

Draft document

Vision Derbyshire Achieving Net Zero Emissions across Derbyshire (2022-2025)

Introduction

Vision Derbyshire

Vision Derbyshire is a shared commitment across Derbyshire's county, district and borough councils, to strategically collaborate to improve outcomes for people and places, speak with one voice as a county, and coordinate our resources better and more sustainably.

For people and places, Vision Derbyshire will:

- Create a fair society for Derbyshire where everyone has opportunities
- Enable people to better manage their quality of life, health and wellbeing
- Exceed climate change targets for people
- Develop an inclusive and diverse economy for Derbyshire
- Empower communities to drive sustainable change

Within Vision Derbyshire there are four key workstreams, one of which is ***Live and work sustainably***, with an objective of embedding sustainable and green strategic spatial planning Derbyshire-wide, including for housing and transport.

Councils across Derbyshire are all taking action to tackle climate change, through reducing emissions from their own estates and operations, and playing their role in reducing county-wide emissions. With the increasing need to accelerate action on tackling climate change, the development and adoption of a joint climate change strategy has been identified as an opportunity to establish common ambitions and priorities, foster collaboration and resource sharing, and provide consistency in delivery.

Purpose and Scope of the Strategy

The purpose of this Strategy is to present a vision for Derbyshire to thrive and prosper as a net zero county. It has been developed through collaborative working between the county,

What do we mean by Net Zero?

A 'net zero' emissions scenario is one in which we have taken all viable action to reduce emissions to zero in the first instance, and any remaining or residual emissions by the target date will be offset i.e. removed from the atmosphere, as a last resort.

district and borough councils across Derbyshire.

The Strategy sets out what needs to be done to reduce emissions across the county to net zero by 2050, or sooner, and how Derbyshire's councils will work to achieve this through a series of ambitions and priorities, supported by an action plan.

The Strategy looks at how to reduce Derbyshire’s county-wide carbon emissions, taking into account those emissions generated directly in the county and those created outside of Derbyshire and which the county is, in part, responsible for.

The public sector is estimated to be directly responsible for 2% of the UK’s emissions, with influence over a further 40%. As such, this Strategy focuses principally on what councils can do about the county-wide emissions that they have direct control or influence over, but also considers wider opportunities where councils can encourage, promote and facilitate action by others – including central government as well as businesses, communities and individuals across the county.

The Strategy covers the period 2022 to 2025 and is accompanied by a live action plan. It is not intended to replace existing climate change strategies and plans in place within individual councils, but instead will complement these and set out key common areas of collaboration.

As well as reducing emissions across Derbyshire, delivery of the Strategy will help to address the wider key issues facing society, including improving and future-proofing homes, businesses, infrastructure and transport, reversing the decline in biodiversity, promoting community health and wellbeing, and the facilitation of a sustainable and robust low carbon economy.

Councils can’t deliver all of the necessary actions required to reduce emissions alone. Delivering the Strategy will therefore require collaboration with and across partners, citizens, businesses and communities.

This Strategy focuses on reducing emissions, but we also recognise the importance of adapting to climate change and protecting and enhancing the natural environment. These aspects are being explored separately to this Strategy.

Existing Collaboration

Derbyshire Environment and Climate Change Framework

During 2019, councils across Derbyshire came together to develop the Derbyshire Environment and Climate Change Framework. The Framework set out a common approach for Derbyshire councils to reduce greenhouse gas emissions to levels which are consistent with the UK’s commitment of net zero by 2050. The Framework contained a number of themes under which strategies and actions could be agreed, these were:

Energy	Travel	Resources	Air Quality	Economy	Natural Environment	Partnership working
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Linked to, and in addition to the Derbyshire Environment and Climate Change Framework, councils in Derbyshire have been working together to develop a number of joint strategies to tackle climate change and wider sustainability issues at county and regional levels. This includes:

- **The Air Quality Strategy (2020-2030)** – Developed through the Health and Wellbeing Board, the Strategy sets out how partners will work together to reduce the health impact of poor air quality for the people of Derby and Derbyshire.

- **The Derbyshire Economic Partnership COVID-19 Recovery Strategy (2021-2025)** – Developed by the Derbyshire Economic Partnership to identify the priorities to protect and grow Derbyshire’s economy in a post-COVID world.
- **Natural Capital and Biodiversity Strategy for Derbyshire (due to be published in Autumn 2022)** – The study will consider all the natural capital assets that are key to the county’s future prosperity, health, and wellbeing. It will identify the priority areas for the protection, restoration, and enhancement of natural capital assets and take climate change implications into account.
- **D2N2 Energy Strategy (2019-2030)** - This Strategy was developed by the D2N2 Local Enterprise Partnership and is being implemented in collaboration with Midlands Energy Hub. The Strategy sets out how the region can align with national and regional ambitions to expand renewable and low carbon energy development and achieve a net zero future.
- **Renewable Energy Study for Derbyshire (due to be published in Summer 2022)** – This study will identify the renewable energy opportunities in the county, including which technologies are most suitable and where they could be located.

In addition to these strategies, a range of specialist working groups exist that focus on specific areas and topics, including sustainable travel, low carbon energy, and improving the energy efficiency of homes.

Existing Climate Change Strategies Across Derbyshire

In addition to the collaborative working described in the previous section, councils have recently developed their own individual strategies and action plans to tackle climate change at county, district and borough levels. This Strategy is designed to complement individual council-level strategies and plans, through setting out key common themes and areas of collaboration. A summary of individual strategies and plans is listed below.

Council	Key Climate Change Strategy or Plan
Amber Valley Borough Council	The council has in place a Carbon Reduction Management Programme and Action Plan , which set out the council’s plans to implement carbon reduction measures across all its assets, operations, and spheres of influence within the borough.
Bolsover District Council	The council has in place a Carbon Reduction Plan 2019-2030 , which sets out how the council aims to work with partners, business and communities to achieve net zero.
Chesterfield Borough Council	The council has in place a Climate Change Action Plan 2020-2023 which sets out measures that the council will carry out to monitor, reduce and decarbonise its own activities and support the transition of Chesterfield to a low carbon borough
Derbyshire County Council	The council has in place a Climate Change Strategy: Achieving Net Zero (2021-2025) , which sets out how the council will work to become a net zero council by 2032, or sooner, and play its part in decarbonising the county by 2050.
Derbyshire Dales District Council	The council has in place a Climate Change Strategy and Action Plan, 2020 to 2030 , which sets out an action plan for the council to become net zero by 2030.
Erewash Borough Council	Although no formal climate change plan exists at present, the aim to support the wider climate change agenda to facilitate a better environment for everyone is included in the council’s Corporate Plan 2021-2023 .

High Peak Borough Council	The council has in place its Towards Carbon Neutrality 2030: Climate Change Plan , which sets out an action plan for reducing the council’s own emissions and also its role in reducing emissions across the Borough.
North East Derbyshire District Council	The council has in place a Climate Change Action Plan 2019-2030 , which sets out steps for achieving the vision of “A district that balances economic prosperity with environmental sustainability, improving the lives of our people and our environment today and in the future”
South Derbyshire District Council	The council has in place a Climate and Environment Strategy and supporting Action Plan , which aligns to and supports the Corporate Plan Commitments of "Our Environment, Our People, Our Future"

Delivering the Strategy

In order to effectively deliver the Strategy, councils across Derbyshire will work together to deliver projects and initiatives that align with and achieve the ambitions, targets and principles set out in Section xx. To deliver the Strategy, a range of actions and projects will be identified and delivered collaboratively by the councils during the Strategy period.

The Strategy will be co-ordinated and monitored by the Vision Derbyshire Climate Change Officers Group, which is comprised of officers from the county, district and borough Councils in Derbyshire. This Officers Group reports into the wider Vision Derbyshire governance structure, ensuring oversight and accountability of activities and projects being delivered.

The councils also play a key role in bringing together residents, businesses, academic, public, community and voluntary sectors to plan and implement climate action. We will use our leadership, partnership building and influencing role to facilitate and promote actions across all sectors and groups.

The councils will also work with partners and other stakeholders to educate, raise awareness and engage and involve people within the local community.

To deliver the action required to play their part in reducing emissions across the county to net zero, councils will need to work together to identify and prepare for external funding opportunities. This will help the councils to maximise our collective success in securing funding and other support for delivering action on decarbonisation.

Furthermore, the councils will work together to utilise our links with central government to lobby for additional support for local government on this agenda and to secure investment for decarbonisation in Derbyshire.

Derbyshire’s Emissions

There is no doubt that emissions across the world need to be cut as a matter of urgency and that if global temperature rises are to be kept to a level at which it is estimated ‘we can manage’ then emissions need to be reduced sharply over the next decade and to net zero by 2050.

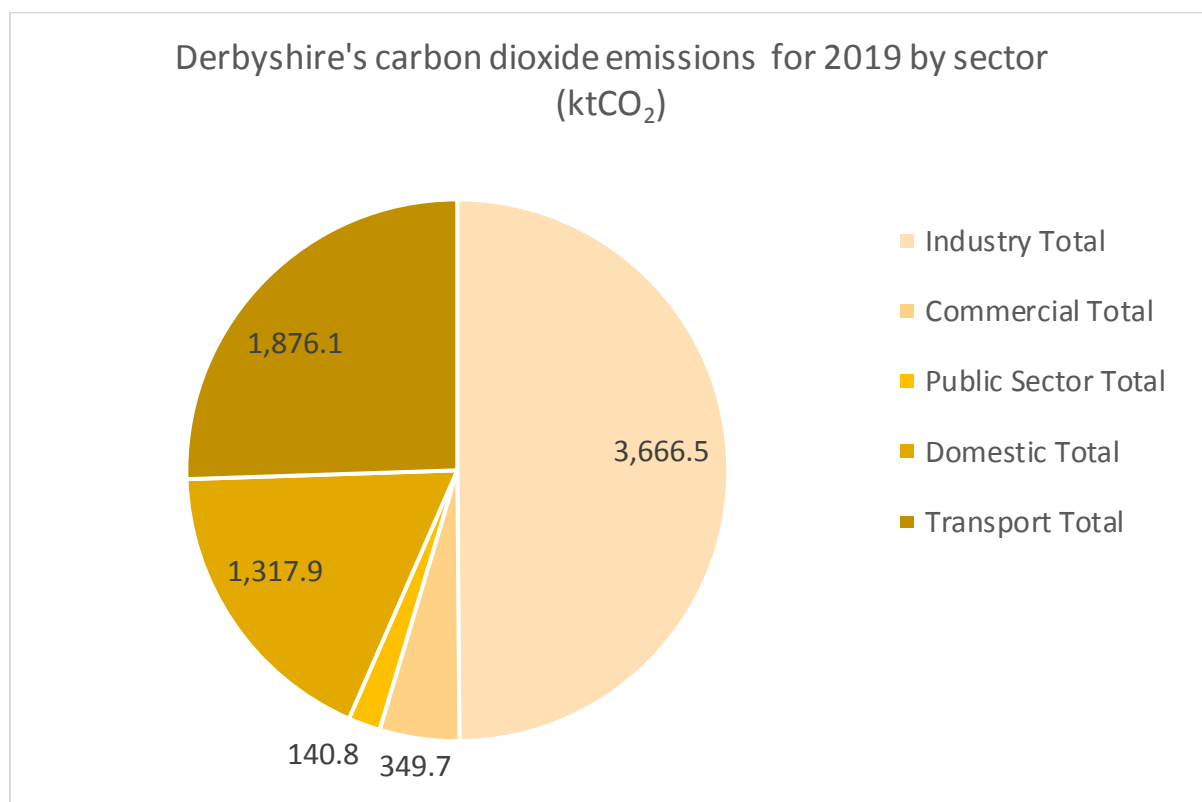
The UK has legal targets to:

- Reduce greenhouse gas emissions by 78% by 2035 compared to 1990 levels as set out in the sixth carbon budget (to include the UK’s share of international aviation and shipping emissions)

- Reduce greenhouse gas emissions to net zero by 2050

Derbyshire’s county-wide target of net zero by 2050 is aligned with the UK’s legal commitment to deliver net zero by 2050.

In 2019, Derbyshire’s total greenhouse gas emissions across the county amounted to 7.2 million tonnes of CO₂¹. This works out at 9.0 tonnes per person compared to a UK average of 6.8 tonnes per person. Our biggest sources of emissions are from the industrial sector (including significant emissions from the county’s quarrying and cement industries), followed by the transport and domestic sectors. Figure 1 presents the split of these emissions sources, with more details provided in Appendix 1. It is worth noting that Derbyshire’s emissions aren’t just caused by activities inside the county, but also by the production of the goods and services outside it, which are bought in.



Since 2005, Derbyshire’s county-wide emissions have fallen by 25%. However, emissions reductions need to be accelerated if the county is to be on course to deliver net zero by 2050.

Emissions data

There are a number of datasets and modelling tools available that provide emissions data for the UK and for individual areas. The datasets vary according to the sources of information used, and also what is included and what is excluded. This complex array of datasets can lead to confusion about the quantity of emissions emitted in an area and inconsistency in reporting.

The Department for Business, Energy and Industrial Strategy (BEIS) produces a

¹ [UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019](#)

breakdown of carbon dioxide emissions by Local Authority area as a subset of its annual inventory of greenhouse gas emissions. The nationally available data sets begin in 2005 and, at the time of this Strategy's production, the latest data set was for 2019. Emissions from aviation, shipping and military transport are excluded from this data set as there is no obvious basis for allocation to local areas. For the purpose of this Strategy and to aid comparisons and consistency in measurement and decision-making, the BEIS data is being used as the core source of emission data for the county.

Other sources of emission data include the Tyndall Centre and the Anthesis ScatterCities modelling tool.

Strategic Vision and Priorities

The strategic Vision for net zero, including common priorities, is presented in the following section, split by five key themes:

- Local Authority Estate, Operations and Services
- Strengthening the Low Carbon Economy
- Decarbonising Derbyshire's Housing
- Sustainable Transport, Travel and Infrastructure
- Waste and Resources.

Local Authority Estate, Operations and Services

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Derbyshire's county, district and borough councils will become net-zero carbon organisations that lead by example in implementing and promoting sustainable and low carbon practices in their ways of working and service delivery. This will include ensuring carbon reduction is embedded as a core part of decision-making and commissioning, and improving the energy and carbon efficiency of council buildings, land and fleet, as well as in all of the services that the councils deliver on behalf of Derbyshire's residents. All council employees and suppliers will understand the importance of reducing emissions, and their role in achieving these reductions.

Priorities

Individual councils across Derbyshire are producing and delivering their own climate change strategies and action plans to reduce their own operational emissions to net zero. This Strategy does not intend to replace these individual council-level strategies and action plans, but instead seeks to complement them and identify common priority themes where a collaborative approach can be taken to reduce council-level emissions. These themes include:

- **Training** – the development and delivery of consistent climate change training materials and messaging relevant to all councils in Derbyshire.
- **Procurement** – working together to develop and embed an approach to sustainable procurement to ensure environmental and social sustainability is embedded within all contracting and procurement activities.
- **Renewable and low carbon energy** – collaborative research into opportunities and locations for the installation of renewable energy generation technologies (e.g. solar) on council-owned buildings and land.

- **Planning** – working together to develop appropriate guidance, policy and frameworks to ensure that planning measures for net zero buildings are integrated into Local Plans and wider planning activities.
- **Fleet** – working together to facilitate low-carbon vehicle fleets across all Councils, including cars, vans and larger vehicles, and the infrastructure to support this.
- **Funding** – working together to identify and secure funding (such as from central government) for climate change and low carbon projects and initiatives.

Strengthening the Low Carbon Economy

Vision

There will be an acceleration in the transition to a zero carbon economy through low carbon recovery and good growth, the creation of more and better jobs in the low carbon and clean technology sectors, increased skill levels and the fostering of innovation within the county, and a reduction in energy consumption from all industrial and commercial sectors. The natural resources of the county will be rapidly used to expand renewable energy generation across the county.

Priorities

Derbyshire councils will work together and with partners, citizens, businesses and communities to:

- Reduce manufacturing and construction emissions through energy efficiency improvements and expansion of new technologies, and promotion of fuel switching.
- Promote net zero commercial and industrial building developments and retrofitting activities.
- Support the adoption of large-scale and small-scale renewable energy generation in suitable locations.
- Support the adoption of low carbon technologies for space and water heating.
- Promote net zero and sustainable planning policies and practices in all planning activities.
- Promote the use of LED lighting and energy efficient machinery and technology.
- Foster innovation through the promotion of green sector businesses, and identifying, highlighting and signposting areas of green innovation.
- Support academic and training institutions in the development and implementation of relevant training courses.
- Promote and create skilled green jobs in Derbyshire to help reach net zero emissions and enable our local economy to grow and flourish.

Decarbonising Derbyshire's Housing

Vision

Through working with partners and external stakeholder groups, low and zero carbon homes will be created that reduce emissions but also provide economic and wellbeing benefits for our residents. This will be achieved through insulating homes, installing more efficient heating systems, reducing energy consumption, and facilitating behaviour change through the provision of support and information. There will also be support for the growth in green jobs to install these measures, and the councils will play their role in the expansion of small-scale renewable energy generation in the domestic sector.

Priorities

Derbyshire councils will work together and with partners, citizens, businesses and communities to:

- Improve the EPC rating of homes, so that all owner occupier domestic properties are EPC rating C, or better, by 2035.
- Promote the use of LED lighting and energy efficient white goods and electrical items.
- Work to ensure all new houses are net zero through planning policy and guidance.
- Work to accelerate the retrofitting of homes across the county.
- Support the adoption of low carbon heating technologies.
- Support the adoption of micro-energy generation on homes, such as solar photovoltaics (PV).
- Support households in changing behaviours that lead to a reduction in energy and water use through information provision and tailored support and advice.
- Support and help to address supply challenges and skills shortages in the sector.

Sustainable Transport, Travel and Infrastructure

Vision

Working with partners and external stakeholder groups, the councils will deliver an ambitious low-carbon integrated transport system across the county that meets the needs of residents in accessing the places they work, live and socialise as well as improving air quality and delivering health and wellbeing benefits for Derbyshire's residents. Derbyshire's flexible, accessible, affordable and integrated transport system will enable everyone to make their journeys through active travel (walking and cycling), public transport or zero or low carbon private vehicles.

Priorities

Derbyshire councils will work together and with partners, citizens, businesses and communities to:

- Accelerate the shift to electric vehicles through improving charging point infrastructure and promoting the uptake in these vehicles.
- Reduce the modal share of cars, vans and motorbikes in travel.
- Support the uptake of low and zero carbon transport for personal and business purposes.
- Improve public transport services and infrastructure and increase its modal share.
- Increase the modal share of active transport (walking and cycling).
- Promote the use of zero carbon fuel sources for transport.
- Decrease the distance travelled by road freight where possible and promote the use of more efficient vehicles.

Waste and Resources

Vision

Derbyshire will have a more sustainable and circular economy-based system of resource management, where the councils place high value on our natural resources, whilst seeking to reduce our consumption and generation of resource and waste. The councils will encourage and work with others to establish innovative approaches to waste diversion, reuse and recycling.

Priorities

Derbyshire councils will work together and with partners, citizens, businesses and communities to:

- Reduce the amount of household and commercial waste, particularly packaging and food waste.
- Divert more waste from landfill.
- Increase levels of reuse and recycling across the county.
- Collaborate in moving towards the circular economy.

Carbon Offsetting and Sequestration

Despite all efforts across Derbyshire to reduce emissions, it is anticipated there may be remaining residual emissions to be offset in order for Derbyshire to be a net zero county by 2050.

The councils will work with partners and wider stakeholders to maximise offsetting activities, for example, through carbon sequestration techniques as a short-term solution whilst we continue to seek and prioritise decarbonisation opportunities.

Carbon sequestration reduces atmospheric levels of CO₂ by capturing the gas and storing it so helping to limit climate change. CO₂ can either be removed from the atmosphere using natural processes, or captured where it is created (e.g. in power plants or industrial processes) and then stored, for instance, underground. This is known as Carbon Capture, Utilisation and Storage (CCUS).

In 2019, Derbyshire's woodlands and other vegetation absorbed 0.13 million tonnes of CO₂², which is a small amount when compared to annual emissions across the county of 7.2 million tonnes of CO₂ in the same year. In order to increase the amount of CO₂ absorbed by woodlands and other vegetation in Derbyshire, the councils will:

- Work with partners and wider stakeholder groups to increase tree cover across the county and restore peatlands and grasslands.
- Promote a reduction in grazed grassland and increased areas of natural grassland sustainable arable farming.
- Promote the adoption of farming practices which increase carbon sequestration by plants and soil and lead to fewer negative environmental impacts.
- Promote and facilitate an increase in green spaces and tree coverage in urban areas.

Derbyshire's county, district and borough councils are currently working together to develop a natural capital and biodiversity strategy for Derbyshire. This project will take a close look at Derbyshire's natural assets – such as soil, minerals, air, water and biodiversity – assess what resources Derbyshire needs more of, where existing resources can be enhanced, and the measures needed to replace natural resources when they are used. This will identify the priority areas for the protection, restoration, and enhancement of our natural assets.

Large scale CCUS processes are relatively new technologies which may become increasingly viable options for Derbyshire in the future. The councils will continue to work with partners and wider stakeholders to monitor and further explore improvements and

² [UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019](#)

expansion of CCUS technologies to understand how these options could be deployed at scale.

Communication and Engagement

Derbyshire's councils cannot reduce Derbyshire's emissions to net zero alone. This can only be achieved through coordinated and concerted effort from everyone – residents, businesses, academic, public, community and voluntary sectors.

Derbyshire councils want to want to work with everyone in the county to:

- Establish a mutual understanding of climate change and the risks that it poses too Derbyshire.
- Establish a shared understanding of what could, and should, be done in Derbyshire to tackle climate change.
- Give all individuals and groups the opportunity to shape how this challenge is addressed and play their part in reducing emissions.

The way that the councils will engage and work with others will vary depending on the nature, scale and type of projects. For example, collective efforts between councils to decarbonise council buildings is unlikely to require a significant level of communication and involvement with wider groups and individuals, whereas projects relating to decarbonising homes across the county will require engagement across a wide number of groups and in various formats and levels of detail.

The councils will ensure communication and engagement is meaningful and leads to outcomes and results. Effective engagement will also help to ensure communities benefit from actions taken to reduce emissions and make sure that the action taken to reduce emissions do not bring about inequalities or significantly increased costs for Derbyshire's residents.

Monitoring, Reviewing and Reporting

To deliver this Strategy effectively, the councils will need to monitor progress of the county in reducing emissions, as well as progress on delivering actions to contribute towards achieving the Visions and Priorities set out in this document.

During this Strategy period the councils will collaborate, on an annual basis, to:

- Track annual BEIS emissions data for the county to understand the level of progress being made in reducing Derbyshire's emissions.
- Undertake a gap analysis of ambition versus action in terms of emissions reduction and collaborative climate change action.
- Publish a summary update on progress on reducing emissions across Derbyshire, and progress against Strategy's Visions and Priorities.

This will ensure progress is being made and any necessary early interventions to address under performance are identified and implemented. This annual review will also take account of any policy, technological, economic and cultural developments and how they might influence and affect delivery and priorities.

The supporting action plan will be reviewed and updated on a regular basis to ensure that the councils are continuing to develop the appropriate climate actions necessary to achieve our net zero targets in collaboration with other partners, stakeholders, and community members, and to respond to future technological and policy developments.

CONTROLLED

The councils will also continue to explore the wider co-benefits of climate action e.g. air quality improvements, improved health and wellbeing, biodiversity net gain, and social value. This will help to identify and communicate the benefits of climate action beyond emissions reductions.

Action Plan – a separate document

Appendix 1: Total annual greenhouse gas emissions for Derbyshire for 2019³.Carbon dioxide emissions for 2019 (in ktCO₂)

<i>Borough</i>	<i>Industry Total</i>	<i>Commercial Total</i>	<i>Public Sector Total</i>	<i>Domestic Total</i>	<i>Transport Total</i>	<i>LULUCF Net Emissions</i>	<i>Grand Total</i>	<i>Population</i>	<i>Per Capita Emissions (t)</i>	<i>Area</i>	<i>Emissions per km² (kt)</i>
<i>Amber Valley</i>	157.3	61.1	24.5	209.3	223.2	-12.5	662.9	128.1	5.2	265.4	2.5
<i>Bolsover</i>	461.6	33.5	13.1	157.4	327.5	-10.2	982.9	80.6	12.2	160.3	6.1
<i>Chesterfield</i>	54.5	52.2	27.9	170.7	145.0	-5.3	444.9	104.9	4.2	66.0	6.7
<i>Derbyshire Dales</i>	141.5	34.7	12.2	127.3	227.2	-42.3	500.7	72.3	6.9	795.3	0.6
<i>Erewash</i>	71.6	26.7	21.6	170.7	232.7	-4.0	519.4	115.4	4.5	109.6	4.7
<i>High Peak</i>	2,580.0	64.8	19.7	149.0	159.4	-19.4	2,953.4	92.7	31.9	540.3	5.5
<i>North East Derbyshire</i>	73.3	32.4	10.1	170.3	234.0	-21.0	499.1	101.5	4.9	275.6	1.8
<i>South Derbyshire</i>	126.6	44.3	11.7	163.3	327.1	-12.5	660.5	107.3	6.2	338.1	2.0
<i>Derbyshire (total)</i>	3,666.5	349.7	140.8	1,317.9	1,876.1	-127.1	7,223.9	802.7	9.0	2,550.8	2.8

³ [UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019](#)