoption of hybrid working (reducing energy use in council buildings), the relatively mild winter of 2022/23, and the greater awareness of rising energy prices following Russia's invasion of Ukraine in February 2022, resulting in increased emphasis on energy efficiency.

A much bigger challenge will be to reduce our 'invisible' emissions from the things that we procure and the services we buy in as a Council. These are Scope 3 emissions, and are much harder to accurately measure and monitor, but significantly dwarf the emissions from our energy and fuel use (Scope 1 and 2 emissions). Scope 3 also includes the emissions resulting from employee commuting / working from home, the grey fleet emissions arising from the use of personal vehicles for work, business travel, and our pension fund investments. For our new Plan we want to make these emissions more visible and find effective ways to both measure and ultimately reduce them.

3.0 Lessons Learnt

We have learnt a great deal through our journey so far that has informed the development of our second CCAP.

3.1 Fewer, more strategic interventions

Our new Plan will focus on fewer interventions to make sure we prioritise the most important actions, as opposed to smaller, business as usual activities. By having 35 headline projects aligning with our target of net zero by 2035, this will help us to really drive progress and to monitor the difference we are making more effectively.

Due to their complex nature across multiple services, it is not possible in many cases to estimate potential carbon savings for actions in advance. Where possible, we will calculate estimated emissions reductions for the simpler, single-project-based actions within our Plan. We will measure and monitor carbon emissions savings for all 35 actions as far as possible, as work progresses to deliver what we said we would do.

3.2 A broader remit

Our first Plan mainly restricted itself to those interventions the Council has more control over (Scope 1 and 2), including the energy used in its buildings and vehicle fleet. This approach meant that some essential Council services, (where a considerable amount of Scope 3 emissions reside), did not play a role. These included Public Health, Adult's and Children's Social Care, Travel and Transport and Commissioning, which are now included in the new Plan.

The new Plan also has an extended remit, including not just the Council's own internal actions but those where the Council can help bring about transformational citywide change by focusing on its role as an enabler and place-shaper, working in collaboration to achieve greater impact for Derby. This also includes at a regional level, where we are joining forces with the Councils that come under the East Midlands County Combined Authority (EMCCA) to work at a much larger scale through projects like the Local Area Energy Plan (LAEP) - see CCAP Action number 19.

3.3 Scope 3 emissions

Our first Plan mainly focused on measuring and reducing our Scope 1 and 2 emissions (our energy and fuel related carbon emissions). Our new Plan introduces more rigour to how we measure these emissions but also introduces Scope 3 emissions which are significantly larger, making up over 90% of our organisational carbon footprint. Citywide Scope 3 emissions are likely to also be in this order of magnitude. However, Scope 3 are much more difficult to accurately measure, monitor and most importantly, reduce.

Table 2: Derby City Council's Scope 3 emissions sources

Financial Year 2023/24		
Description	tCO2e amount	Estimated percentage contribution of Scope 3
Purchased goods and services	83,880 tCO2e	77.9%
Employee commuting / working from home*	5,000 tCO2e	4.6%
Derby City Council pension fund fossil fuel investments	18,800 tCO2e	17.5%
Business travel	27 tCO2e	0.1%
Grey fleet travel	TBC	-
Combined total	107,707 tCO2e	100%

*Employee commuting / working from home figure is an estimate which involves multiple assumptions (including the number of days employees travel to work, mode and distance of travel and home energy use) and should be treated as an indicative figure only.

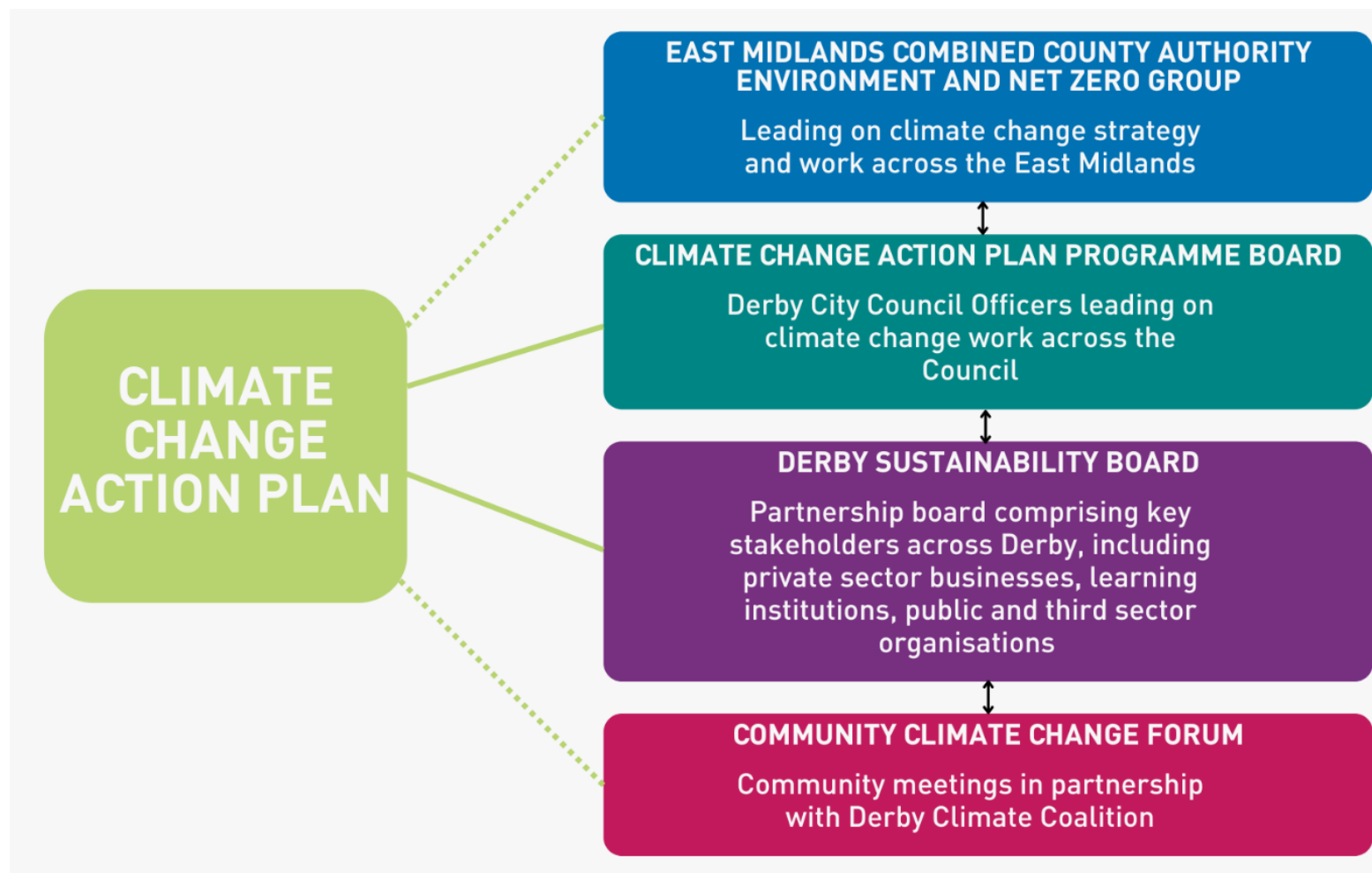
Quantifying and reporting on Scope 3 emissions presents a significant challenge, not just to the Council but to Local Authorities and organisations both nationally and globally. Measuring and monitoring Scope 3 emissions is a developing area and is not an exact science. This is due to the difficulty and complexity of obtaining reliable supplier data, the evolving scientific evidence, adopting the most effective and reliable quantitative tools, and following the most appropriate accounting and reporting methodology.

As such, the Council will approach Scope 3 differently and separate it from Scope 1 and 2 monitoring and reporting, recognising its overall complexity. We will keep abreast of best practice in this area, especially in relation to the standardisation of reporting and how to turn the emissions data into actionable insights as opposed to a reporting only exercise, with a particular focus on our top suppliers and hotspot carbon emissions areas.

3.4 Joined-up working

Working at a range of different levels requires us to join up with others and to better co-ordinate what we do to ensure we have the most impact. We need to create a 'green' thread that connects the high-level ambitions and direction of the Council's Climate Change Programme Board with the Council Plan, the City Sustainability Partnership Board and the developing EMCCA governance arrangements to ensure that we all work closely together to seek and secure opportunity and added value.

Diagram 1: groups and connections within Derby which influence the CCAP.



4.0 Layout

The table in section 5 lists all 35 interventions that we will focus on over the next two years. Each column provides details about the status of the project, its ownership and monitoring information. Of special mention are the following column headings which require some further explanation.

4.1 Scope description

Carbon emissions can be divided into three main categories or 'Scopes'. Scope 1 and 2 relate to the carbon emissions that the Council itself is largely responsible for through its use of energy, fuel and electricity. Scope 3 emissions relate to the products and services the Council buys in to deliver its various functions. These are more difficult for the Council to both measure and control.

4.2 Carbon savings

For each intervention we have attempted to indicate potential carbon savings to give us a better indication of the progress we are making and what we still need to do to reach our net zero target. Carbon savings, where known, are expressed in tCO₂e, which means tonnes of carbon dioxide equivalent. 'Carbon dioxide equivalent' refers to all greenhouse gases emitted, not just carbon dioxide, so CO₂e is a way to give a single, comparable measurement for all emissions. However, where the necessary data or resource is not available, the predicted emissions savings have been categorised as low, medium or high.

Table 3: carbon savings for CCAP Savings categories

Category	Annual potential tCO ₂ e saving
Low	Up to 10
Medium	50+
High	100+

An additional category has been added, "Identifies carbon saving opportunities", to signify actions which do not directly save carbon themselves but enable essential emissions monitoring and strategic planning in order to target and implement mitigation and adaptation projects which will achieve carbon savings.

4.3 Co-benefits

Co-benefits relate to “the positive effects that a policy or measure aimed at one objective might have on other objectives”. This is very relevant in addressing climate change and decarbonising our city, which will also deliver a great deal of positive environmental, social and economic benefits for the people of Derby. Maintaining focus on co-benefits also allows us to focus on inequalities. Some communities within our population will be more affected by climate change, or the actions we take to address climate change. It is important for us to ensure that these inequalities are taken into consideration when we are designing actions to address climate change. We have captured some of the most common co-benefits and have aligned these to the 35 actions within the Plan, to raise awareness of the additional benefits related to each action.

Table 4: Description of co-benefits associated with CCAP actions.

Number	Co-benefit short descriptor for CCAP	Co-benefit detail
1	Improved physical health	Retrofitting of homes leading to fewer deaths from extreme seasonal temperatures. More active lifestyles with less car travel leading to enhanced physical and mental health and a reduction in obesity and long-term illness.
2	Improved mental health	From a better-quality living environment (internal and external), higher levels of physical activity, greater social integration, and improved physical health.
3	Reduced energy and resource costs	For organisations and residents alike.
4	Greater energy security	Measures to reduce carbon dioxide emissions from vehicles and energy use in buildings are expected to improve energy security by reducing the nation's dependency on oil imports and exposure to price volatility.
5	Reduced inequality	Lower income households suffer most from high energy costs and proximity to busy roads producing air/noise pollution and resultant health problems. Car-centric cities disadvantage the marginalised.
6	Enhanced city vibrancy	Strengthened communities from more human-orientated environment and increased accompanying footfall.
7	Reduced costs of public healthcare	Lower incidence of health impacts from poor air quality, poor quality housing and lack of physical activity (e.g. obesity, poor mental health, cancer, cardiovascular disease, respiratory disease, diabetes, dementia) would save Derby hundreds of millions of pounds each year in health and care costs.
8	Improved housing quality	From energy efficiency/home insulation works - reducing cold, draughts, mould, and condensation issues. Also helps reduce associated health impacts such as asthma, respiratory disease, and cancer.

9	Enhanced productivity in schools & workplaces	From active travel (riding a bike or walking/wheeling to work/school).
10	Enhance local green economy	Opportunities for greater green job creation, upskilling and green export-led growth.
11	Cleaner air	Improvements to air quality from: reduced use of petrol and diesel vehicles; reduced impacts from other parts of vehicles, such as particulates from tyres and brake pads, decreased levels of pollution from industry and burning of domestic fuel. Better air quality brings significant public health benefits and reduced healthcare costs.
12	Greater physical activity	Through active travel - reduced mental and physical health problems, increased productivity.
13	Reduced fuel poverty	Improved housing quality through home energy efficiency works; reduced energy bills.
14	Improved green & blue infrastructure	Climate change adaptation and biodiversity work improve the amount and quality of accessible green spaces and waterways, to benefit the health and wellbeing of residents as well as provide additional active travel options.

4.4 Council's role in delivery

In broadening the overall scope of the Plan, it is recognised that the Council will need to draw on the important role it plays as a place-maker, influencer, and enabler in helping to facilitate positive change at a city-wide level. For each of the 35 actions we have attempted to categorise the Council's role in the delivery process, recognising the fact that we cannot reach net zero for the city of Derby on our own.

4.5 Structure of the Plan

In a similar approach to our first Plan, we have separated the 35 actions under four different themes – Property, Processes, Place and People. Each of the four different themes has a dedicated group to co-ordinate and champion progress. This approach allows closer control and monitoring and assigns greater accountability across the whole Council. Collective reporting across departments will ensure joint effort and responsibility for progress.

4.6 Monitoring our progress

The 35 actions contained within our Plan will be monitored through the Council's performance management system. This will take place every quarter and will result in a stand-alone internal report which will identify which actions are progressing and which ones require further attention. We will also

produce a publicly available annual statement outlining the progress we are making and will present this to our Climate Change Programme Board, the Derby Sustainability Board and the Community Climate Forum.

All actions with a deadline status of “Ongoing” will be monitored each quarter and reviewed at the end of the term of the Action Plan (2027) if they are not complete by this point.

5.0 Actions

Number	Action	Action Description	Delivery date	Carbon emissions Scope(s)	Estimated annual carbon savings tCO2e or low/medium/high	Co-benefits
Property						
1	Hydroelectric Power Plant	Increase generation capacity of the Council's hydroelectric power plant.	31/12/2025	1 & 2	192	4, 10, 11
2	Renewable Energy	Identify further opportunities for renewable energy generation via the Council's own assets.	Ongoing	1 & 2	Medium	4, 10, 11
3	Renewable 'green' energy supply	Switch to a renewable energy tariff for the Council. Due to the mix of energy sources present in grid-supplied electricity, this will not directly reduce carbon emissions for the Council, but it is important to set an example and demonstrate support for the supply of green energy.	15/01/2025	1 & 2	0	
4	Fleet decarbonisation	Reduce the carbon emissions of the Council's fleet, including carrying out a pilot for using HVO.	30/04/2025	1 & 2	52.5	1, 2, 11
5	Reinstatement of electric pool cars at the Council House	Fund replacement of failed EV charge points at Council House; investigate car club EV options for pool cars.	31/12/2027	1	Medium	3, 4, 11
6	Decarbonisation of Council sites	For each site that has had a feasibility study conducted, progress the proposed decarbonisation projects to RIBA Stage 4 (technical design stage). This is necessary to be able to bid for the appropriate funding towards the cost of implementation. This is for DCC corporate sites that DCC operates and pays the energy bills for.	30/09/2025	1&2	High	3, 4

7	Use energy data to inform carbon emissions and energy use reduction at Council sites	Compare sites' energy consumption to benchmarking data and work with budget holders and site managers to lower energy consumption at poorly performing sites. Improve transparency and accessibility of energy consumption data for Council sites; enable access to web portal for budget managers to facilitate monitoring and better control of consumption at each site. This is for sites that DCC owns, operates and pays the energy bills for.	Ongoing	1&2	High	3, 4
8	Street lighting	Identify new opportunities, where funding is available and, subject to any Deed of Variation withing the contract, to reduce the carbon emissions from street lighting.	Ongoing	2	Medium	3, 4
9	Council Housing	Domestic new builds to meet Future Homes standards; all existing council housing to have an SAP rating of at least band C by 2030.	Ongoing	All	Medium	1, 2, 8, 10
10	Private sector housing	Increase uptake of various housing grants and work more with landlords to improve the energy efficiency of privately owned accommodation in Derby. Present the case to EMCCA for it to provide 3-5 year grant funding programmes relating to the provision of domestic home insulation retrofit. Investigate creation of low interest home energy efficiency loan scheme for able-to-pay residents in the city.	Ongoing	1 & 2	High	1, 2, 8, 10
People						
11	Climate Change Communications	Working with Council Teams to use Council and partner communication and marketing channels, to raise the profile of, and engagement with the CCAP, CCIA and co-benefits of climate change adaptation and mitigation to stakeholder groups including ongoing in-house training for Councillors and Colleagues.	Ongoing	All	Medium	

12	New Communications Projects	Develop new internal and external engagement channels/projects including use of the Director of Public Health's Annual Report which focuses on Climate Change, the Derby Promise and Festival of Ideas, and the Let's Talk Climate platform.	Ongoing	All	Medium	
13	Home energy advice and support	Provide free and impartial home energy advice to all residents of Derby. This includes: signposting to sources of grant funding for home energy improvements; referrals for emergency energy and food bank vouchers; referrals to other Council and external services to support vulnerable people with energy costs and staying warm and well at home; support to understand energy bills and OFGEM price cap; provision of free energy-saving products for the home (LED lightbulbs, draft proofing products etc.).	31/03/2025 (when funding for current Projects Officer ends)	All	High	1, 2, 3, 4, 5, 7, 8, 10, 13
14	Community Energy	Encourage and support the development of community energy groups and potential project opportunities, in conjunction with the Government's Local Power Plan.	Ongoing	All	Medium	3, 4, 5
15	Community Climate Change Forum	Through this Forum, further develop opportunities to work with community groups and individuals across Derby to engage them in action towards net zero, potentially moving towards creating new community energy or climate change projects.	Ongoing	All		
16	Derby Sustainability Board	Align the CCAP and work of the Council with the Sustainability Board's work programme. The Board is a partnership of organisations across the city to advance Derby towards net zero.	Ongoing	All		
17	Young Peoples' Climate Conference	Organise a conference for young people as part of the Derby Promise, to meaningfully involve this important group in debates and discussions about how the city responds to the climate crisis.	31/07/2025	All		
Processes						

19	Local Area Energy Plan (LAEP)	Develop and deliver a Local Area Energy Plan (LAEP) for the City to map out the current energy demand, issues, and opportunities. Must align with EMCCA's net zero work/priorities.	31/12/2025	All	Identifies carbon saving opportunities	
18	Carbon footprinting	Implement an annual carbon footprinting exercise for the Council's Scope 1 and 2 carbon emissions; work on a similar exercise for the Council's Scope 3 emissions where possible. Implement the recommendations coming out of our scope 1 and 2 2022/23 report, especially with regards to the Council House.	Ongoing	All	Identifies carbon saving opportunities	3, 4
20	Net Zero Procurement	Work towards the design and implementation of a net zero procurement strategy, for Scopes 1, 2 and 3.	31/08/2025	All	High	10
21	Climate Finance	Secure finance for climate change action, with a focus on securing investment from the public sector, in order to be able to make the scale of investment needed to reach the Council's net zero 2035 target, aligning work with the LAEP and EMCCA.	Ongoing	All	High	6, 10
22	Climate Change Fund	Align the actions contained in the new Action Plan with the Climate Change Fund.	Ongoing	All	Medium	3, 4
23	Pension Divestment	Investigate the best opportunities to aid decarbonisation of the Council's pension fund (which is run by Derbyshire County Council).	31/05/2025	3	High	10
24	CCIA review	Review and improve the CCIA, improving quality of CCIA's in Cabinet Reports and increasing uptake of CCIA's in project planning e.g. via the Project Management Platform.	31/03/2025	All	Medium	
25	City carbon emissions	Use, interrogate and present the main sources of publicly available data to inform and prioritise the carbon reduction interventions required for Derby to reach net zero for Housing, Industry, Commercial, Public Sector, Domestic, Transport and Waste.	Ongoing	All	Identifies carbon saving opportunities	

26	Local carbon insetting scheme	Develop a local carbon insetting project for Derby. Investigate a scheme which involves retrofitting renewables and energy efficiency upgrades to derby Homes properties with Housing Associations' Charitable Trust (HACT).	30/04/2025	All	Medium	8, 10
27	Embed climate change action within the People's Services Directorate	Work across the People's Services directorate to embed climate change adaptation and mitigation within services. This is essential to protect vulnerable communities who will be first and most severely affected by climate change. This work will also reduce spend via energy and resource efficiency and tackle the Council's largest source of Scope 3 carbon emissions.	Ongoing	All	High	1, 2, 3, 4, 5, 7, 10
Place						
28	Regeneration	Where the Council is involved in regeneration activity we will focus on use of energy, resources and materials to minimise carbon emissions and maximise climate adaptation by: i) ensuring new build developments meet the latest energy efficiency standards and address the impacts of extreme weather events. ii) decarbonise and improve the energy efficiency of existing buildings through retrofitting and use of new technology.	Ongoing	All	High	8, 10
29	Sustainable Mobility Plan	Work with partners to develop a mobility plan to address short journeys, encourage the use of active travel and sustainable modes, and switching to cleaner fuels.	Ongoing	All	High	1, 2, 5, 6, 7, 9, 11, 12
30	Influence emerging regional transport policy	Work with the East Midlands Combined County Authority, influencing new strategic transport policies and developments as they are established at a regional level, which will lead to new regional objectives and obligations for the Council.	Ongoing	All	Identifies carbon saving opportunities	

31	Planning	Develop a suite of policies in the Council's emerging new Local Plan aimed at reducing the city's carbon emissions, mitigating the impact of climate change and promoting green solutions in all new development.	The emerging Local Planning policies should be in place before December 2026.	All	High	
32	Climate Change Adaptation	Raise the profile and understanding of climate adaptation by identifying both the risks and opportunities that a changing climate will bring for Derby and to align this with the approach undertaken at a regional level through EMCCA.	Ongoing	All	Medium	
33	Improve local air quality	Work collaboratively across climate change, environmental health, public health and transport to support actions that improve local air quality and reduce greenhouse gases. Identify opportunities where both air quality and climate change benefit from the same actions, and produce collaborative solutions if air quality and climate change actions conflict. Work together to influence regional and national policy and strategy.	Ongoing	All	Medium	1, 2, 7, 11
34	Co-benefits	Utilise information on the co-benefits of tackling climate change to capture the additional benefits of CC work, and support the use of this to encourage further action across the city. Develop our understanding of health co-benefits through the 2025 Derby City Council Director of Public Health report on climate change. Utilise this information to support and encourage further action including implementation of the report recommendations.	Ongoing; Director of Health report due by 30/04/2025	All	Identifies carbon saving opportunities	
35	Parks and open spaces	In partnership, identify and deliver projects and actions across parks and open spaces to support Climate Change resilience and tackle biodiversity loss. Key projects include next phase of rewilding project at Allestree Park and identification of opportunities through Biodiversity Net Gain and other funding sources.	Ongoing	3	Medium	1, 2, 7, 11, 12, 14

6.0 Glossary of Climate Change Terminology

Adaptation: action that helps cope with the effects of climate change - for example construction of barriers to protect against rising sea levels, or conversion to crops capable of surviving high temperatures and drought.

Anthropocene: relating to or denoting the current geological age, viewed as the period during which human activity has been the dominant influence on climate and the environment.

Anthropogenic climate change: climate change caused by human activity as opposed to natural processes.

Biofuel: fuel derived from renewable, biological sources, including crops such as maize and sugar cane, and some forms of waste.

Carbon dioxide (CO₂): Carbon dioxide is a gas in the Earth's atmosphere. It occurs naturally and is also a by-product of human activities such as burning fossil fuels. It is the principal greenhouse gas produced by human activity.

Carbon dioxide equivalent (CO₂e): the overall warming effect of the combination of six key greenhouse gases is often expressed in terms of carbon dioxide equivalent - the amount of CO₂ that would cause the same amount of warming.

Carbon footprint: the amount of carbon emitted by an individual or organisation in a given period of time, or the amount of carbon emitted during the manufacture of a product.

Carbon insetting: involves initiatives that directly address a company's carbon footprint and reduction within its own operations and supply chain. Instead of offsetting using an emissions reduction activity outside of the organisation's scope, the organisation targets emissions that are within its value chain.

Carbon insetting – specifically including Area Based Insetting (ABI): a new mechanism that builds on the principles of traditional 'insetting' by shifting the focus of the carbon saving project(s) into the geographic boundary of a local authority.

Carbon neutral: a state of balance between CO₂e emitted into the atmosphere and CO₂e removed from the atmosphere, typically through carbon offsetting.

Carbon offsetting: a way of compensating for emissions of CO₂ by participating in, or funding, efforts to take CO₂ out of the atmosphere. Offsetting often involves paying another party, somewhere else, to save emissions equivalent to those produced by your activity.

Carbon sequestration: the process of storing carbon dioxide. This can happen naturally, as growing trees and plants turn CO₂ into biomass. It can also refer to the capture and storage of CO₂ produced by industry.

CCAP: Climate Change Action Plan – the Council’s high level, strategic Plan that shows the actions the Council is taking, including working with partners, over the next two years to reach an ultimate goal of being net zero by 2035.

CCCN: Colleague Climate Change Network – the Council’s support and learning network for colleagues who are interested in the climate change agenda.

CCIA: Climate Change Impact Assessment – a tool used to show the potential climate or environmental impact of a key decision by the Council. A CCIA must be included in all Cabinet Papers and should also be used from inception of projects/initiatives.

CCF: Community Climate Forum – a forum for open and constructive dialogue between the Council and local people, to ask questions and seek opportunities for collaboration. Run in partnership between the Council and Derby Climate Coalition.

Climate change: a pattern of change affecting global or regional climate, as measured by yardsticks such as average temperature and rainfall, or an alteration in frequency of extreme weather conditions. This variation may be caused by both natural processes and human activity. Global warming is one aspect of climate change.

Derby Sustainability Board: a partnership of key stakeholders from across the city, ranging from public bodies such as the NHS, to large corporate organisations, small and medium sized businesses, community and voluntary organisations and community groups. Partners come together voluntarily to make change in our city in the face of a global climate crisis.

Global warming: the steady rise in global average temperature in recent decades, which experts believe is largely caused by man-made greenhouse gas emissions.

Greenhouse gases (GHGs): natural and industrial gases that trap heat from the Earth and warm its surface.

Greenhouse effect: the insulating effect of certain gases in the atmosphere, which allow solar radiation to warm the earth and then prevent some of the heat from escaping.

Mitigation: action that will reduce man-made climate change. This includes action to reduce greenhouse gas emissions or absorb greenhouse gases in the atmosphere.

Net zero: a target of completely negating the amount of greenhouse gases produced by human activity, to be achieved by reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.

Renewable energy: energy is energy created from sources that can be replenished in a short period of time. The five renewable sources used most often are: biomass (such as wood and biogas), the movement of water, geothermal (heat from within the earth), wind, and solar.