Climate Change Annual Report 2024/25

CAN Climate Action Now.

CHESTERFIELD BOROUGH COUNCIL

Contents


This is our habitat
SWEET HOME
As part of our Climate Change Strategy, we are committed to improving biodiversity.

Foreword

Welcome to Chesterfield Borough Council's Climate Change Annual Report for 2024/25.

This report provides a summary of activities detailed within our delivery plan for the past year and is the third report published after we launched our Climate Change Strategy 2023-2030.

Since declaring a climate emergency in July 2019, we have been working to reduce our greenhouse gas emissions across key services aiming to be a carbon neutral authority by 2030. We have also continued to positively engage with our communities by facilitating the Chesterfield Climate Change Forum and supporting local voluntary groups, charities and non-profits to apply and secure grant funding through the Community Grants Fund.

In recent years we have seen flooding, heatwaves and storms that have had a devastating impact in Chesterfield, the UK, and across the world. Adjusting to changing weather patterns and preparing for the projected increase, frequency and intensity of extreme weather events presents a challenging time for councils, businesses and communities which need to be addressed sooner rather than later.

While we continue to deliver both mitigation and adaptation activities, some of which depend on securing large external grant funding and significant investment from the council, by lowering our carbon emissions, switching to renewable energy and technology and enhancing our green spaces for residents and wildlife, the positive benefits are clear.

With the introduction of the East Midlands Combined County Authority in 2024 and local government reorganisation to follow, it is vitally important that now more than ever, our set aims and ambitions remain in place and are built upon in collaboration with our climate change allies over the coming years.

Councillor Martin Stone

Cabinet member for climate change, planning and the environment

Chesterfield Borough Council

Introduction

Across the organisation our staff have been working hard to engage with leading sustainability partners, build knowledge and understanding of green technology, secure internal and external funding, and embed climate change within our services to deliver wide-ranging activities contributing to our six key themes of work:

Building and energy use

Travel

Green space, land use and offsetting

Communications, engagement and training

Data, monitoring, and corporate activity

Council influence and partnership activity

Throughout the year we have continued to progress with mitigation activities which will result in a reduction in carbon emissions, and we have also started to develop a broader understanding of resilience and adaptation, so we are able to better prepare and adjust to a changing climate.

The state of the borough

Many natural factors affect a changing climate, and scientists agree that human activity is the dominant cause of climate change.

By burning fossil fuels (coal, oil, and natural gas), using intensive farming techniques, and destroying large areas of forest, we are causing a rapid rise in heat-trapping gases called greenhouse gases which has caused the earth to warm up, affecting global weather patterns and sea levels.

The Met Office 'provides essential climate information that is tailored to the local area and easy to use for climate risk assessments, developing adaptation plans and building climate resilience'.

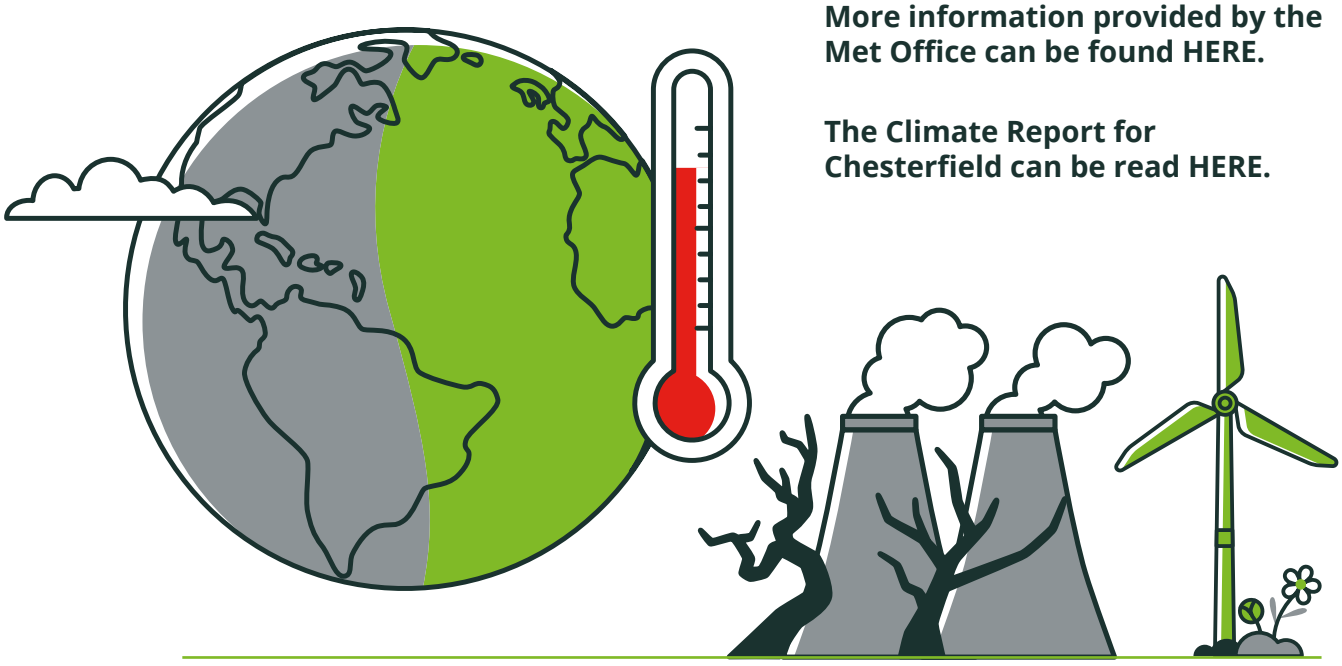
Chesterfield is already experiencing the impacts of a changing climate, and even in the most optimistic scenario, we should at least prepare for 'an increased chance of warmer, wetter winters and hotter, drier summers.'

Almost 10 years ago, in December 2015 a total of 196 parties originally adopted the Paris Agreement – a legally binding international treaty on climate change – which aims to 'hold the increase in the global average temperature to well below 2°C above pre-industrial levels.'

However, should the global average temperature rise above the 1.5°C threshold, communities here in the UK and worldwide will face 'the risk of far more severe climate change impacts, including more frequent and severe droughts, heatwaves and rainfall'.

More information provided by the Met Office can be found HERE.

The Climate Report for Chesterfield can be read HERE.



Understanding adaptation and resilience

Climate change adaptation means preparing and adjusting to the current and predicted changes in severe weather patterns, while resilience to climate change means preparing for the impacts of a changing climate and building our capacity to recover.

Ensuring we improve our understanding of adaptation and identify and embed adaptation measures within our direct and indirect services is a crucial next step for us and all other councils, as is, supporting residents to build resilience within their local communities.

In recent years, heatwaves, flooding and storms have interrupted the delivery of council services and proved to be an added financial cost to already stretched resources. The more we can adapt to the negative impacts of climate change now, the more benefits we will see in the near and far future.

While we will all feel the pressure of a changing climate, sadly, some residents and communities will bear the strain on a much more damaging scale. Working with diverse local, regional and national partners to identify those most at risk and those most vulnerable will be a fundamental focus during 2025/26.

More information on community resilience to climate change can be found HERE

Highlights of activities during 2024/25

Building and energy use

Case Study - **Brocklehurst Court**

Brocklehurst Court is leading the way on decarbonised shared domestic heating, improving the quality of life of our tenants and helping to reduce carbon emissions by up to 80%.

The independent living scheme is being upgraded into a more sustainable and energy-efficient building.

The project is replacing the existing gas central heating system and hot water boilers with commercial air source heat pumps. To further enhance energy efficiency, solar panels and battery storage are being installed on the roof which will help generate electricity to power the new air source heat pumps, which will reduce the reliance on the grid.

Case Study - Northern Gateway Enterprise Centre (NGEC)

As part of funding obtained under the UK Shared Prosperity Fund (UKSPF), we facilitated a decarbonisation grant to businesses by installing solar panels (120 450Wp) on the roof of the NGEC in December 2024.

The centre was built in 2022 and comprises 32 office suites, which are let by various businesses. It was designed to a BREEAM (Building Research Establishment's Environmental Assessment Method) excellent standard, which is a sustainability rating scheme, and helps to measure and reduce environmental impacts of buildings.

Prior to the installation of the solar panels, the utility bills indicated that the building's usage was around 151,553kWh of electricity per annum. The projection for the solar installation would offset around 27% of the building's energy consumption and therefore allow these savings to be passed onto tenants at a rate of 27%.

Case Study - Chesterfield homeowners receive energy efficient boost

Over 50 homeowners in Chesterfield have benefited from energy efficient improvements to their homes which will reduce their utility bills. Over the past two years we have joined forces with Marches Energy Agency (MEA), and Eon Energy Solutions to help residents to make their homes warmer and more energy efficient.

After we were successful in securing over £440,000 through the Government's Home Upgrade Grant Phase 2 (HUG2), grant funding has been used to help improve the energy efficiency of 27 'off-grid' properties across the borough. The funding, which was available to homeowners who do not have a mains gas heating system and where their property has a valid Energy Performance Certificate (EPC) rating of D or below has helped to deliver a range of energy measures - insulation and solar panels to air source heat pumps and smart heating controls - that will help save residents money on their energy bills whilst also reducing carbon emissions.

In addition to the homeowners supported through the HUG2 scheme, a further 30 homes in the borough have benefitted from energy efficient improvements after the council secured over £583,500 through the Domestic Retrofit (DEVO) scheme. DEVO helped homeowners whose homes have an EPC rating of D and below and who had not been eligible for grant funding through previous schemes. Under the scheme, ten properties benefitted from external wall installation, while other properties had energy improvements made to their home to help save on energy bills.

The council were also able to secure an extra sum of £4,500 towards the cost of removing asbestos that was needed to complete the installation of the energy improvements.

"I don't think the council could ever fully realise just how much I am benefiting now - health and finance-wise. I am now warm and comfortable, and able to use appliances whenever I need without worry about cost."

Ann is one of the residents benefiting from energy efficient improvements to her home.

Travel

Case study – Electric Vehicles

Throughout 2024/25, the council replaced 34 small to medium sized diesel and petrol vehicles with low emission electric vehicles, making positive progress towards decarbonising our fleet. This comes as part of a phased approach to replacing all our current fossil fuel fleet, which are used to deliver building cleaning, environmental protection, Chesterfield Careline and other housing services.

The roll out of zero-emission vehicles comes with other bonuses too, including fewer breakdowns and repairs, spreading out the fleet management workload over time and reducing the amount of carbon per mile. Charging points have also been installed at our Stonegravels Depot to ensure the smooth transition to electric vehicles.

During 2025/26 our intention is to continue to trial other alternative vehicle and fuel types including Hydrotreated Vegetable Oil (HVO) and electric vehicle options for our larger fleet.

Green space, offsetting and land use

Case Study – Tree planting

Two new projects have seen trees planted in green spaces across Chesterfield with an innovative planting style used to celebrate the coronation of King Charles III.

Funding was received from the Coronation Living Heritage Fund which was used to plant trees in a 'Miyawaki' style in Pearson Park and Stubbing Road in Grangewood. Miyawaki is a Japanese planting style where small trees are planted incredibly densely which helps trees establish quicker and when fully grown creates micro-woodlands that help to boost biodiversity and create new habitats for wildlife.

Further funding was granted by the Forestry Commission's Urban Tree Challenge Fund to plant heavy standard trees in Highfield Park. Heavy standard trees are supplied as larger trees, usually being around four meters tall which is more than double the size of trees usually planted by the council. These trees create a greater impact because of their size and will form a tree-lined boulevard through the park.

Trees improve the environment we live in by supporting wildlife, and providing access to green spaces, having positive impacts on wellbeing. They also provide shade and absorb carbon, helping to offset carbon emissions.

Case study – Rain gardens at Holmebrook Valley Park

Don Catchment Rivers Trust (DCRT), with support from the Friends of Holmebrook Valley Park, was awarded money from our Community Grant Fund to install rain garden planters, otherwise known as Sustainable Urban Drainage (SuDS) units, on the pavilion building at Holmebrook Valley Country Park.

The Community Grants Fund aimed to support local projects that help to build resilient, healthy, and safe neighbourhoods, as well as initiatives which will help reduce the borough's impact on the climate and wider environment by promoting greener choices.

Debbie Coldwell, Natural Flood Management Officer at Don Catchment Rivers Trust said:

"We applied for funding for some rain garden planters that we could install on the pavilion building. The planters help to slow flows of rainfall from the roof of the building into the drainage network and work alongside other measures we've installed in the park to reduce downstream flood risk. Planters also have a variety of wildlife habitat features attached and are proving to be of interest to visitors. The application process was straightforward, and the grants team have been wonderfully supportive throughout. We were thrilled to be awarded the funding

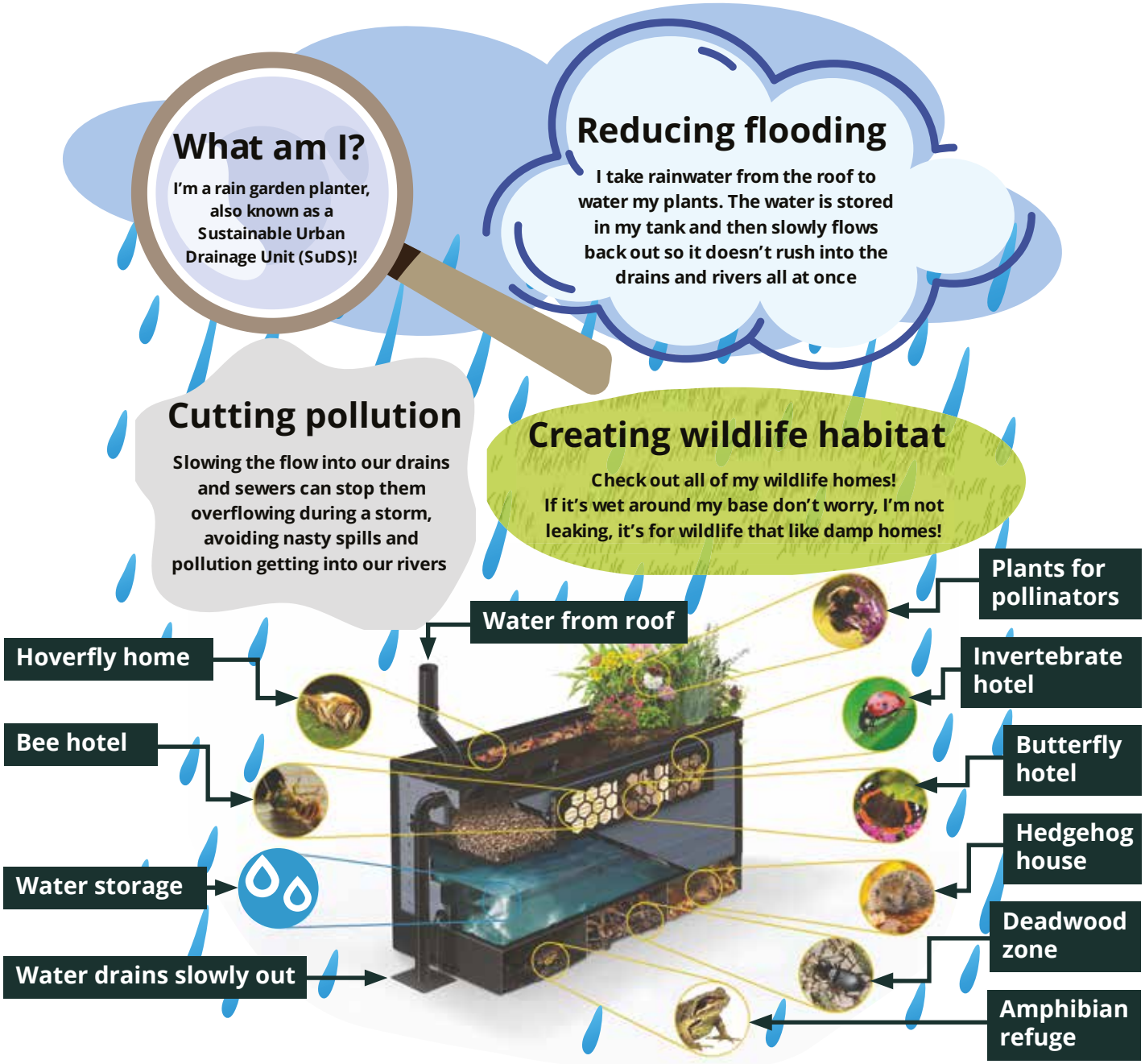
"We applied for funding for some rain garden planters that we could install on the pavilion building."

Debbie Coldwell, Natural Flood Management Officer at Don Catchment Rivers Trust.

and are working with the council and Transition Chesterfield to expand the project to other buildings across Chesterfield."

Planters take rainfall from the roof of buildings which waters the plants and temporarily holds back access water in a storage tank before slowly being released back into the drain. This helps to slow flows to the drainage network and our rivers during storms which together with other measures can help to reduce the risk of flooding and pollution spills into our rivers.

A variety of wildlife habitats are also incorporated into the planters including homes for bees, hoverflies, butterflies and invertebrates, a hedgehog house, a deadwood zone, an amphibian refuge, and plants for pollinators.



Middlecroft development

Tenants are settling into 4 new-build council homes in Middlecroft.

We have handed over the keys to tenants for two three-bedroom properties on Ringwood Avenue, and a further two two-bedroom bungalows at Court Place.

Each of the completed properties has been designed to achieve an A-rated EPC (energy performance certificate) and fitted with an air source heat pump, which will supply hot water and heat the homes via underfloor heating – without the need for a gas boiler.

Solar panels have also been installed and have been designed to generate more energy than the properties are expected to use.

Comms, engagement and training

Case study - Chesterfield Climate Change Forum

The Chesterfield Climate Change Forum is facilitated by the council and chaired by Councillor Martin Stone. The forum is made up of various representatives from different climate-related voluntary groups, organisations and community groups.

It was decided that to give each forum meeting a specific focus, the members of the forum would vote on specific themes. This allows us to invite community groups who can benefit from such themes and would help with engaging residents in climate activities. Some of the themes chosen include plan for nature, sustainable travel, home improvements and extreme weather.

Case study - Carbon Literacy and Climate Fresk Training

Carbon Literacy and Climate Fresk training was delivered to staff across various teams to increase knowledge and understanding around climate change.

Carbon literacy is climate change learning that catalyses action to reduce greenhouse gas emissions on an individual, community and organisational basis. Climate Fresk training was integrated into the Carbon Literacy training which is a powerful evidence-based tool for climate education.

CL!MATE FRESK

All the cards are in your hands!

"The course was a wake-up call. It has motivated me to look at ways to make a positive change both personally and professionally."

Deborah Goodall, Head of Procurement, on attendeding the course.

Data monitoring and corporate activity

Council emissions 2024/25

Our emissions from our electricity and gas use for buildings have continued to fall by over 30 percent and 13 percent respectively, and our emissions from road fuels have remained relativity the same with only a slight fall of two percent. We have however incurred additional electricity emissions of 1.37 tonnes of carbon dioxide equivalent (tCO_2e) from the introduction of 34 electric vehicles, which were deployed in January 2025.

Electricity usage (buildings)

1,264
2019/20

938
2023/24

872
2024/25

-31%
Reduction on baseline emissions

We have reduced our electricity emissions from 1,264 to 872 tonnes of carbon dioxide equivalent (tCO_2e). We also took the decision to offset our electricity usage and purchase Renewable Energy Guarantees of Origin (REGO) which are certificates that verify electricity has been generated from zero-carbon sources. Issued by a regulatory body such as Ofgem, REGOs have enabled us to make more informed choices regarding our energy supplier aligning to our commitment to reducing our greenhouse gas emissions across all services.

Gas usage (buildings)

2,065
2019/20

1,824
2023/24

1,788
2024/25

-13%
Reduction on baseline emissions

The benefits of an electric fleet

Our investment in 34 electric vehicles and the required charging infrastructure at our Stonegravels Depot has reduced our environmental impact and over time will provide financial benefits through lower fuel and maintenance costs.

Over a 3-month period from 1 January to 31 March 2025 (Q4), we reduced our diesel consumption by over 16 percent compared to the same period the previous year which reduced our diesel emissions by 29.19 tonnes of carbon dioxide equivalent (tCO_2e).

Litres of diesel fuel used

65,763
2023/24

54,127
2024/25

-17%
Reduction in diesel consumption

Throughout 2025/26 we will continue to monitor the efficiency of our electric fleet over a full 12-month period including electricity usage and emissions incurred and a reduction in diesel consumption and emissions.

Council influence and partnerships

Our partnerships and networks are extensive and include local authorities across the UK, charities and non-profits, and large and small businesses all working together to address environmental issues and improve climate change initiatives and sustainable practices.

East Midlands Combined Authority (EMCCA)

Established in 2024, East Midlands Combined County Authority (EMCCA) cover our four local authority areas Derbyshire, Nottinghamshire, Derby and Nottingham. The newly formed combined authority has a commitment to supporting the climate change agenda and has a target to become carbon neutral region by 2050. Our partnership with the combined authority will continue to grow through our shared ambitions to provide cleaner more sustainable living.

Midlands Net Zero Hub (MNZH)

Funded by the Department of Energy Security and Net Zero (DESNZ), the Midlands Net Zero Hub (MNZH) 'provides free strategic and technical support to local authorities, public sector organisations and community groups to develop net zero projects'. During 2024/25 we have continued to engage with MNZH through a range of opportunities including support to apply for external grant funding. As in previous years, MNZH led on successful consortium applications to Warm Homes: Social Housing Fund and Warm Homes: Local Grant, which will now fund more than 30 consortium partners across the Midlands working to deliver low-carbon heating and energy efficiency measures for both social housing and private homes.

AECOM and Salix Finance

Working with consultants AECOM and Salix Finance, a non-departmental public body who manage government funding or projects supporting net zero targets, we have secured almost £2.4 million from the Public Sector Decarbonation Scheme. Funding for a heat decarbonisation project at our Healthy Living Centre, one of our council owned buildings with the highest greenhouse gas emissions will see the existing worn heating system replaced by modern air source heat pumps and system upgrades. Throughout 2025/26 we will continue to receive support from Salix and work with the National Grid and contractors to deliver the ambitious project. Learning from this, our first heat decarbonisation project on a large commercial building, will provide invaluable learning for additional priority buildings including Queens Park Sports Centre and the Town Hall.

Local Area Retrofit Accelerator (LARA)

The MCS Foundation have continued to deliver the Local Area Retrofit Accelerator (LARA) initiative across pilot areas Hertfordshire, Surrey, Derbyshire and Nottinghamshire, and Liverpool City Region. The project will soon see the completion of bespoke retrofit strategies supporting pilot areas to attract investment and funding resulting in more existing homes to be retrofitted quicker than the current rate. To meet the government's net zero target by 2050, it is estimated that residential retrofits need to increase to a rate of one million per year.

Derbyshire Wildlife Trust (DWT)

Derbyshire Wildlife Trust (DWT) and our Planning team have produced a Plan for Nature which provides a 'detailed action plan intending to guide policy making and facilitate an integrated approach to delivering biodiversity enhancements across the borough'. Since the early 1970s nature across the UK has sadly declined in health with a loss of habitats and connectivity between them, and biodiversity continues to be threatened as the borough continues to expand urban boundaries. During 2025 we will continue to work closely with DWT to deliver activities in priority areas across Chesterfield.

Carbon Disclosure Project (CDP)

Led by the Carbon Disclosure Project (CDP) 'a global non-profit that runs the world's only independent disclosure system' we participated in the Disclosure Cycle 2024 which provided a climate action benchmark score based on our current climate change activities supporting eight key themes. Funded by MNZH and supported by Sustainability West Midlands we are pleased to say that our climate action score for 2024 is B, which compares to an average B score across the Midlands and an average B score globally. The benchmarking process started in 2019, and our intention is to take part in the project again starting in June 2025.

To read the Climate Action in the Midlands 2024 Report click HERE

Local Area Energy Partnership (LAEP)

The Local Area Energy Partnership (LAEP) hosted by Derbyshire County Council (DCC) have continued to facilitate regular network meetings for all Nottingham and Derbyshire local authorities which enables continued peer learning, collaborative working and key training opportunities throughout the year. In addition to training offered by the LAEP we have also benefited from ongoing workshops and webinars provided by the Association for Public Service Excellence (APSE), Local Government Association (LGA), Knowledge Hub, Regen, Ashden Adaptation Network, ESTU and others.

Looking forward: the coming year

Local Area Energy Plan

The National Grid recognise they have a 'critical role to play in the acceleration towards a cleaner future' and aim to decarbonise the energy system by 2050. On a local level, Midlands Net Zero Hub are working with councils across Derbyshire and Nottinghamshire to produce the largest local area energy plan in England. The plan will take into consideration existing energy systems and developing technology and identify the most suitable pathway to net zero.

Healthy Living Centre

We have secured funding to commence heat decarbonisation work at our Healthy Living Centre in Staveley. Our Assets team have successfully secured almost £2.4 million from the Public Sector Decarbonation Scheme which includes £500,000 investment from the council. We have estimated that the introduction of air source heat pumps and associated future proofing will reduce our carbon emissions by 40 percent.

Warm Homes Plan

Our Housing teams have successfully secured grant funding for council housing and private homes through two external grant funding applications working alongside the Midlands Net Zero Hub. Both projects will deliver energy efficiency measures contributing to lower energy bills, reduced carbon emissions and improved comfort for tenants and homeowners.

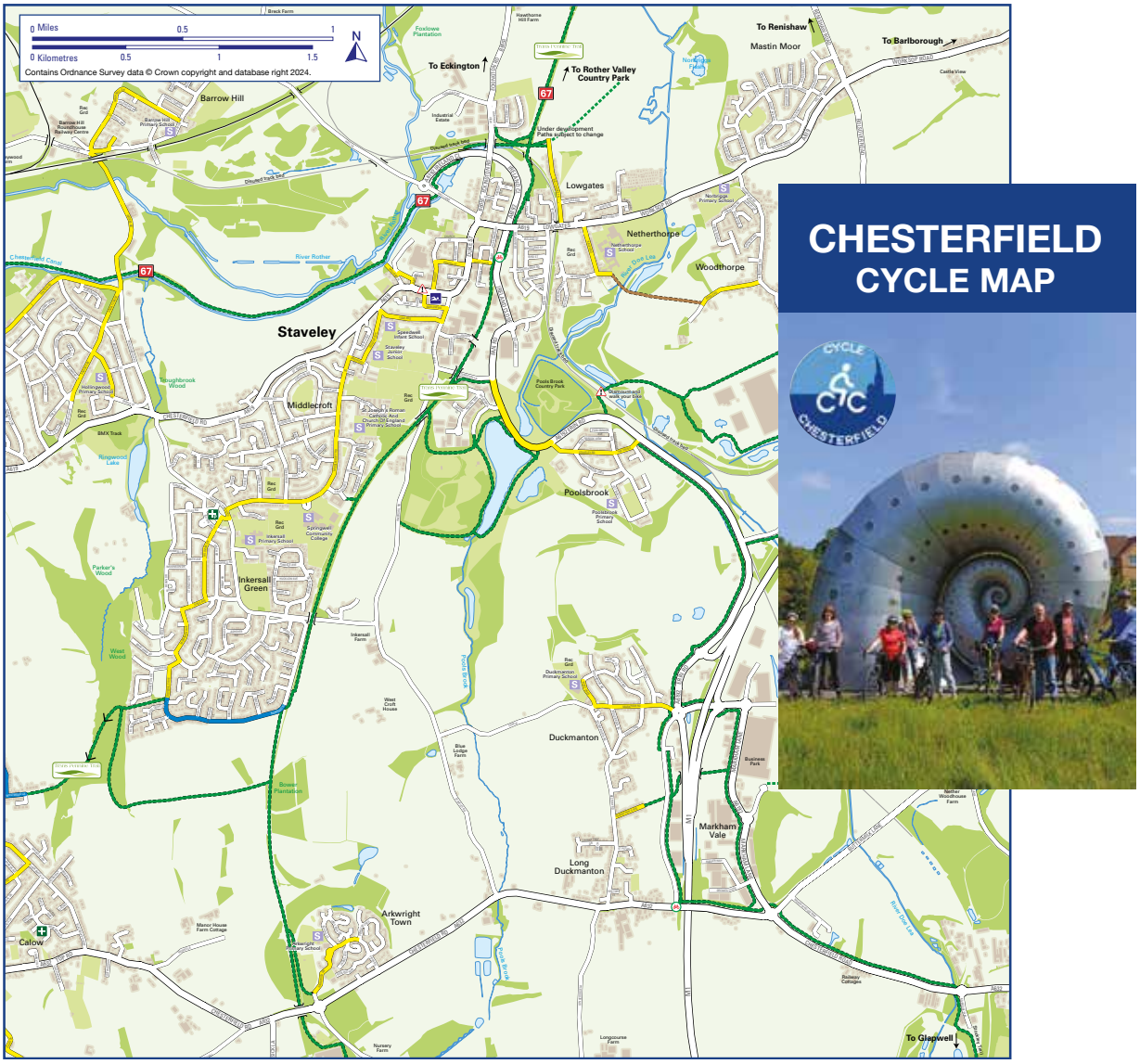
Low Emission Vehicle Infrastructure

In partnership with Derbyshire County Council, we will continue with plans to improve low emission vehicle infrastructure across the borough. Lamp column chargers, on-street chargers, and rapid chargers will increase accessibility to electric vehicle charging for residents and visitors.

Community Grants Fund

Our Community Grants Fund will launch again in the first half of 2025 with a minimum of £20,000 ringfenced for climate change initiatives. The fund has already successfully funded 14 climate change related projects with successful applications from our local voluntary and community sector groups, charities and non-profits providing activities and support to residents and communities across Chesterfield.

Cycle Chesterfield received funding for a Chesterfield Cycle Map available HERE.



Staff Travel

Supporting active and sustainable travel, we consulted with our staff regarding their commute to and from work. During 2025/26 our aim is to promote various initiatives including car sharing and an electric pool car, and the opportunity for staff to invest in electric bikes and vehicles through the various employee travel schemes available.

Community Engagement

As part of our work to engage with residents and communities in climate-related activities, we have added to our climate change resources pack to include various ‘eco action games’ including a giant snakes and ladders board and card games. These resources promote environmental education, positive engagement and behaviour change and are available to members of the Chesterfield Climate Change Forum.

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Climate Action **Now.**

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