# Derby City Council's Climate Change Action Plan 2022 – 2024

# Achieving net zero by 2035

## Foreword

Derby City Council declared a climate emergency in May 2019. This was in response to the global impacts of Climate Change and the consequences for our city and our residents. We have all started to see some of these for ourselves - increased local flooding, higher temperatures during the summer and unusual weather patterns.

It is imperative that we, as the Council, act now and act fast, which is why we are pledging to reduce our emissions and achieve net-zero by 2035.

This Climate Change Action Plan, which is aligned to our Green City ambition in our Council Plan, represents our commitment to tackling the causes of climate change and trying to reduce the effects they have on our city. We are pledging to protect and enhance our environment, whilst building a green, vibrant and resilient Derby.

The plan is our first attempt and we know it isn't perfect because this is a complicated and wide-reaching issue. What we have tried to do is set out how we are going to take steps towards our target, working with our colleagues to ensure that climate change is at the heart of every decision, project, or plans we make. It won't be an easy journey, there are many difficult decisions that we will have to make, but we are committed to stepping up to the challenge and will continue to monitor our progress.

We will embrace new greener technology and best practices to ensure we are doing the right thing for Derby. We have already introduced various initiatives that positively help such as Our City, Our River flood defence programme to mitigate flood risks, the Roadside Nitrogen Dioxide (NO<sub>2</sub>) Local Air Quality plan to improve the quality of the air in the city, our Waste Management Strategy to support recycling and waste reduction and supporting Derby as a centre of excellence for future fuels technology.

I want to thank residents, colleagues and partners for their hard work and dedication to tackling climate change in Derby. We still have a great deal to do together to get to net carbon zero and I look forward to your continued commitment to our city's journey.

Paul Simpson, Chief Executive Derby City Council

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# Introduction

The Council and the city are on an urgent and challenging journey to net zero by 2035. This is an incredibly ambitious commitment 15 years in advance of the UK's national target of net zero carbon by 2050.

This action plan is all about what the Council can do in this area to make a real difference to reduce its carbon footprint and to act as a catalyst for local action to tackle our declared climate emergency.

#### Where are we now?

Climate change is the "the biggest threat to security that modern humans have ever faced" <sup>1</sup>. In 2019, Derby City Council declared a climate emergency in recognition of the urgent need to reduce greenhouse gas emissions and safeguard our climate from heating by more than 1.5°C (compared to pre-industrial levels).

The Council has already done some good work in this area from building a hydropower plant on the banks of the River Derwent to provide power to the Council House to retrofitting solar panels to over 1,000 of our Derby Homes properties and investing in electric vehicles to be used by our colleagues.

However, there are more steps we need to take to help us reach our ambitions. The UK's greenhouse gas emissions are coming down but there's a long way to go to reach net zero.

#### Where do we want to be?

The Climate Change Act 2008 says we must be net zero by 2050 but we're more ambitious than that. We want to be a net zero organisation by 2035.

This means that by 2035, we will reduce our greenhouse gas emissions drastically and have steps in place to remove any remaining emissions from the atmosphere.

Being net zero means that as an organisation, we won't emit any carbon dioxide or other greenhouse gasses from our buildings, or our activities and we'll also have a wider effect on reducing emissions throughout the city. Currently, we produce less than 2% of the overall emissions in the city.

By becoming net zero, we'll benefit not just our organisation but also the city. The co-benefits to our residents include:

- improved public health
- a cleaner, greener environment to live and work in
- reduced inequalities
- better transport infrastructure and less cars on the road
- more jobs and a more resilient economy.

<sup>&</sup>lt;sup>1</sup> David Attenborough, addressing the United Nations Framework Convention on Climate Change (UNFCCC) in November 2021

#### How are we going to get there?

In developing our plan our strategy has been to prioritise those actions that:

- ★ TARGET: will give us the biggest carbon impact in the shortest time
- ★ COLLABORATE: can impact multiple services or work together more effectively
- ★ EMBED: bring decarbonization into our decision making at every level
- ★ LEARN: increase our knowledge and skills on emission reduction across the organisation.

Our action plan sets out the specific things we will do, and by when, to reach net zero by 2035. To achieve this, we first need to know where our emissions currently come from. We estimate that our emissions (direct and indirect) are 25,000 tonnes per year.

We're a large organisation so to make sure our Plan is going to be effective we've taken an in-depth look at ourselves and where we need to prioritise our de-carbonisation efforts to deliver the best results.

Like any long-term plan, the goal-posts may move and we must be able to adapt to that. For example, if the Government changes their legislation, we may need to change what we do and when we're going to do it. We're a learning organisation, so that's why a team of Climate Champions at the Council will be continuously monitoring and reviewing our actions and updating our Plan to show what we've achieved and where we've potentially had to steer our ship in a different direction to overcome challenges.

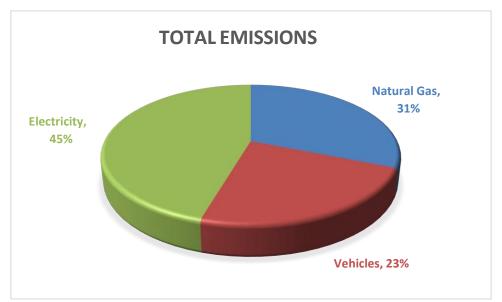
Our journey to net zero is just that, a journey, which could mean diversions and route changes as we're travelling the path to reduce our carbon emissions and if necessary, offset the remainder.

# Understanding the Council's carbon footprint

To help begin our journey to net zero, a carbon baselining exercise was undertaken in 2020 to evaluate and understand the Council's 'direct' emissions which we directly influence and control. These include:

- Scope 1 emissions are from activities owned or controlled by the Council including emissions from combustion in council owned or controlled boilers, furnaces and vehicles.
- Scope 2 emissions are associated with purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of the Council's energy use but occur at sources not owned or controlled by the Council including grid supplied electricity and heat provided through a heat network.

The Council's Scope 1 and 2 energy and fuel use emissions for 2019 amount to 11,476 tonnes CO2e.



The Council also has Scope 3 emissions which are far more challenging to capture and potentially amount to a higher proportion of total emissions than Scope 1 and 2 combined.

Scope 3 emissions are a consequence of our actions that occur at sources we do not own or control. Examples of Scope 3 emissions include business travel by means not owned or controlled by the Council (going on trains, using personal cars for business), using commercial organisations to dispose of our house-hold waste along with the goods and services that we purchase, etc.

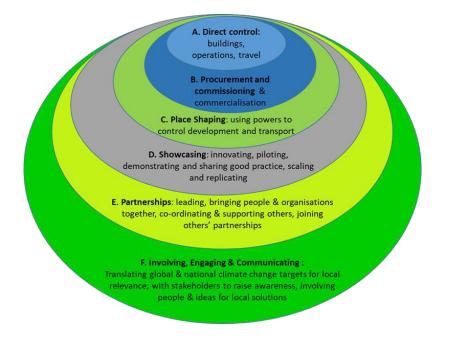
While Scope 3 emissions are not directly generated by ourselves, we can, however, influence other organisations to reduce their own emissions, for example, through the supply chain relationships we have with local businesses.

In terms of our wider 'influencing' role in Derby, we can show this through the Onion Diagram shown below.

Our scope 1 and 2 emissions are within the first ring of the onion (A) and our Scope 3 emissions are mainly within rings B

The remainder mainly comes under the remit of the City's Climate Change Commission and the city's emerging Climate Change Strategy.

Our plan also includes several areas that fall into the third ring (C) that are needed to tell the story of how the Council helps to shape out city. It should be acknowledged that these emissions contribute to the City's overall carbon emissions and not the Councils, so we will deal with these areas differently when we come to review our progress. We work closely with the four action hubs of the Derby Climate Commission to align our action plan and those supporting the city-wide strategy, such as areas like transport, where the Council has an important role in helping facilitating the changes our organisations and residents need to make to achieve our net zero goal.



### Structure of our Plan

Accounting for our carbon emissions is not exact science but it is necessary to establish a base line to see how, and where, we are making progress. To help us do this we have broken down our organisation into four themes – Our Assets, Our Processes, Our Place and Our Culture.

Each theme contains several different areas of Council activity that will be looked at in some detail as part this exercise. Each area is outlined in the next section accompanied by a dedicated action plan detailing what we intend to do to reduce our carbon footprint.

| Theme         | Areas   |  |
|---------------|---|--|
| Our Assets    | <ul> <li>Buildings – Corporate Estate</li> <li>Buildings – Derby Homes</li> <li>Fleet</li> <li>Street Lighting</li> <li>Highways</li> <li>Renewable Energy</li> </ul> |  |
| Our Processes | <ul> <li>★ Planning</li> <li>★ Procurement</li> <li>★ Carbon Offsetting</li> <li>★ Democracy and monitoring</li> </ul>  |  |
| Our Place     | <ul> <li>★ Waste</li> <li>★ Natural Environment</li> <li>★ Air Quality</li> </ul>   |  |
| Our Culture   | <ul> <li>★ Community and collaboration</li> <li>★ Our Colleagues</li> <li>★ Travel</li> </ul>   |  |

# Our Assets

### Buildings – Corporate Estate

Our corporate estate (132 sites), accounts for over half of our overall emissions. The emissions from gas and electricity consumption in 2019/20 equated to 8,784 tonnes, which has a financial cost of £3.7 million.

We will work with our sites to reduce their emissions, focusing on: building design, heating and cooling, ventilation, lighting and renewable energy.

| Reference | Action Description   | Timescale  | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service      | Priority<br>(1 – 5) |
|-----------|--|--|---|---------------|--|----------------------|---------------------|
| 1.1a      | Redevelop the Kedleston Road<br>Training Centre as a 'low carbon'<br>asset   | Mar-24   | Internal delivery<br>team<br>Costs to be<br>identified likely to<br>include £300,000<br>design cost | RED           | A more efficient building resulting in<br>reduced emissions. A holistic approach<br>aims to reduce energy consumption to its<br>lowest levels through behavioural and<br>technical changes. Renewables can then<br>be considered. Tackling the building will<br>result in greater energy savings.  | Property<br>Services | 1                   |
| 1.1b      | Plan the development of a new or refurbished crematorium, incorporating energy capture   | In line with the project plan  | TBC   | GREEN         | Sustainable service with reduced<br>emissions. Holistic and collaborative<br>approach to ensure carbon reduction is a<br>driver of change.   | Property<br>Services | 1                   |
| 1.1c      | Undertake Property Review<br>process using EPC and DEC<br>ratings as a guide and evidence<br>impact of actions taken<br><i>NB</i> - the recommendation is for all<br>new buildings to achieve a<br>mandatory 'A rated' EPC   | Plan to be<br>developed in<br>line with the<br>Energy<br>Strategy                | TBC but Internal<br>delivery as part of<br>service<br>management                                    | GREEN         | Produce an Energy Design Brief, which<br>will set out the considerations and targets<br>for all new and retrofit projects (September<br>2021). Embed energy reduction as part of<br>the tender process, ensuring emissions<br>inform decision making. All refurbished<br>buildings to have progressive improved<br>carbon emissions reductions   | Property<br>Services | 1                   |
| 1.1d      | Complete quarterly energy reports,<br>feeding into corporate landlord, to<br>inform the Council's Property<br>Strategy, including insight on<br>energy consumption data showing<br>month on month comparisons<br>identifying areas of saving and<br>areas of concern | Ongoing,<br>quarterly, to be<br>evaluated at<br>the end of<br>March each<br>year | Internal delivery as<br>part of service<br>management   | GREEN         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions - including identification of<br>renewable options.<br>Using insight to closely monitor the<br>success of energy reduction measures.<br>Email alerts for any unexpected<br>consumption increases and/or issues that<br>is informed by an effective use of insight.<br>Established early risk warning measures.<br>Reports will also allow the Energy<br>Manager to determine areas that need | Property<br>Services | 1                   |

| Reference | Action Description  | Timescale                             | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service      | Priority<br>(1 – 5) |
|-----------|---|---------------------------------------|---|---------------|---|----------------------|---------------------|
|           |   |                                       |   |               | investment to reduce energy consumption along with low and no cost measures.  |                      |                     |
| 1.1e      | Commission energy surveys to<br>identify potential energy saving<br>projects, starting with the 'Top 23'<br>energy consuming sites / assets | December<br>2022<br>September<br>2026 | TBC<br>Internal delivery as<br>part of service<br>management plus<br>consultation costs | AMBER         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions - including identification of<br>renewable options.<br>Using insight to closely monitor the<br>success of energy reduction measures.<br>Email alerts for any unexpected<br>consumption increases and/or issues that<br>is informed by an effective use of insight<br>Established early risk warning measures.<br>This will allow us to determine areas of<br>investment to reduce water consumption.<br>Monitoring consumption will also allow<br>early leak detection. | Property<br>Services | 3                   |
| 1.1f      | Investigate recording equipment to<br>allow data collection on the usage<br>of the Hydro Plant  | December<br>2022                      | TBC - Internal<br>delivery as part of<br>service<br>management plus<br>equipment costs  | AMBER         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions - including identification of<br>renewable options. Using insight to closely<br>monitor the success of energy reduction<br>measures. Email alerts for any unexpected<br>consumption increases and/or issues that<br>is informed by an effective use of insight.<br>Established early risk warning<br>measures.To determine the usage of<br>generated electricity overnight.   | Property<br>Services | 2                   |
| 1.1g      | Commission energy surveys to<br>identify potential energy saving<br>projects, starting with the 'Top 23'<br>energy consuming sites / assets | December<br>2022                      | TBC<br>Internal delivery as<br>part of service<br>management plus<br>consultation costs | GREEN         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions - including identification of<br>renewable options.<br>Using insight to closely monitor the<br>success of energy reduction measures.<br>Email alerts for any unexpected<br>consumption increases and/or issues that<br>is informed by an effective use of insight.<br>Established early risk warning measures.<br>Surveys will determine a program of works<br>which will reduce carbon emissions and<br>financial costs. Considering renewable<br>options.             | Property<br>Services | 1                   |

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service      | Priority<br>(1 – 5) |
|-----------|--|---|---|---------------|---|----------------------|---------------------|
| 1.1h      | Carry out cost benefit analysis on<br>each of the recommendations from<br>the 23 energy surveys  | December<br>2023  | Internal delivery as<br>part of service<br>management                                   | GREEN         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions - including identification of<br>renewable options.<br>Using insight to closely monitor the<br>success of energy reduction measures.<br>Email alerts for any unexpected<br>consumption increases and/or issues that<br>is informed by an effective use of insight.<br>Established early risk warning measures.<br>Enable financial and carbon savings to be<br>determined.                                    | Property<br>Services | 1                   |
| 1.1i      | Conduct surveys on the remainder<br>of the retained property portfolio<br>where necessary  | December<br>2023  | TBC<br>Internal delivery as<br>part of service<br>management plus<br>consultation costs | GREEN         | Identification of further opportunities to<br>commission activities to reduce carbon<br>emissions – including identification of<br>renewable options Using insight to closely<br>monitor the success of energy reduction<br>measures Email alerts for any unexpected<br>consumption increases and / or issues that<br>is informed by an effective use of insight<br>Established early risk warning measures<br>Surveys will determine energy<br>improvements to reduce carbon emissions<br>and financial costs. | Property<br>Services | 5                   |
| 1.1j      | Use the current funding streams<br>identified in the MTFP to develop a<br>holistic approach to Perth House<br>re-development (low carbon)      | 2023/24   | ТВС   | RED           | A more efficient building. A holistic<br>approach aims to reduce energy<br>consumption to its lowest levels through<br>behavioural and technical changes.<br>Renewables can then be considered.<br>Tackling the building as a whole will result<br>in greater energy savings.   | Property<br>Services | 1                   |
| 1.1k      | Review our workspace<br>requirements and update the<br>Corporate Asset Management Plan   | Plan to be<br>developed in<br>line with the<br>Energy<br>Strategy | TBC   | AMBER         | More efficient buildings. Potential to reduce energy consumption  | Property<br>Services | 1                   |
| 1.11      | Identify low and no cost energy<br>efficiency measures working<br>alongside site managers, budget<br>holders and occupants of the<br>buildings | Ongoing   | Internal delivery as<br>part of service<br>management                                   | RED           | More efficient buildings. Potential to reduce energy consumption  | Property<br>Services | 1                   |

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications                      | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service      | Priority<br>(1 – 5) |
|-----------|--|---|---|---------------|--|----------------------|---------------------|
| 1.1m      | Complete a review of building<br>management systems (BMS) to<br>improve insights and impact<br>analysis  | January 2023  | Internal delivery as<br>part of service<br>management | RED           | Identification of further opportunities for<br>improvements in relation to energy saving<br>and optimisation of energy systems | Property<br>Services | 3                   |
| 1.1n      | Install LED lighting across the<br>whole council property estate to<br>reduce lighting costs by 20% at<br>each site  | January 2026  | TBC   | GREEN         | Carbon and cost savings delivered  | Property<br>Services | 1                   |
| 1.10      | Consider renewable alternatives<br>prior to replacement boiler<br>installation. This will incorporate<br>improvements to thermal elements<br>of the building prior to installation | Plan to be<br>developed in<br>line with the<br>Energy<br>Strategy | TBC   | RED           | More efficient buildings. Ensure significant carbon reductions with all new boilers  | Property<br>Services | 1                   |
| 1.1p      | Invest in water reduction measures<br>to reduce carbon and chemical<br>usage from water treatment  | Plan to be<br>developed in<br>line with the<br>Energy<br>Strategy | TBC   | AMBER         | Increase use of renewable energy.<br>Financial and carbon savings  | Property<br>Services | 2                   |

### Buildings – Derby Homes

In addition to Council buildings, we need to make our properties, that are managed by Derby Homes, as energy efficient as they can be.

Over the past 25 years, we've made big investments in energy efficiency improvements for all our housing stock. This work means that soon, all our properties will have an EPC rating of C or above. Already, they are amongst the most energy efficient in the country. Our investments have reduced energy costs by £3.7m a year and removed 23,688 tonnes of emissions.

| Reference | Action Description  | Timescale   | Resources / Cost<br>Implications | RAG<br>Status | Outputs, outcomes and benefits | Lead<br>Service | Priority<br>(1 -5) |
|-----------|---|---|----------------------------------|---------------|--------------------------------|-----------------|--------------------|
| 1.2a      | Explore the feasibility of installing<br>air source heat pumps on heating<br>system upgrades starting with new<br>builds, then extending to full<br>heating system replacements | Ongoing -<br>review at the<br>end of March<br>each year | (RHI)                            | AMBER         | More efficient buildings       | Derby<br>Homes  | 1                  |

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits                                 | Lead<br>Service | Priority<br>(1 -5) |
|-----------|--|---|---|---------------|--|-----------------|--------------------|
| 1.2b      | Provide additional Solar PV<br>systems to suitably located<br>properties with an SAP of D or<br>below and/or to properties housing<br>the elderly and vulnerable | Ongoing -<br>review at the<br>end of March<br>each year | HRA Capital<br>budget.<br>Explore availability<br>of Government<br>funding.<br>Identify properties<br>via aerial/GIS<br>imagery | AMBER         | More efficient buildings and reduced costs for residents       | Derby<br>Homes  | 2                  |
| 1.2c      | Complete the installation of wall<br>insulation to the last few remaining<br>homes that require this work  | 2023  | Green Homes<br>Grant, ERDF<br>funding, HRA<br>Capital budget  | GREEN         | More efficient buildings                                       | Derby<br>Homes  | 3                  |
| 1.2d      | Promoting new builds to be 'net<br>zero' using green construction<br>methods, such as timber framed<br>properties, utilising timber from<br>sustainable sources  | Ongoing -<br>review at the<br>end of March<br>each year | Utilise green<br>technologies, green<br>methods of<br>construction and<br>green energy<br>suppliers                             | AMBER         | More efficient buildings                                       | Derby<br>Homes  | 1                  |
| 1.2e      | Procure new energy supplier(s) for<br>all properties, ensuring the supplier<br>only uses electricity from 100%<br>renewable sources                              | Ongoing -<br>review at the<br>end of March<br>each year | TBC   | GREEN         | Increased use of renewable energy.<br>More efficient buildings | Derby<br>Homes  | 3                  |
| 1.2f      | Utilise 'green technologies and low<br>carbon materials' as part of any<br>tender process for material supply<br>chains and new contracts                        | Ongoing -<br>review at the<br>end of March<br>each year | Internal delivery as<br>part of service<br>management   | AMBER         | Increased use of renewable energy<br>More efficient buildings  | Derby<br>Homes  | 3                  |
| 1.2g      | Continue to provide energy<br>efficiency advice for our customers,<br>to aid the reduction of our carbon<br>footprint.   | Ongoing -<br>review at the<br>end of March<br>each year | Internal delivery as<br>part of service<br>management - use<br>of existing Energy<br>Efficiency Officers                        | AMBER         | More efficient buildings and reduced costs for residents       | Derby<br>Homes  | 1                  |
| 1.2h      | Promote efficient re-cycling of<br>waste, to reduce the carbon<br>footprint of Derby Homes   | Ongoing -<br>review at the<br>end of March<br>each year | Continued use of<br>waste transfer<br>station at London<br>Road and existing<br>staff   | AMBER         | Sustainable waste disposal                                     | Derby<br>Homes  | 3                  |

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications   | RAG<br>Status | Outputs, outcomes and benefits                           | Lead<br>Service | Priority<br>(1 -5) |
|-----------|--|---|--|---------------|--|-----------------|--------------------|
| 1.2i      | Investigate introduction of<br>hydrogen ready boilers/heating<br>systems. This is in its infancy and<br>will be introduced on a phased<br>approach. More clarity is needed in<br>terms of hydrogen roll out to make<br>these decisions | 2030  | External<br>(Infrastructure) and<br>use of HRA Capital<br>budget.<br>Explore availability<br>of government<br>funding                                      | AMBER         | More efficient buildings and reduced costs for residents | Derby<br>Homes  | 5                  |
| 1.2j      | Integrate decarbonisation into all<br>maintenance work, such as<br>consideration of solar PV on roof<br>covering replacements  | Ongoing -<br>review at the<br>end of March<br>each year | In-house resource<br>where possible,<br>external local<br>contractors or<br>partners on<br>specialist works or<br>due to human<br>resources<br>constraints | GREEN         | More efficient buildings and reduced costs               | Derby<br>Homes  | 2                  |

### Fleet

In 2019/20, the operation of our own fleet to deliver services such as waste collection, highway repairs and outreach programmes, including Derby Homes, resulted in the emission of 2,691 tonnes of CO2e equivalent. Our fleet currently includes 568 vehicles / plant items / mowers and 400 small plant (strimmers / chain saws/ ped mowers).

| Reference | Action Description  | Timescale  | Resources / Cost<br>Implications   | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service     | Priority<br>(1 -5) |
|-----------|---|--|--|---------------|--|---------------------|--------------------|
| 1.3a      | Complete a feasibility study to<br>undertake a complete depot<br>overhaul at Stores Road.   | June 2022  | TBC – cost of<br>feasibility study<br>which will establish<br>need.                  | AMBER         | To include charging posts, civil<br>engineering implications for the installation<br>and trenching costs to the depot and cost<br>of electrical work for cabling and<br>connection. Identified opportunities for<br>alternative fuelling | Fleet<br>Management | 1                  |
| 1.3b      | Review options for pool car<br>facilities, including 'super low<br>emission' options  | Ongoing -<br>quarterly to be<br>evaluated at<br>year end | Contingent upon<br>staff travel plan   | AMBER         | Identified opportunities for alternative fuelling/reduced emissions  | Fleet<br>Management | 1                  |
| 1.3c      | Introduce Ultra Low Emission<br>Vehicles (ULEV) / electric smaller<br>and medium fleet vehicles upon<br>renewal, or when technology | Ongoing -<br>quarterly to be<br>evaluated at<br>year end | Internal delivery as<br>part of service<br>management - plus<br>infrastructure costs | AMBER         | Reduction on diesel/petrol fuel consumption  | Fleet<br>Management | 1                  |

| Reference | Action Description   | Timescale  | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service     | Priority<br>(1 -5) |
|-----------|--|--|---|---------------|--|---------------------|--------------------|
|           | versus operational consideration balance is appropriate to do so   |  |   |               |  |                     |                    |
| 1.3d      | Introduce ULEV / electric medium<br>and large fleet vehicles upon<br>renewal or when technology vs<br>operational consideration balance<br>is appropriate to do so   | To be<br>completed by<br>2030  | Internal delivery as<br>part of service<br>management –<br>plus technology<br>and infrastructure  | AMBER         | Reduction on diesel/petrol fuel consumption  | Fleet<br>Management | 1                  |
| 1.3e      | Add more battery powered hand<br>tools, plant diggers, small<br>sweepers as appropriate <i>i.e.</i><br><i>trimmers, strimmers, mowers upon</i><br><i>renewal or when technology vs</i><br><i>operational consideration balance</i><br><i>is appropriate to do so</i> | To be<br>completed by<br>2030  | Ongoing   | AMBER         | Reduced emissions.   | Fleet<br>Management | 2                  |
| 1.3f      | Continue to review current diesel<br>fleet and optimise logistics,<br>including waste collection and<br>grounds maintenance route<br>rationalisation and optimisation  | Ongoing -<br>according to<br>the vehicle<br>replacement<br>programme | Costs dependent<br>on technology and<br>infrastructure<br>purchased.  | AMBER         | Identified opportunities for alternative<br>fuelling/reduced emissions when<br>compared to current fleet | Fleet<br>Management | 1                  |
| 1.3g      | Replace waste collection vehicles<br>at the end of their life or when<br>appropriate, with cleanest proven<br>technology the Council can support<br>and afford.  | Ongoing -<br>according to<br>the vehicle<br>replacement<br>programme | Costs dependent<br>on technology and<br>infrastructure, e.g.<br>electrifying a single<br>RCV is circa 153%<br>purchase cost<br>compared to diesel | AMBER         | Reduced emissions when compared to current fleet   | Waste<br>Management | 1                  |

## Street lighting

The Council is committed to providing good street lighting using the latest technology available. By 2025, there are expected to be 350 million streetlights around the world. Emissions from street lighting accounted for nearly 50% of the Council's electricity in 2019/20 and so contributes significantly to our carbon emissions.

| Reference | Action Description                            | Timescale    | Resources / Cost<br>Implications                                  | RAG<br>Status | Outputs, outcomes and benefits                   | Lead Service | Priority<br>(1 is<br>high) |
|-----------|---|--------------|---|---------------|--|--------------|----------------------------|
| 1.4a      | Upgrade the A5111 Outer Ring<br>Road lighting | 2027 onwards | Approx. £10,000 to<br>survey and then<br>£800,000 to<br>implement | RED           | Reduced costs and emissions (50-<br>60% benefit) | Lighting     | 5                          |

| Reference | Action Description   | Timescale  | Resources / Cost<br>Implications                      | RAG<br>Status | Outputs, outcomes and benefits                                    | Lead Service | Priority<br>(1 is<br>high) |
|-----------|--|--|---|---------------|---|--------------|----------------------------|
| 1.4b      | Maintain regular review and<br>scrutiny of energy consumption<br>through street lighting service<br>meetings, using insight to target<br>interventions | Ongoing -<br>monthly to be<br>evaluated at<br>the end of<br>March each<br>year | Internal delivery as<br>part of service<br>management | GREEN         | Evidence of reduced costs and emissions through effective insight | Lighting     | 1                          |
| 1.4c      | Convert and install 3,492 LED<br>lights (low pressure sodium<br>luminaries)  | June 2022  | Internal delivery as<br>part of service<br>management | GREEN         | A reduction in consumption of energy by 64.5%                     | Lighting     | 1                          |
| 1.4d      | Replace approximately 2,000 street lighting assets   | June 2022  | Internal delivery as<br>part of service<br>management | GREEN         | A reduction in consumption of energy by 64.5%                     | Lighting     | 1                          |
| 1.4e      | 15 High Mast assets (lighting<br>columns) in the city centre, which<br>have clusters of high wattage lights<br>upgraded/replaced                       | January 2022   | Internal delivery as<br>part of service<br>management | GREEN         | Carbon emissions will be reduced from 85,542.07 to 43,689.51kWh   | Lighting     | 1                          |
| 1.4f      | Upgrade 'supported and made<br>deemed to comply stock'   | 2022+  | £2.2million   | RED           | Evidence of reduced costs and<br>emissions                        | Lighting     | 1                          |

### Renewable Energy

Generating renewable energy on site will not only help us reach our target but will also help to reduce our operating costs over the long term. Renewable energy is collected from renewable resources, which are naturally replenished on a human timescale, including carbon neutral sources like sunlight, wind, rain, tides, waves and heat from the ground. The big advantage with deriving energy from these sources is the absence of any greenhouse gas emissions, in contrast to the traditional burning of fossil fuels like coal, oil and gas.

| Reference | Action Description  | Timescale  | Resources / Cost<br>Implications                              | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service   | Priority<br>(1 is<br>high) |
|-----------|---|------------|---|---------------|---|---|----------------------------|
| 1.5a      | Undertake a series of modifications<br>to the Derwent hydro station to<br>help increase its generating<br>capacity                          | March 2022 | TPC requires<br>external funding                              | AMBER         | Improved efficiency of the hydro<br>station and potential to improve and<br>extend energy generation. | Facilities<br>Management                                  | 1                          |
| 1.5b      | Look for opportunities to integrate<br>renewable energy opportunities in<br>the Council's main regeneration<br>projects and capital schemes | Ongoing    | TBC requires<br>revenue funding<br>and effective<br>targeting | AMBER         | Improved energy efficiency and carbon reduction across our regeneration schemes.                      | Climate<br>Change team<br>City Growth<br>&<br>Development | 1                          |

| Reference | Action Description   | Timescale            | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service                                  | Priority<br>(1 is<br>high) |
|-----------|--|----------------------|---|---------------|--|--|----------------------------|
| 1.5c      | Buy energy from 100% renewable sources   | September<br>2024    | Internal delivery as<br>part of service<br>management   | AMBER         | Carbon savings   | Property<br>Services<br>Facilities<br>Management | 1                          |
| 1.5d      | Utilise the Council's estate for<br>energy generation opportunities  | June 2022<br>onwards | Internal delivery as<br>part of service<br>management and<br>available funding<br>opportunities | RED           | Generate income and reduce reliance<br>on grid electricity                             | Property<br>Services                             | 2                          |
| 1.5e      | Work with Derbyshire County<br>Council and all Derbyshire<br>Authorities to progress a renewable<br>energy study | June 2022<br>onwards | Internal delivery as<br>part of service<br>management   | GREEN         | The Renewable Energy Study will<br>examine all forms of renewable energy<br>technology | Planning<br>Services                             | 2                          |

# Our Processes

#### Planning

Derby is a compact city with a growing population. Our Derby City Local Plan (DCLP) plans for more new homes and jobs up to 2028. New developments will contribute towards our carbon emissions, so we need to take action to make development more carbon neutral as soon as possible. Energy efficient homes and businesses, sustainable transport, sustainable drainage schemes and green infrastructure that provide carbon sinks, flood storage and urban cooling, are key opportunities that planning can bring to our communities.

| Reference | Action Description   | Timescale        | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service                                       | Priority<br>(1 - 5) |
|-----------|--|------------------|---|---------------|--|---|---------------------|
| 2.1a      | Develop and confirm a vision for<br>'Net Zero' planning policy within<br>the city, aligned with government,<br>peer, and industry best practice,<br>and reflecting on the outcomes and<br>aspirations of COP26 | 2024/5           | Internal delivery as<br>part of service<br>management as<br>part of Local Plan<br>process | AMBER         | Insight led decisions<br>Identified areas for carbon sinks giving<br>extra protection  | Planning<br>Service                                   | 1                   |
| 2.1b      | Include a guidance note to the<br>application criteria for new planning<br>applications received including a<br>requirement for a carbon reduction<br>energy statement with every<br>application               | April 2022       | Completed   | AMBER         | Better informed decision making and improved development schemes   | Planning<br>Service                                   | 1                   |
| 2.1c      | Promote ecology and biodiversity<br>plans and 10% enhancement in<br>applications   | November<br>2022 | TBC Specialist<br>resource required<br>to assess all<br>schemes that are<br>submitted     | RED           | Agreed standards to support reduced<br>emissions<br>Improving the knowledge base of the<br>Councillors and colleagues regarding<br>climate change<br>All Council development projects are<br>exemplar with regards to their<br>environmental credentials | Planning<br>Service                                   | 1                   |
| 2.1d      | Develop robust planning policy and<br>supplementary planning policy<br>through the Local Plan on climate<br>and biodiversity matters   | 2024/5           | As above  | RED           | Insight led decisions  | Planning<br>Service                                   | 1                   |
| 2.1e      | Develop a climate change adaption<br>strategy working with various<br>departments to assess the risks<br>and actions required to manage<br>the impact of climate change  | July 2022        | Internal delivery as<br>part of service<br>management                                     | RED           | To ensure business continuity<br>To adapt to the challenges that climate<br>change will bring  | Climate<br>Change<br>Officers<br>Group and<br>Climate | 1                   |

| Reference | Action Description   | Timescale | Resources / Cost<br>Implications   | RAG<br>Status | Outputs, outcomes and benefits           | Lead<br>Service      | Priority<br>(1 - 5) |
|-----------|--|-----------|--|---------------|--|----------------------|---------------------|
|           |  |           |  |               |  | Change<br>Commission |                     |
| 2.1f      | Build net zero objectives into the<br>brief for Council funded major<br>projects where we directly deliver<br>and work with partners to<br>encourage net zero ambitions in<br>partnership projects / externally<br>funded projects | From 2022 | Cost implication for<br>capital cost and<br>potentially ongoing<br>revenue costs e.g.<br>fuel and<br>maintenance | AMBER         | More efficient buildings, carbon savings | Assurance<br>team    | 1                   |

#### Procurement

Procurement is how we buy goods like tarmac or bins and services such as managing our street lighting. Sustainable procurement means we can get our goods, services and utilities whilst benefitting society, the local economy and minimising damage to our environment. The Government's Committee for Climate Change Report on the role of local authorities' states: "Procurement is a key power that local authorities can use to deliver net zero, particularly in larger contracts and purchases as they have a duty to deliver best value and social value. In 2017 47% of local government spending was in procurement. Procured goods and services can make up 70-80% of a council's total carbon footprint, due to the use of contractors for waste collection, construction, social services and facilities management."

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service | Priority<br>(1 -5) |
|-----------|--|-------------|---|---------------|---|-----------------|--------------------|
| 2.2a      | Establish and agree the Council's vision and policy for Carbon Net Zero Procurement  | Summer 2022 | Internal delivery as<br>part of service<br>management   | RED           | Net Zero Procurement Vision / Policy  | Procurement     | 1                  |
| 2.2b      | Establish the priority categories of<br>procurement, taking into account<br>expenditure, the nature and extent<br>of environmental risks and<br>opportunities and the extent of<br>market influence on establishing<br>new contracts | Summer 2022 | Internal delivery as<br>part of service<br>management and<br>available data and<br>potential increased<br>costs | RED           | A procurement forward plan which identifies deadlines and targets   | Procurement     | 1                  |
| 2.2c      | Identify and engage with internal and external stakeholders  | Ongoing     | Internal delivery as<br>part of service<br>management   | RED           | Establishing any training needs/skill gaps<br>and what is possible. For internal<br>stakeholders linked with the<br>Accountabilities framework. | Procurement     | 2                  |
| 2.2d      | Establish, through the use of the<br>LGA Sustainable Procurement<br>Toolkit, guidance for supplier<br>selection, specification writing,  | June 2022   | Internal delivery as<br>part of service<br>management   | RED           | To ensure relevance and proportionality   | Procurement     | 2                  |

| Reference | Action Description   | Timescale | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service   | Priority<br>(1 -5) |
|-----------|--|-----------|---|---------------|---|---|--------------------|
|           | tender evaluation and contract key performance indicators  |           |   |               |   |   |                    |
| 2.2e      | Incorporate the collection of relevant data within the contract management requirements  | Ongoing   | None  | AMBER         | To enable efficient reporting and data gathering  | Smarter<br>Working<br>Group for<br>Contract<br>Management | 2                  |
| 2.2f      | Review of existing contracts   | Ongoing   | Internal delivery as<br>part of service<br>management and<br>potential increased<br>costs                       | RED           | To ensure any existing requirements are<br>being met and/or to negotiate additional<br>benefits prior to the application of any<br>allowable contract extensions  | Procurement<br>/ Contract<br>Manager                      | 2                  |
| 2.2g      | Drive a multi-streamed approach to<br>achieve 'Net Zero IT' for the<br>Council and it's information<br>technology supply chain, including;<br>desktop and mobile devices, data<br>centres, reuse and recycle, low<br>travel support and commissioning<br>practices, low energy<br>consumption, mandatory supply<br>chain net zero fulfilment and<br>offsetting | Ongoing   | Internal delivery as<br>part of service<br>management for<br>technology change<br>and commissioning<br>projects | AMBER         | All the Council's equipment procurement<br>will be certified carbon neutral or better<br>Maximised deployment of low energy<br>consuming IT<br>Significant extension of useful life of<br>equipment, through reuse and community<br>re-tasking<br>All IT contracts for the council will be<br>delivered as certifiable 'net zero' | Digital<br>Services                                       | 1                  |

## Carbon Offsetting

Just reducing our emissions isn't enough to get us to net zero. Once we've reduced our emissions through the actions in this plan and future plans, we'll still need to offset left-over, or residual emissions. As we plan projects, we'll need to 'budget' for emissions in the same way we would with money and balance the carbon books. Part of that planning could include things like sequestration or even carbon capture and storage, depending on the technology available to us.

| Reference | Action Description   | Timescale | Resources / Cost<br>Implications                             | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service   | Priority<br>(1 - 5) |
|-----------|--|-----------|--|---------------|---|-------------------|---------------------|
| 2.3a      | Establish a Best Practice Carbon<br>Offsetting model in conjunction with<br>APSE |           | Establish new cross<br>organisation task<br>and finish group | GREEN         | Corporate and partnership enabling<br>shared vision for embedding carbon<br>offsetting into all operations and future<br>planning | Climate<br>Change | 1                   |

| Reference | Action Description   | Timescale  | Resources / Cost<br>Implications | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service   | Priority<br>(1 - 5) |
|-----------|--|------------|----------------------------------|---------------|---|-------------------|---------------------|
| 2.3b      | Carbon Capture Projects - Create<br>business cases for prioritized<br>carbon capture projects (from 2.3a)<br>and seek resources to deliver | March 2023 | TBC informed by outcome of 2.3a  | AMBER         | A pipeline of projects to invest<br>opportunistic funding into a create carbon<br>offset and capture capital                              | Climate<br>Change | 3                   |
| 2.3c      | Carbon Capture Technology -<br>Track the development of<br>sequestration and carbon capture<br>technologies                                | March 2024 | TBC informed by outcome of 2.3a  | GREEN         | Intelligence led adoption of technologies to<br>allow the Council to help meet its Net Zero<br>goals, and avoidance of those that do not. | Climate<br>Change | 3                   |

### Democracy and monitoring

If we want to achieve our ambition of being net zero by 2035 then potential impacts on the climate must be a key part of how decisions are made. We want councillors to feel informed about climate impacts and be confident in their decision making when officers recommend an action. To do this, we need councillors to have the latest training, information and advice. We need to be clear and consistent when presenting climate implications in our reports for meetings such as Council and Council Cabinet.

The Council Constitution sets rules of the relationship between the Council, Councillors and residents. The Articles of the Constitution set out roles and responsibilities for Councillors and how decisions are made. Tackling the Climate Emergency will be a key part of our activity for the next decade and beyond, so we need to reflect this in our Council Constitution. We will monitor our progress regularly to help us identify where we are doing well but more importantly those things that are hampering progress.

| Reference | Action Description   | Timescale         | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits  | Lead<br>Service | Priority<br>(1 - 5) |
|-----------|--|-------------------|---|---------------|---|-----------------|---------------------|
| 2.4a      | Introduction of a climate impact tool<br>for all Key Decisions (financial<br>impact >£250k) – report writers to<br>complete basic climate assessment<br>of their recommended decision,<br>which will produce a diagnostic to<br>be copied into the 'Climate<br>Implications' section of reports. | September<br>2024 | Climate tool shared<br>by Chesterfield BC<br>Internal training<br>requirement for<br>report authors | GREEN         | Informed and objective decision-making<br>and scrutiny – councillors will be presented<br>with a climate impact score against several<br>standard criteria, allowing the climate<br>impact of an officer recommendation to be<br>compared against another.    | Democracy       | 2                   |
| 2.4b      | Mandatory climate training to be<br>included in annual Councillor<br>Training programme – basic<br>training to be delivered internally to<br>all councillors and bespoke<br>sessions to 'Climate Champions',<br>executive decision-makers and<br>scrutiny members.                               | May 2023          | Training<br>programme<br>management plus<br>revenue<br>requirement of<br>approximate<br>£10,000pa   | AMBER         | Mandatory climate training to be included<br>in annual Councillor Training programme –<br>basic training to be delivered internally to<br>all councillors and bespoke sessions to<br>'Climate Champions', executive decision-<br>makers and scrutiny members. | Democracy       | 3                   |

| Reference | Action Description   | Timescale            | Resources / Cost<br>Implications   | RAG<br>Status | Outputs, outcomes and benefits   | Lead<br>Service   | Priority<br>(1 - 5) |
|-----------|--|----------------------|--|---------------|--|-------------------|---------------------|
| 2.4c      | Undertake a constitutional review<br>to embed the Climate Emergency<br>within the Council's Constitution,<br>and to ensure it is reflected in<br>decision-making and Overview and<br>Scrutiny arrangements | September<br>2022    | Internal delivery as<br>part of service<br>management  | AMBER         | Ensure the Climate Emergency is reflected<br>within the Articles of the Constitution and<br>the terms of reference of Committees and<br>Boards reflect the Council's stated climate<br>objectives. Constitute a dedicated Climate<br>Change Overview and Scrutiny Board,<br>accountable for examining and challenging<br>the Council's response to the climate<br>emergency. | Democracy         | 3                   |
| 2.4d      | Continue to improve and refine the<br>Council's approach to carbon<br>baselining especially with regards<br>to scope 3 emissions.  | June 2022<br>onwards | Internal delivery as<br>part of service<br>management.<br>Requires ongoing<br>intelligence<br>gathering and<br>learning through<br>organisations such<br>as APSE Energy. | GREEN         | Will improve the way we collect and<br>analyse such date to better inform Council<br>decisions.  | Climate<br>Change | 3                   |
| 2.4e      | Report on Scope 1, 2 and scope 3<br>emissions (where known) for the<br>Council including Derby Homes, at<br>the end of the current Action Plan<br>period   | June 2024            | Internal delivery as<br>part of service<br>management.<br>Requires data<br>gathering across<br>the Council and<br>analysis by the<br>Climate Change<br>team.             | AMBER         | Will help identify the relative progress of<br>the Council in meeting its 2035 net zero<br>target and identify areas which have not<br>as yet been assessed in terms of CO2e<br>emissions.   | Climate<br>Change | 3                   |

# Our Place

#### Waste

Derby City Council is responsible for collecting and disposing of household waste and recycling from approximately 111,000 properties. During 2019/20, the Council collected 114,268 tonnes of waste and recycling. The majority of this was from wheelie bins but some came from bulky waste collections, litter or waste taken to Raynesway HWRC. By weight, Derby City Council recycled 38.8% of household waste in 2019/20 and each household created 520kg of residual waste at the kerbside. When compared to our neighbours during the same period, we are recycling more but we also produce more waste overall.

The emissions from waste don't just come from the waste itself or us collecting it. Once it has been collected from the kerbside, waste and recycling is then sent on to facilities for sorting and processing. Combined, these emissions (9,969 tonnes of CO2) are almost as much as all our assets (buildings, vehicles and Derby Homes properties).

| Reference | Action Description  | Timescale                                  | Resources / Cost<br>Implications                       | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service                                | Priority<br>(1 - 5) |
|-----------|---|--|--|---------------|--|---|---------------------|
| 3.1a      | Pursue options to minimise blue bin<br>recycling contamination through<br>communications, refreshing and<br>reinforcing existing procedures and<br>support from Team Derby and<br>other stakeholders/agencies.  | Ongoing:<br>evaluated<br>quarterly         | Internal delivery as<br>part of service<br>management. | AMBER         | Improved efficiency of recyclate<br>processing, increasing yield of material<br>that is recycled.<br>Reducing the quantity of waste that<br>needs double handling and transporting<br>onto a suitable facility for disposal,<br>reducing carbon miles.   | Waste<br>Management<br>Comms &<br>Marketing | 1                   |
| 3.1b      | Rationalise waste collection<br>rounds, using insight to inform<br>decision making, therefore<br>minimising miles and optimising<br>operations.   | Ongoing: Main<br>review end of<br>May 2022 | Internal delivery as<br>part of service<br>management. | AMBER         | Improved efficiency reducing time taken<br>to complete rounds and reducing<br>emissions.<br>More flexibility to accommodate growing<br>numbers of households within existing<br>residence (to a point)<br>Increasing numbers of properties with<br>access to recycling, moving waste up the<br>hierarchy   | Waste<br>Management                         | 1                   |
| 3.1c      | Continue to provide a varied<br>programme of awareness and<br>education opportunities enabling<br>customers to move their waste up<br>the Waste Hierarchy. Link into<br>national campaigns to build<br>increasing momentum and<br>normalise these behaviours. | Ongoing -<br>evaluated<br>annually         | Internal delivery as<br>part of service<br>management. | AMBER         | Improved recycling in terms of<br>participation and material quantity and<br>quality<br>Uptake of schemes such as Real Nappy<br>Cashback and Get Composting<br>Increased levels of engagement with<br>customers<br>More customers accessing resources on<br>the topic<br>Ideally a reduction in waste arisings, but<br>more likely a reduction in any increase | Waste<br>Management<br>Comms &<br>Marketing | 2                   |

| Reference | Action Description   | Timescale   | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service                                    | Priority<br>(1 - 5) |
|-----------|--|-------------|---|---------------|--|---|---------------------|
|           |  |             |   |               | which is very difficult to quantify<br>Increased awareness of or improve the<br>infrastructure available (if viable) to<br>increase the uptake of the reuse. Also<br>realising the additional social benefits<br>this brings |   |                     |
| 3.1d      | Introduce a standardised waste<br>service for all council<br>buildings/assets<br>To recycle all materials, may<br>require the services of additional<br>contractors this cost of which may | Summer 2022 | Initial capital outlay<br>for containers and<br>communications. A<br>review will need to<br>take place. | RED           | Lead by example<br>Reduction of waste and moving waste up<br>the hierarchy<br>Greater understanding resulting in<br>improved recycling quality   | Facilities<br>Management<br>Waste<br>Management | 3                   |
|           | not entirely be offset by reductions elsewhere   |             |   |               | Greater participation leading to increased tonnages captured for recycling   |   |                     |

#### Natural Environment

Adapting to climate change in a sustainable way, means making our parks and green spaces stronger. They form a natural foundation that is critical to our community in the same way streets, drainage and sewers are. We need to invest in and carefully manage these areas as we would any other assets.

Our parks and green spaces are a lifeline for many. They provide opportunities for play, relaxation and exercise. They also bring communities together and support health and wellbeing, biodiversity and local economic growth. Put simply, nice spaces mean nice places to live and work. We will achieve this by enhancing our parks, green spaces and waterways, creating nature corridors throughout the city, allowing people and animals to move in environments free from traffic and pollution.

| Reference | Action Description  | Timescale   | Resources / Cost<br>Implications       | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service                               | Priority<br>(1 - 5) |
|-----------|---|---|--|---------------|--|--|---------------------|
| 3.2a      | Implement a rewilding scheme on<br>Allestree Park in partnership with<br>Derbyshire Wildlife Trust (DWT),<br>Rewilding Britain and The<br>University of Derby | Subject to<br>consultation<br>and Cabinet<br>approval | TBC<br>Additional capacity<br>required | RED           | Significant biodiversity net gain to be<br>quantified / measured. Carbon capture<br>for the city. Natural Health Service.<br>Raising awareness of urban rewilding.<br>National exemplar. | Parks<br>Grounds &<br>Arboriculture        | 1                   |
| 3.2b      | Establish a number of 'green walls'<br>(including bus shelters) throughout<br>the city as a practical way to<br>increase urban biodiversity.                  | 2022/23   | £40,000 plus<br>£7,000 per year        | AMBER         | Development of natural assets of the city to support a gain in biodiversity  | Grounds &<br>Arboriculture<br>Regeneration | 4                   |

| Reference | Action Description  | Timescale          | Resources / Cost<br>Implications   | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service   | Priority<br>(1 - 5) |
|-----------|---|--------------------|--|---------------|--|--|---------------------|
| 3.2c      | Build on current collaboration<br>between services to manage and<br>maintain green spaces for climate<br>change and biodiversity for<br>example 'No Mow May'  | 2022/23            | Internal delivery as<br>part of service<br>management.   | GREEN         | Assist pollinators, help reduce nitrogen<br>levels in the soil, will improve the quality<br>of wildflower meadows and increase<br>biodiversity as well as potentially reduce<br>fuel usage | Parks<br>Grounds &<br>Arboriculture  | 1                   |
| 3.2d      | Deliver on vibrancy projects within<br>the city Centre boundary to<br>increase green infrastructure   | 2022/23            | Internal delivery as<br>part of service<br>management with<br>neighbourhood and<br>community               | AMBER         | Urban biodiversity net gain, raising<br>awareness, improve air quality   | Grounds &<br>Arboriculture<br>Regeneration<br>Planning                           | 1                   |
| 3.2e      | Increase the area of designated<br>Local Nature Reserves within the<br>city, including, for example   | 2022/23            | Internal delivery as<br>part of service<br>management.<br>Potential for<br>additional<br>maintenance costs | AMBER         | Biodiversity net gain<br>Increased area of protected habitat<br>Carbon capture<br>Community involvement  | Parks<br>Grounds &<br>Arboriculture<br>Neighbourhoods<br>Planning                | 1                   |
| 3.2f      | Continue with the commissioned<br>tree canopy survey and increase<br>tree canopy coverage following<br>projected survey results   | 2022/23            | Internal delivery as<br>part of service<br>management.<br>Tree survey will<br>inform further costs         | AMBER         | Improved oxygen levels<br>Green spaces   | Parks<br>Grounds &<br>Arboriculture<br>Planning<br>Derby Homes<br>Neighbourhoods | 1                   |
| 3.2h      | Explore changes to management<br>practices to increase biodiversity<br>on parks, green spaces and<br>verges. Including the reduction of<br>use of pesticides which includes<br>glyphosate                 | From April<br>2022 | Internal delivery as<br>part of service<br>management.   | GREEN         | Assist pollinators, help reduce nitrogen<br>levels in the soil, will improve the quality<br>of wildflower meadows and increase<br>biodiversity   | Parks<br>Grounds &<br>Arboriculture<br>Planning<br>Derby Homes<br>Neighbourhoods | 2                   |
| 3.2i      | Implement biodiversity net gain<br>improvements to offset new built<br>developments.  | From 2022/23       | Funding secured<br>through net gain<br>outputs where<br>possible   | GREEN         | Biodiversity net gain<br>New habitat creation<br>Protection of vulnerable 'red list' species   | Parks<br>Grounds &<br>Arboriculture<br>Planning                                  | 1                   |
| 3.2j      | Develop Sustainable Urban<br>Drainage systems, utilising some<br>areas of parks for the associated<br>environmental improvements, for<br>example, Sunnydale Park Local<br>Nature Reserve, Dale Road Park. | From 2022/22       | TBC: Grant funding<br>through EA and<br>ERDF   | AMBER         | Biodiversity net gainNew habitat<br>creationReduced flooding risk  | Land<br>DrainageParksG<br>rounds &<br>Arboriculture                              | 1                   |

| Reference | Action Description   | Timescale                                       | Resources / Cost<br>Implications                           | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service  | Priority<br>(1 - 5) |
|-----------|--|---|--|---------------|--|---|---------------------|
| 3.2k      | Through the planning process for<br>major developments, require that<br>the project mitigates through open<br>space allocation, provision of new<br>allotments and planting for public<br>health and the environment | From 2021                                       | Internal delivery as<br>part of service<br>management.     | AMBER         | Biodiversity net gain<br>New habitat creation  | Planning  | 1                   |
| 3.21      | Develop a Biodiversity Net Gain<br>Supplementary Planning Guidance<br>document (SPG) and a<br>Householder Guidance Note.   | Spring 2022                                     | Internal delivery as<br>part of service<br>management.     | GREEN         | The SPG will highlight to developers the<br>Council's aspirations to deliver this.<br>The Householder Guidance Note will<br>provide simple measures which could be<br>incorporated into minor developments.  | Planning<br>Services  | 2                   |
| 3.2m      | Work with Derbyshire County<br>Council to develop a Natural<br>Capital Study and a Local Nature<br>Recovery Strategy   | March 2023                                      | Internal delivery as<br>part of service<br>management.     | GREEN         | The Natural Capital Study will provide<br>baseline information about habitats<br>across Derbyshire and including the<br>Peak Park. The Nature Recovery<br>Strategy will set out the habitats and<br>locations which could be improved and<br>will provide the foundations for any off-<br>site Biodiversity Net Gains in the city. | Planning<br>Services<br>Parks   | 1                   |
| 3.2n      | Further extend river corridor<br>environmental improvements for<br>flora and fauna benefits.   | March 2023                                      | TBC: Funding to be<br>secured through<br>Project Munio     | GREEN         | Biodiversity net gain<br>Habitat creation<br>Nature connections<br>Carbon reductions<br>Reduce flood risk<br>Health and wellbeing  | OCOR<br>Parks<br>Grounds &<br>Arboriculture                                       | 1                   |
| 3.20      | Continue to support Friends<br>Groups, volunteers and businesses<br>to undertake tasks and<br>management for the benefit of<br>biodiversity and nature<br>conservation   | Ongoing -<br>evaluated at<br>March each<br>year | TBC: Funding to be<br>secured as<br>required<br>Staff time | GREEN         | Biodiversity net gain<br>Habitat creation<br>Carbon reductions<br>Reduce flood risk<br>Health and wellbeing<br>Community engagement and awareness  | Volunteers/com<br>munity<br>Parks<br>Grounds &<br>Arboriculture<br>Neighbourhoods | 1                   |
| 3.2p      | Deliver a tree planting programme<br>across the city including the<br>Queens Canopy Project,<br>community woodland and<br>community orchards schemes   | November<br>2021 to March<br>2022               | TBC: Some<br>funding already<br>secured                    | GREEN         | Improved oxygen levelsBiodiversity net<br>gainHabitat creationNature<br>connectionsCarbon<br>reductionsCommunity engagement and<br>awareness   | Grounds &<br>ArboriculturePla<br>nningDerby<br>HomesNeighbo<br>urhoodsParks       | 1                   |
| 3.2q      | Continue to develop and implement<br>a programme of wildflower<br>meadows improvements through<br>programmes including the Higher  | Ongoing   | Funded scheme  | GREEN         | Biodiversity net gain<br>Habitat restoration and management  | Parks<br>Grounds &<br>Arboriculture   | 1                   |

| Reference | Action Description   | Timescale | Resources / Cost<br>Implications                       | RAG<br>Status | Outputs, outcomes and benefits  | Lead Service   | Priority<br>(1 - 5) |
|-----------|--|-----------|--|---------------|---|--|---------------------|
|           | Level Stewardship Scheme at<br>Sinfin Moor Park, Chellaston<br>Brickworks, Allestree Park, Darley<br>& Nutwood LNRs, Inglewood<br>Avenue open space and<br>improvements to biodiversity of<br>Highway verges |           |  |               | Carbon reductions<br>Community engagement and awareness   | DWT<br>Volunteers                                    |                     |
| 3.2r      | Develop a Biodiversity Action Plan<br>for Parks and green spaces   | 2022      | Internal delivery as<br>part of service<br>management. | GREEN         | Provide a strategic direction for the<br>development of biodiversity net gain from<br>across parks and open spaces<br>Provide a benchmark for current<br>provision and set targets for<br>improvements and aspirations for the<br>next 5 years  | Parks<br>Grounds &<br>Arboriculture<br>Land Drainage | 1                   |
| 3.2s      | Review policies for climate change,<br>green infrastructure, open space,<br>biodiversity and sustainable<br>transport in the next Local Plan   | From 2022 | Internal delivery as<br>part of service<br>management. | AMBER         | The Local Plan is the Statutory<br>Development Plan for the City against<br>which every planning application is<br>determined against. Through various<br>policies, the current plan aims to address<br>the impact of climate change, promote<br>sustainable development, enhance and<br>protect the natural environment and<br>deliver sustainable transport options. It is<br>envisaged that the next Local Plan will<br>carry forward and strengthen this<br>approach. | Planning<br>Services                                 | 1                   |

#### Air Quality

Air pollution is associated with several adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions.<sup>2</sup> Air pollution is predominantly considered in terms of nitrogen dioxide (NO<sub>2</sub>) and fine particulate matter (PM2.5) due to road transport. Petrol and diesel emissions from road transport contributes to both poor air quality and increased CO2 emissions. Consequently, both air quality and CO2 can benefit from the shared incentive to reduce reliance on fossil fuel-powered transport. As

<sup>2</sup> Using national morbidity data, Public Health England calculated that the deaths attributable to poor air quality in Derby are estimated at 131 annually (equivalent to around 1425 life years lost each year).

well as potentially causing a nuisance, bonfires can also produce 'greenhouse' gases such as carbon dioxide. Bonfires can also produce other noxious gases and fine particles which affect human health along with the burning of biomass for heating and power.

| Reference | Action Description   | Timescale                          | Resources / Cost<br>Implications  | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service                             | Priority<br>(1 is<br>high) |
|-----------|--|------------------------------------|---|---------------|--|--|----------------------------|
| 3.3a      | Promote cleaner vehicles e.g.<br>taxis, EV charging infrastructure,<br>low emissions freight initiatives,<br>buses, anti-idling measures | Ongoing - no<br>completion<br>date | TBC: Needs further<br>policy development<br>and financial<br>support                                | AMBER         | Increase in EV charging points, EV<br>buses and the number of taxis<br>meeting minimum Nox emissions<br>standards<br>Reduced vehicle emissions   | Environmental<br>Protection<br>Transport | 3                          |
| 3.3b      | Contribute to the D2N2 Local<br>Cycling and Walking Infrastructure<br>Plan   | Ongoing                            | Plan fully funded.<br>Schemes are not all<br>programmed or<br>funded                                | AMBER         | Well-being<br>Reduced vehicle emissions from<br>mode shift   | Environmental<br>Protection<br>Transport | 2                          |
| 3.3c      | Review Derby Bonfire<br>Enforcement Policy   | Ongoing                            | Internal delivery as<br>part of service<br>management.  | AMBER         | Reduction of CO2, NO2 and PM2.5<br>emissions<br>Hard to quantify<br>Some equalities issues to consider<br>and conflicts with Bonfire Night<br>celebrations.<br>Political/public pressure needs to be<br>considered fully | Environmental<br>Protection              | 4                          |
| 3.3d      | Align Air Quality Action Plan to<br>ensure compatibility with climate<br>agenda  | On annual<br>basis                 | TBC: Resource/<br>staff constraints<br>and ownership of<br>measures following<br>completion of plan | GREEN         | Benefits<br>1. tackling NO2 hotspots<br>2. improving the overall air quality<br>across Derby<br>3. managing PM2.5 exposure<br>4. reducing CO2 emissions  | Environmental<br>Protection              | 3                          |

It is important that we align our climate change measures with the Council's Air Quality Action Plan (AQAP) to ensure that the two do not conflict.

# Our Culture

### Community and collaboration

The climate emergency is an issue that affects everyone in our city. That's why we want to work with the city, for the city when it comes to our journey to net zero. We need the support, knowledge and understanding of our communities so we can develop projects that work for residents as well as ourselves.

We want residents, community groups and other partners across the city to have lots of opportunities to work with us and share their ideas as we head towards 2035 but the Council can't do this alone and we think it's important we look beyond our own organisation for solutions and ideas. Hence, we are supporting development of the Let's Talk Climate communications platform to harness ideas in shaping the City's low carbon vision.

We also know that different communities will have different priorities when it comes to us reaching net zero so we'll adapt how we communicate to make sure that everyone can access information, learn, take part in conversations, take action and help make decisions.

| Reference | Action Description   | Timescale                       | Resources / Cost<br>Implications                       | RAG<br>Status | Outputs, outcomes and benefits                          | Lead Service  | Priority<br>(1 is<br>high) |
|-----------|--|---------------------------------|--|---------------|---|---|----------------------------|
| 4.1a      | Support the development of the<br>Lets Talk Derby communications<br>platform to harness ideas in<br>shaping the City's low carbon<br>vision  | 2022                            | Internal delivery as part of service management.       | AMBER         | Increased awareness, understanding and behaviour change | Climate<br>Change Team  | 1                          |
| 4.1b      | Raise awareness of the Climate<br>Emergency amongst residents<br>through existing channels (such as<br>Neighbourhood forums) in<br>partnership with voluntary sector<br>and community groups, setting out<br>how residents can get involved. | Ongoing<br>Review each<br>March | Internal delivery as<br>part of service<br>management. | RED           | Increased awareness, understanding and behaviour change | Climate<br>Change Team<br>Neighbourhood<br>s team             | 1                          |
| 4.1c      | Respond to and collaborate with community climate groups.  | Ongoing<br>Review<br>annually   | Internal delivery as part of service management.       | AMBER         | Increased awareness, understanding and behaviour change | Climate<br>Change Team  | 1                          |
| 4.1 d     | Develop a 'Climate Inequalities<br>Group' to work with specific<br>communities and ensure equal<br>access to Climate knowledge,<br>understanding and action taking   | Sep-22                          | Internal delivery as part of service management.       | AMBER         | Increased awareness, understanding and behaviour change | Climate<br>Change Team<br>Human<br>Resources<br>Equalities    | 3                          |
| 4.1e      | Develop and implement a<br>comprehensive and ambitious<br>communications and marketing<br>strategy to support the delivery of  | May-22                          | Internal delivery as<br>part of service<br>management. | GREEN         | Increased awareness, understanding and behaviour change | Climate<br>Change Team<br>Communicatio<br>ns and<br>Marketing | 2                          |

| Reference | Action Description   | Timescale | Resources / Cost<br>Implications | RAG<br>Status | Outputs, outcomes and benefits | Lead Service | Priority<br>(1 is<br>high) |
|-----------|--|-----------|----------------------------------|---------------|--------------------------------|--------------|----------------------------|
|           | the CCAP. For example: sharing details of community events |           |                                  |               |                                |              |                            |

### Our Colleagues

We know there are different levels of knowledge, understanding and engagement with climate change across our organisation although awareness has generally increased. All our colleagues must have the knowledge and understanding needed to make a difference and support our journey to net zero by 2035. Recently, we've put climate change at the top of the agenda when we're communicating to our colleagues. We have also embarked upon nationally accredited Carbon Literacy training, however, we recognise that we need to do more to reach all colleagues in engaging and relevant ways. For example, we know that colleagues working in our front-line services need to be engaged in a different way to those who work in more desk-based roles.

| Reference | Action Description   | Timescale  | Resources / Cost<br>Implications                 | RAG<br>Status | Outputs, outcomes and benefits   | Lead Service  | Priority<br>(1 is<br>high) |
|-----------|--|--|--|---------------|--|---|----------------------------|
| 4.2a      | Deliver Carbon Literacy training,<br>with a view to cascading this to<br>colleagues and councillors  | Ongoing  | Internal delivery as part of service management. | GREEN         | A consistent understanding of the<br>climate context for all DCC colleagues<br>and councillors   | Climate<br>Change Team<br>and &<br>Democratic<br>Services | 1                          |
| 4.2b      | Become an accredited Carbon<br>Literacy Organisation   | TBC  | £500   | Amber         | Carbon Literate Organisation status<br>allows the council to display a plaque<br>to demonstrate that DCC is serious<br>about climate change. | Climate<br>Change Team                                    | 2                          |
| 4.2c      | Introduce a climate change impact<br>assessment tool to both challenge<br>and ultimately improve all the<br>Council's key decisions  | Spring 2022  | Internal delivery as part of service management. | Amber         | Insight led decisions, where climate implications are consistently considered  | Climate<br>Change Team<br>and<br>Democratic<br>services   | 1                          |
| 4.2d      | Share best practice information and<br>resources about the 'climate<br>emergency' agenda from available<br>sources such as APSE and the<br>LGA   | To be<br>developed in<br>line with the<br>Communicatio<br>ns Strategy          | Internal delivery as part of service management. | Green         | Insight led decision making  | Climate<br>Change Team<br>& comms                         | 2                          |
| 4.2e      | Develop ways of working with<br>colleagues which do not make<br>them feel guilty but encourage<br>personal and team commitments<br>relating to reducing carbon<br>emissions (e.g driving less, reuse | Ongoing. To<br>be developed<br>in line with the<br>Communicatio<br>ns Strategy | Internal delivery as part of service management. | Amber         | A consistent understanding and commitment to the climate emergency   | Climate<br>Change Team                                    | 1                          |

| Reference | Action Description                          | Timescale | Resources / Cost<br>Implications | RAG<br>Status | Outputs, outcomes and benefits | Lead Service | Priority<br>(1 is<br>high) |
|-----------|---|-----------|----------------------------------|---------------|--------------------------------|--------------|----------------------------|
|           | and recycle more, turning down thermostats) |           |                                  |               |                                |              |                            |

#### Travel

Travel creates more than a third of emissions in Derby. How our colleagues travel, the vehicles they chose, and what fuel they use, are all questions where climate change and technology is challenging our thinking. We expect to see big changes over the next 10 years. We know that moving our colleagues, and running our services is essential to our operations but if we want to reduce emissions and reach net zero, we need to enable colleagues to choose more sustainable and active travel options. COVID-19 changed the way we think about how and where we want to work along with the daily commute. Ultimately, fewer journeys to the Council House or our other sites means reduced vehicle emissions. To support this change, we are investing in our own fleet to include more electric and ultra-low emissions vehicles.

| Reference | Action Description  | Timescale | Resources / Cost<br>Implications                 | RAG<br>Status | Outputs, outcomes and benefits  | Lead Service             | Priority<br>(1 is<br>high) |
|-----------|---|-----------|--|---------------|---|--------------------------|----------------------------|
| 4.3a      | Undertake a data collection<br>exercise to establish emissions<br>produced by colleagues use of own<br>vehicles   | ТВС       | Internal delivery as part of service management. | AMBER         | A consistent understanding and commitment to the climate emergency                            | Working<br>Smarter Board | 2                          |
| 4.3b      | Review the Business Travel Policy   | Mar-23    | Internal delivery as part of service management. | Green         | A consistent understanding and commitment to the climate emergency                            | Human<br>Resources       | 2                          |
| 4.3c      | Review the environmental impact<br>and business risk resulting from<br>the running a large number of grey<br>fleet vehicles   |           | Internal delivery as part of service management. | GREEN         | The major benefits from this review will come from environmental and health and safety gains. | Fleet                    |                            |
| 4.3d      | Support staff to use lower carbon<br>forms of transport when traveling,<br>such as use and purchase electric<br>vehicle, join car-ownership clubs,<br>continue to encourage staff to<br>access the 'Cycle to Work' scheme,<br>encourage use of public transport | Ongoing   | TBC: informed by<br>4.3a,b & c                   | Green         | Colleagues use lower carbon forms of transport  | Human<br>Resources       | 2                          |
| 4.3e      | Maintain, as appropriate, the<br>culture of virtual meetings post<br>Covid19; maximizing flexible<br>working benefits. Work with Future<br>Working Group to promote climate<br>benefits.  | ТВС       | Internal delivery as part of service management. | Green         | Reduced emissions from travel.  | Working<br>Smarter board | 1                          |

# How it all works

### Internal

The Council has set up a Climate Change Officer Group (CCOG) chaired by our Chief Executive and attended by officers from all levels of our organisation to give it the gravitas and inclusivity it deserves. The group meets monthly to coordinate and shape what we can do to reduce our carbon footprint. To facilitate corporate buy in and ownership amongst all colleagues, the CCOG have set up five cross cutting groups to ensure that projects are 'owned', accountable and progress is made.

The groups oversee and champion the following themes:

- 1. Integration of climate change into Council processes and procedure.
- 2. Raising awareness and changing hearts and minds.
- 3. Improving the energy efficiency of our estate and delivering exemplar priority projects.
- 4. Reconnecting with nature to deliver a greener city.
- 5. Preparing our city and services for a changing climate.

#### External

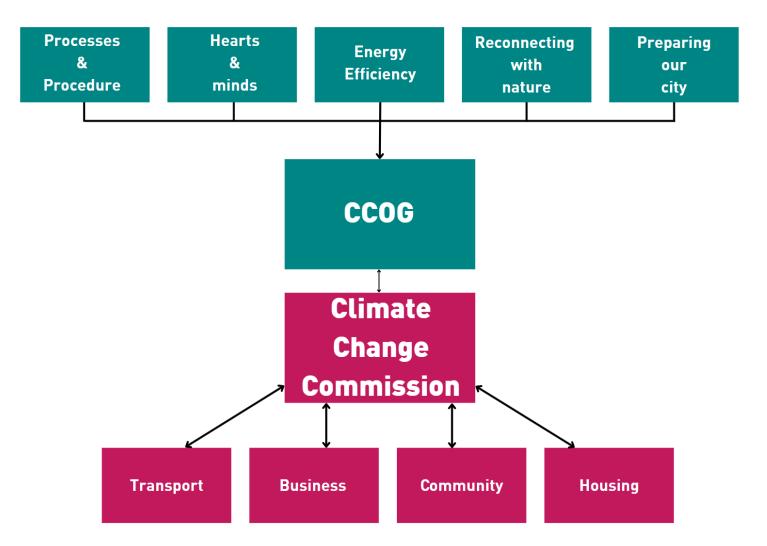
A Climate Change Commission has been established to provide an external presence to champion this important issue and to co-ordinate a city-wide response. The Commission is chaired by the University of Derby and has representation from a variety of external partner organisations including the Council, Derby Homes, the Environment Agency, East Midlands Chamber and the East Midlands Energy Hub. The work of the Commission is driven by a series of themed based action hubs focusing on transport, housing, business and community.

One of the main aims of the Commission is to o-ordinate the production of a city-wide climate change strategy building on the previous document that was produced in 2015. The strategy will:

- raise the profile and understanding of how Derby can proactively respond to climate change
- develop a shared vision for Derby about this critically important issue
- recognise and build on the strengths of the city while identifying the gaps that exist in tackling this complex and challenging issue
- promote long term, integrated planning across different disciplines and organisations to help tackle the city's response to climate change.

The strategy will be out for consultation in the summer and will be finalised towards the end of the year. It should be acknowledged that there will be a close relationship between the city-wide strategy and the Council's Action Plan in addressing climate change.

The following diagram helps to show the various internal and external groups that currently operate in this area and the relationship between them.



#### Monitoring our progress and impact

Our action plan is designed to be a living document where we can include new projects and initiatives as and when they arise or adapt our plans if we face challenges.

It will have a 2-year timeframe after which we'll undertake a carbon foot printing exercise to track the progress we are making and will use the results to re-evaluate our approach.

Using key measures of success and impact, we'll monitor our progress annually and we'll prepare a report to document this. The report will be shared through the Climate Change Officer Group to the Chief Executive, Cabinet Member, Overview and Scrutiny Board and partnership groups.

This will help us to review what we are doing that is working well but more importantly to identify those things that are hampering progress. The processes of challenge, transparency and learning are all essential if we are to deliver our net zero carbon ambitions.

We know that some of our actions will have wider effects on the city so we'll regularly share updates with residents on key successes and our impact.

This document is not an end but just a start on our journey to net zero.

| Theme         | Areas   |  |
|---------------|---|--|
| Our Assets    | <ul> <li>Buildings – Corporate Estate</li> <li>Buildings – Derby Homes</li> <li>Fleet</li> <li>Street Lighting</li> <li>Highways</li> <li>Renewable Energy</li> </ul> |  |
| Our Processes | <ul> <li>★ Planning</li> <li>★ Procurement</li> <li>★ Carbon Offsetting</li> <li>★ Democracy and monitoring</li> </ul>  |  |
| Our Place     | <ul> <li>★ Waste</li> <li>★ Natural Environment</li> <li>★ Air Quality</li> </ul>   |  |
| Our Culture   | <ul> <li>★ Community and collaboration</li> <li>★ Our Colleagues</li> <li>★ Travel</li> </ul>   |  |