

# Climate Change Strategy 2022-2024



## Foreword

As the Portfolio Holder for Climate Change, I am pleased to present this Climate Change Strategy on behalf of Chorley Council which will drive forward our work to deliver net zero for the Borough. For many years, our teams have delivered projects and services which have positively contributed to the mitigation of climate change.

We have improved the biodiversity in our green spaces with our wildflower meadows, differential mowing of our verges, the annual management of our large meadows and the inclusion of bird boxes, bat boxes and hibernacula and wildlife only spaces. We have also improved the quality of our wetlands across the Borough with new pond creation, existing pond improvements and a new reed beds in Astley Park and Yarrow Meadows to clean up the water which flows into the River Yarrow. Our woodlands been proactively managed to eradicate non-native species and to enhance the age and variety of trees found within them.

Chorley Council has a proven track record of working in collaboration with stakeholders, partners, funding bodies, customers, and parish councils. We have delivered schemes to provide natural flood management working with the Environment Agency, on the river Yarrow to 'slow the flow' of river water providing resilience upstream. We have also delivered projects to promote sustainable energy and we have taken steps to drive up the levels of recycling we achieve as a borough. In 2019 we committed to significantly increasing our tree cover and we embarked on a tree planting programme involving our communities which will deliver a tree for every resident of our borough by 2025.

This strategy brings all of this work together and sets out our ambitious vision, priorities and action plan which will help us all to achieve a greener, carbon neutral Chorley which is well placed to meet the needs of our future generations. Our comprehensive programme of activity will deliver real, tangible change such as converting our Council vehicles to electric powered, decarbonisation of our buildings, requiring our suppliers to demonstrate their goods and services are carbon neutral, and also investing in the improvement of our canal towpaths and enabling improvements in cycle provision and bus stops.

There are things we can deliver as a Council and there are many, we will need your help with, from all walks of life- our local residents, our partners, our young people, and our businesses. Climate Change affects us all and together we can make a contribution and protect our Chorley for future generations.



*Adrian Lowe*

**Councillor Adrian Lowe,**

**Executive Member for Customer, Streetscene and Environment**

## **The Council's Vision for The Future**

### **Our goal as a Council is for the borough to be net zero by 2030**

In 2019 Chorley Council declared a climate emergency and set the ambitious target of becoming net zero by 2030.

This strategy sets out Chorley Councils vision for the future as a net zero carbon borough and our priorities and programme for action the period January 2022 to December 2024 to achieve that goal.

We must all act now to ensure we are able to cope with and recover from the physical risks that are happening as a result of changes in the climate. These include floods, droughts and heatwaves as well as rises in global temperatures and sea level rise and take steps to reduce the carbon we produce.

### **What is Net Zero?**

Being a net zero borough means that there will be a flat balance between the amount of carbon emitted into the atmosphere and the amount of carbon removed. This needs a joined up effort from across a number of areas of our lives and the businesses we have in our borough and include transport, energy, and waste.

There are also many ways we can use nature to deliver carbon reductions and also build, our resilience to changes in the environment, such as natural flood defences and promoting biodiversity to thrive.

### **What is Our Carbon Footprint in Chorley?**

Carbon footprints have been calculated for both the Council assets and the borough as a whole (for further information, a detailed report of the carbon footprint for the Council and the Borough 2019 has been published on our website).

The carbon footprint baseline for Council assets has been classified as the year 2019. This year was used as opposed to 2020 because of the significant changes in behaviour and lifestyle, including reductions in personal travel, working from home and leisure observed during 2020 because of the COVID-19 pandemic.

The Council's total emissions for 2019 was 1568.03 tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent emissions), of which the largest contributor was the Council's use of mains gas.

The emissions of Chorley Borough are provided by The Department for Business, Energy and Industrial Strategy (BEIS) and we have detailed data records which date back to 2005, however the 2020 data has still been omitted as only provisional data has been published for that year. The borough's total emissions for 2019 was 651900 tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent emissions), of which the largest contributor was transport.

We will track our progress towards the goal of net zero by 2030 on an annual basis both as a Council and as a Borough.

Changes in total emissions and emission type will show the success of previous decarbonisation efforts and inform decisions of future actions which must be taken to meet the Council net zero goal.

### **Policy Context**

The Climate Change Act 2008 introduced the UK's first legally binding target to reduce Greenhouse Gas emissions by 2050 to at least 80% of levels in 1990. Progress has been made between 1990 and 2017 with the UK reducing its emissions by 42% whilst the economy has grown by more than two thirds.

Government has recognised the need to go further and on 27 June 2019, the UK government amended the Climate Change Act to set a legally binding target to achieve net zero Greenhouse Gas emissions from across the UK economy by 2050.

Climate change has dominated the headlines in recent times and there has been a notable shift in public concern over the environment, accelerated by the COP26 hosted by Glasgow in October 2021. The establishment of impartial committees such as the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) and the UK's Committee on Climate Change (CCC) play a key role in publishing data on Climate Change and the environmental impacts and the forecast for carbon budget expenditure and progress against national and global targets and commitments,

The Council's Climate Change Programme is supported nationally through different legislation and national strategies including:

- A Green Future: Our 25 Year Plan to Improve the Environment
- The Clean Growth Strategy
- The Clean Air Strategy
- The Ten Point Plan for a Green Industrial Revolution
- Net Zero Strategy: Build Back Greener
- The Environment Act 2021

Following the UK's re-emergence from the coronavirus (covid-19) lockdowns, the government has published new policies to not only Build Back Better but also to Build Back Greener for the economy and the environment. The Environment Act 2021 which received Royal Assent on the 9<sup>th</sup> November 2021, introduces new legally binding targets, many of which will come through secondary legislation to follow in due course. The Act is expected to be enforced through within the next 2-5 years.

Our Climate Change Strategy fully takes account of the emerging national policy and legal context.

### **Timescales**

This Chorley Climate Change Strategy covers the period 2022-2024. It is accompanied by an action plan which contains short, medium and longer term actions, and it will be reviewed bi-annually to ensure the aim of the strategy and its actions are compliant with changes in national and international agreements/legislation in this area.

### **Links to other strategies and plans**

This strategy is aligned with a number of other strategies and plans not least the Chorley Council Corporate Strategy which includes the following objectives;

- Involving residents in improving their local area
- equality of access for all
- A strong local economy
- Clean, safe, and healthy homes and communities
- An ambitious Council that does more to meet the needs of residents and the local area.

There are also links to others which include the Chorley Local Plan (2015), the Central Lancashire Core Strategy (2012), The Chorley Clean Air Strategy (2022), Emergency Tree Action Plan (2021) and the Douglas Catchment Partnership Management Plan (2019)

## **Our Strategic Objectives for Climate Change**

Radical changes are needed to address climate change and Chorley Council recognise that we are facing two unprecedented challenges:

- we must dramatically reduce our carbon emissions
- we must prepare for unavoidable environmental impacts by building climate resilience into our systems and services.

As a Council we directly emit a small percentage of the UK's carbon emissions, but we influence around 40% of emissions through our roles as community leaders and via the services we deliver such as planning, streetscene services and waste collection. We are working with partners including Lancashire County Council and local community groups and businesses to progress the goals and aims of the Climate Change Programme.

## **Strategic Objectives for Climate Change**

There are five strategic objectives for climate change which shape our priorities and actions as a Council to deliver our goal for net zero.

	<b>Summary</b>
<b>Climate Change Objective 1</b>	To understand the carbon footprint of both the Council's activities and the Borough as a whole, now and in the future, so we can develop robust plans and track our progress
<b>Climate Change Objective 2</b>	To dramatically reduce our carbon emissions as a Council and be an ambassador for change.
<b>Climate Change Objective 3</b>	Work with our residents, partners, and local businesses to influence behaviour and deliver local projects to drive down the carbon footprint of our Borough.
<b>Climate Change Objective 4</b>	To significantly increase the tree coverage across the borough and promote nature recovery
<b>Climate Change Objective 5</b>	Enable Chorley to be climate resilient and better equipped to cope with changes in the natural environment including extreme weather events

Our five Strategic Objectives for Climate Change provide an overarching framework for our priorities for actions and guide what we plan to deliver to achieve our goal of a net zero borough. Everything we do falls within a number of identified themes which are inter linked.

## **Priorities**

The Council has identified 9 nine priorities for action to tackle climate change and under each of these, we have a number of projects or activities which will all help us to deliver our strategic objectives for climate change and the end goal to be a net zero borough.

These are cross cutting priorities which include a programme of activity across a broad range of themes including the environment, air quality and nature recovery, transport, waste and recycling, policy, behaviour change and the built environment.

Below is an overview of each of our priorities.

### **Priority One Embed climate change in everything the Councils does from policy to decision making**

Chorley Council is committed to understanding and assessing the impacts for climate change in every decision we take and that for all of our activities, from development to waste collection and to our events, we maximise opportunities to reduce the carbon footprint.

### **Priority Two Deliver the decarbonisation of Council owned assets and improve the sustainability of the Councils fleet**

It is crucial that as a community leader and asset manager of a portfolio of buildings and areas of land across the borough, we are an exemplar for the greening of our buildings and the vehicles we use, ensuring our open spaces and natural habitats are managed to promote nature recovery and biodiversity.

### **Priority Three Develop robust planning policies to deliver adaption and mitigation**

The future of our built environment is shaped by our planning policies, from the location of future growth to the design, materials and impact assessments and more than ever, these policies will enable us to future proof development creating spaces which enhance nature and add resilience to the environment.

The National planning policy Framework (NPPF) sets out the process for decision making and plan-making and we must comply with this when preparing our local policies and making decisions about planning applications. Our current policies are included within the Central Lancashire Core Strategy (2012) and the Chorley Local Plan (2015). Work is well underway to produce a new Central Lancashire Local Plan for 2023-2038. This will be a single plan for Central Lancashire which will seek to ensure that all future development is:

- Sustainable
- Benefits nature and our biodiversity
- Carbon neutral (or delivers equivalent in carbon off-setting)
- Promotes new forms of energy for heating homes and for transport
- Does not worsen our air quality
- Reduces the need to travel by private car and promotes active travel and also our health and wellbeing
- Ensure new developments are well designed and 'future proofed'

Through the development of this plan, we will have a suite of policies which help us mitigate and to adapt to changes which are already happening and cannot be reversed, such as rising sea levels and changes in extreme weather events.

**Priority Four Provide safe spaces for walking and cycling, promote sustainable public transport and greener private and commercial vehicles.**

The largest sector of fossil fuel use and carbon emission is transport. Vehicles emit gases and substances which not only have a considerable greenhouse gas effect, but also impact on human health and wellbeing. These air pollutants include nitrogen oxides, particulate matter, and methane.

Sustainable transport options include private motor cars which are electric or hybrid but also includes sustainable public transport as well as more active modes such as cycling or walking. By enabling the change to alternative modes of transport including enabling and or provision of infrastructure for electric vehicle charging, buses, trains, cycling, and walking, coupled with communications to raise awareness and promote behaviour change, we can relieve traffic congestion and reduce air pollution and bring added benefits to physical health and wellbeing.

**Priority Five Work with housing providers, landlords, developers, and businesses to promote and encourage energy efficiency and decarbonisation of buildings.**

The heating of private homes produces a significant amount of carbon emissions and many of our older properties are inefficient to heat which can impact on health, particularly in the colder months and cause fuel poverty. We need to find ways to bring our existing homes up to a standard of energy efficiency including delivery of a programme of switching to more sustainable methods of energy such as air source heat pumps and away from gas or oil, improving the insulation of our homes to prevent heat loss and encouraging higher sustainable standards in new homes such as BREEM.

**Priority Six Promote low carbon incentives and enable access to government funding within the borough for low carbon technology.**

There are increasingly more opportunities for grant funding for Councils to access to deliver decarbonisation of homes, business, and transport and its vital the Council maximises these opportunities in what is a growing an emerging sector.

**Priority Seven Improve the Borough's recycling rates and work with partners, residents, businesses, schools, community groups and internally to reduce the volume of landfill waste produced in the borough**

Reducing waste is an important factor with regard to climate change and sustainability and promoting the ideals of a circular economy. The advantages of recycling and reuse compared to producing new materials and objects from natural resources can result in lower demand for virgin material meaning fewer quarries and mines are needed to extract finite reserves of metal ores, and less energy is needed for recycling resulting in a reduction of GHG emissions, and the amount of waste that is disposed of to landfill is minimised.

Recycling is easy and has a huge impact in the fight against climate change:

- Recycling 1 tonne of paper saves 19 trees from being cut down, which helps capture carbon dioxide.
- Aluminium can be recycled repeatedly, saving around 95% of the GHG emissions compared to extraction.

- Recycling in the UK saves around 18 million tonnes of CO2 a year, which is the same as almost 17 million of us switching from petrol to electric cars.

The new Resources and Waste Strategy for England has set a much higher national recycling rate of 65% and Chorley Council provides a waste and recycling collection service to 53,000 households with a recycling rate of 46.6% and we know we can do better together.

**Priority Eight Influence behaviour change by sharing knowledge, best practice and promoting debate around climate change across all groups and ages.**

Human behaviour is a significant contributor to climate change and we need to win the hearts and minds of our residents, businesses and visitors to encourage more sustainable ways to go about our daily lives which cumulatively will drive down carbon emissions and have the biggest impact.

Effective communication between the Council and our local residents, businesses and other organisations is essential to raise awareness and share ideas for change, which can be big or small.

We have a variety of communication channels available to us that allow us to reach different audiences with messages about climate action, which maximise the use of digital channels and social media platforms as well as physical events such as youth debate events and business summits.

Regular communication has provided opportunities to inform residents of the Council's ongoing climate change initiatives, to gather residents' feedback (e.g. through public consultations), to get residents involved and share tips and advice regarding sustainability.

**Priority Nine Deliver investment and improvements in the natural environment including waterways, areas of open space, natural habitats to deliver an increase in the biodiversity of Chorley.**

Chorley is a semi-rural Borough with a wealth of habitats from public parks to waterways and the highest % of ancient woodland in Lancashire. For future generations to be able to enjoy the benefits of wild animals and plants, we must safeguard their habitats and the natural environment as a whole. The environment provides for our educational, recreational, mental wellbeing and cultural activities as well as material needs such as water, fuel, air, and food. Nature and biodiversity have become a major focus of attention for all sectors of our community. As trends in data show a reduction in the diversity of our species and loss of natural habitats, rising temperatures and sea levels, and carbon emission levels, a joined-up effort is required to take steps now to protect and nurture the natural environment.

Chorley Council have a track record of working with our partners such as the Environment Agency, Lancashire Wildlife Trust, the Canal and River Trust and United Utilities to deliver environmental projects which include; the creation of wildlife areas in many of our parks and open spaces, the establishment of mini meadows and wildlife corridors along our roads, the creation of a tree nursery and the planting of sapling trees, the creation of ponds for great crested newts and new wetland areas, achieving green flag status for seven of our parks and the management of nature reserves across the Borough.

The Council will continue to co-ordinate action to conserve, manage, and enhance Chorley's wildlife and habitats ensuring an increase in the quality of biodiversity.

Chorley Council works towards creating an inclusive community between the Council, partners, and the residents of the borough.

Effects of climate change are expected to impact all of Chorley's residents in different aspects of life and it is essential that the residents are factored into, considered, and involved during decision making and supported where necessary. Work with the community regarding the natural environment is already taking place within the Council. Work has included; community education regarding climate change, support regarding environmental action, free community use of litter pickers and equipment and includes free collection of waste, community clean up days, environmental community grant scheme, providing grant and support to businesses which are working towards becoming more sustainable and ecological, and a school uniform swap scheme.

The residents of Chorley have shown passion and commitment to helping the mitigation of climate change effects and supporting nature and biodiversity of the borough. The Council is committed to ensuring the protection and enhancement of the borough's natural environment. This enhancement, however, is not an offsetting measure for the borough's carbon emissions.

With community support and community engagement it will further the joint goals of a healthy and sustainable environment and community. A great example of this collaborative approach to tackling climate change is the borough's tree planting programme. The Council committed to planting 116,875 trees in 2019 and the Local Community have embraced the opportunity to help grow saplings and participate in tree giveaways, a programme which is estimated to capture approximately 38,000 tonnes of CO<sub>2</sub> over the next 100 years as well as promoting biodiversity and visual benefits to our places.

## Action Plan

This Climate Change Strategy Action Plan sets out the programme of activity which is a mix of schemes delivered across the Council with many supported by our partners and involving engagement with our residents, schools, voluntary organisations, and businesses.

Chorley Council cannot deliver our vision and priorities alone and we need the support of our residents, businesses, partners, and visitors to help us to make Chorley a greener, cleaner, and more sustainable place to live, work and relax.

All of our actions fall within our nine identified priorities and will contribute to at least one of our Strategic Objectives for climate change and ultimately, our vision of a net zero borough.

## How We Will Monitor our Performance

Performance against the actions within this strategy will be reported to the Climate Change Working Group each quarter and also as part of general service performance reporting to Executive Cabinet and the Executive Member for Climate Change.

## Climate Change Strategy Action Plan 2022/2024

Priority	Action	Lead	Completion Date
Embed climate change in everything the Councils does from policy to decision making	Refresh the Corporate Integrated Impact Assessment to ensure robust and transparent evaluation of environmental implications of new policies, strategies, and services.	Performance and Partnerships,	Dec 2024
	Objectives and measures to mitigate climate change where feasible are included in any new and refreshed Council policy including the Corporate Strategy	Performance and Partnerships,	Annually
	Explore ways to introduce mechanisms to introduce into the procurement process the evaluation and assessment of environmental impact	Procurement	Dec 2024
Deliver the decarbonisation of Council owned assets and improve the sustainability of the Councils fleet	Develop a plan to progress the Councils conversion to electric vehicles	Streetscene, Spatial Planning (Climate Change Team)	Dec 2024
	Undertake an annual carbon footprint audit of the Council and report progress	Spatial Planning (Climate Change Team)	Annually
	Develop and implement a Sustainable Policy for Council Buildings to ensure that all future development the Council undertakes meets sustainability and net zero targets and there is a clear action plan for existing buildings to be decarbonised.	Spatial Planning (Climate Change Team) Property Services Commercial Services	March 2023
	Complete and evaluate the trial use of HVO fuel to determine its safety and carbon saving throughout the fleet	Streetscene	Dec 2022
	Complete the programme replacement of spent bulbs with energy efficient LED lights where feasible across all council assets	Property Services	Dec 2024
	Develop a roadmap for Council asset retrofitting and decarbonisation work. Feasibility studies will provide cost estimations, priorities, and carbon savings	Spatial Planning (Climate Change Team) Property Services	March 2024
Develop robust planning policies to deliver adaption and mitigation	Develop & adopt Local Plan policies for climate change including flood risk & sustainable drainage, biodiversity net gain, green and blue infrastructure, open space, clean energy, and sustainable transport.	Spatial Planning (supported by Climate Change Team)	Dec 2023
	Support local communities in the preparation of Neighbourhood Plans and incorporation of policies for Climate Change	Spatial Planning (Supported by Climate Change Team)	Dec 2024

Provide safe spaces for walking and cycling, promote sustainable public transport and greener private and commercial vehicles.	Produce an Infrastructure Delivery Plan which includes new schemes for cycling, walking and improved public transport	Spatial Planning	Dec 2023
	Deliver the recommendations of the Sustainable Public Transport Overview and Scrutiny Task Group	Spatial Planning	Dec 2022
	In Partnership with LCC, develop a Highways and Transport Masterplan for Central Lancashire include a stand- alone Transport Strategy for Chorley to support delivery of the new Local Plan.	Spatial Planning	Dec 2023
	Produce an Options Paper of sustainable transport initiatives for the town centre such as electric bike schemes, park and ride schemes, car sharing schemes and enhancement of public transport.	Spatial Planning	March 2024
	Complete an assessment of the feasibility and demand for electric vehicle charge points within the borough, including community facilities and land owned not only by the Council and produce a report with options and recommendations.	Spatial Planning (Climate Change Team) Property Services Commercial Services	March 2023
	Investigate the feasibility and business case for the Council to establish a service to offer HVO fuel for residents to use in own private vehicles, include safety, financial, legal and demand	Spatial Planning (Climate Change Team)	Dec 2022
	Investigate the feasibility, benefits, and costs of delivery of green bus stops	Spatial Planning (Climate Change Team and Open Space Strategy)	Dec 2022
	Working with the Canal and Rivers Trust develop a programme of potential investment in the network in Chorley	Spatial Planning (Climate Change Team and Open Space Strategy)	Aug 2022
	Develop and publish an EV Infrastructure Strategy to include specific actions relating to EV charging and relevant policies	Spatial Planning (Climate Change Team) Commercial Services	March 2024
	Evaluate existing provision of cycle storage within the town centre and Astley park and develop a programme to increase capacity	Spatial Planning (Climate Change Team) Commercial Services	March 2023
	Undertake a survey about Cycling in Chorley to inform future investment	Spatial Planning (Climate Change Team)	December 2022

Work with housing providers, landlords, developers, and businesses to promote and encourage energy efficiency and decarbonisation of buildings.	Using existing channels such as the Developers Forum and RP Framework, cascade and promote new policy such as Future Homes Standard and showcase best practices of high-quality low carbon opportunities.	Spatial Planning (Climate Change Team)	Dec 2023
	Support residents to make their properties more energy efficient and affordably warm including practical help and advice	Communities Spatial Planning (Climate Change Team)	Dec 2023
	Promote opportunities in access to grant funding for low carbon heating and energy	Communities Spatial Planning (Climate Change Team)	Dec 2023
	Produce an options paper to explore all current and emerging low carbon technology, potential energy savings, costings, limitations, and identify options for the Council.	Spatial Planning (Climate Change Team)	Dec 2022
Promote low carbon incentives and enable access to government funding within the borough for low carbon technology	Lobby National Government in writing to ensure low carbon energy, EV charging points and increased insulation is available for everyone within housing developments. Enabling powers through planning and the white paper.	Spatial Planning (Climate Change Team)	July 2022
	Investigate the feasibility of small scale renewable energy installation programs to home owners across the borough for potential discounts and support to homeowners	Spatial Planning (Climate Change Team)	March 2023
Improve the Borough's recycling rates and work with partners, residents, businesses, schools, community groups and internally to reduce the volume of	Publish a waste and recycling strategy for Chorley & South Ribble which will guide the Council towards the UK recycling target of 65%	Waste Services Streetscene	Dec 2022
	Increase the number of recycling bins in public spaces based off demand and ensure it is recycled effectively	Waste Services Streetscene	Apr 2023
	Determine the use of single use plastics within Council assets and level of waste generated to identify potential areas of improvement to limit plastic waste in the borough	Waste Services Streetscene	Dec 2022
	Maximise the reuse and recovery of household bulky waste by investigating the donation of white goods and furniture	Waste Services Streetscene	Oct 2022

	Support community groups to coordinate an annual school uniform swap schemes for local families	Spatial Planning (Climate Change Team)	Aug 2022 Aug 2023
	Investigate feasibility and potential uptake of reuse schemes including keep cup and podback	Spatial Planning (Climate Change Team) Waste Services	December 2023
Influence behaviour change by sharing knowledge, best practice and promoting debate around climate change across all groups and ages.	Undertake a baseline audit of the current CO2 emissions from our waste collections fleet and compile recommendations to lower footprint Produce and publish an annual carbon audit of the borough to highlight areas of improvement within the borough	<del>Waste Services Streetscene</del> Spatial Planning (Climate Change Team)	April 2022 Annually
	Develop a communications plan to deliver to promote behavioral change, and climate change work and events including dissemination of this strategy and the actions within it. Draft and publish Climate Change Engagement Strategy with specific actions relating to community events, support and advice	Spatial Planning (Climate Change Team) Communications	April 2023
	Develop an online 'Climate Change Handbook'. A collection of information for sustainability, detailing organisations and local businesses who can support climate change initiatives, recycling, and decarbonisation initiatives	Spatial Planning (Climate Change Team) Communications Business Engagement Team	July 2022
	Deliver staff and Elected member training sessions on Climate Change as part of roll out of this strategy.	Spatial Planning (Climate Change Team)	March 2023
	Coordinate and enable community-based and online events, campaigns, and training opportunities on a number of topics relating to climate change.	Spatial Planning (Climate Change Team) Communications	Dec 2024
	Work with partners such as Inspire Youth Zone and the Schools to develop and deliver a programme of learning for young people on climate change	Spatial Planning (Climate Change Team) Communications	March 2024
	Develop a 'green accreditation' system for Chorley businesses including for buildings, which will be universal for all businesses within the borough. This will be a check list system with an overall rating	Spatial Planning (Climate Change Team) Business Engagement Team	Dec 2022
	Collaborate with local universities for increased research and education within the borough	Spatial Planning (Climate Change Team)	September 2023

<p>Deliver investment and improvements in the natural environment including waterways, areas of open space, natural habitats to deliver an increase in the biodiversity of Chorley.</p>	Deliver the Clean Air Strategy	Communities Spatial Planning Planning Services	Dec 2024
	Continue to source available space for wildflower and wildlife corridors and ensure these spaces are optimised and maintained	Spatial Planning (Open Space Strategy Team)	Dec 2024
	Deliver the Emergency Tree Action Plan including the target to plant 116, 875 165,875 trees by 2025	Spatial Planning (Open Space Strategy Team)	Dec 2024
	Deliver a comprehensive system to record the baseline of canopy tree cover and spatial distribution of the ongoing planting	Spatial Planning (Open Space Strategy Team & Climate Change)	Dec 2022
	Identify opportunities to work with partners to enhance our rivers, improve biodiversity and prevent flood risk	Spatial Planning (Open Space Strategy Team)	July 2023
	Hold tree giveaways twice a year for residents to plant their own trees upto 2025	Spatial Planning (Open Space Strategy Team)	Annually to March 2025

## Climate Change Glossary

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

**Biodiversity** The diversity of life on earth, from genes to species to ecosystems.

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

**Carbon capture and storage** the collection and transport of concentrated carbon dioxide gas from large emission sources, such as power plants. The gases are then injected into deep underground reservoirs. Carbon capture is sometimes referred to as geological sequestration.

**Carbon dioxide (CO<sub>2</sub>)** Carbon dioxide is a gas in the Earth's atmosphere which occurs naturally and is also a by-product of human activities such as burning fossil fuels. It is the principal greenhouse gas produced by human activity.

**Carbon dioxide (CO<sub>2</sub>) equivalent** Six greenhouse gases are limited by the Kyoto Protocol and each has a different global warming potential. The overall warming effect of this cocktail of gases is often expressed in terms of carbon dioxide equivalent - the amount of CO<sub>2</sub> that would cause the same amount of warming.

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

**Carbon neutral** A process where there is no net release of CO<sub>2</sub>. For example, growing biomass takes CO<sub>2</sub> out of the atmosphere, while burning it releases the gas again. The process would be carbon neutral if the amount taken out and the amount released were identical. A company or country can also achieve carbon neutrality by means of carbon offsetting.

**Carbon offsetting** A way of compensating for emissions of CO<sub>2</sub> by participating in, or funding, efforts to take CO<sub>2</sub> out of the atmosphere. Offsetting often involves paying another party, somewhere else, to save emissions equivalent to those produced by your activity.

**Carbon sequestration** the process of storing carbon dioxide. This can happen naturally, as growing trees and plants turn CO<sub>2</sub> into biomass (wood, leaves, and so on). It can also refer to the capture and storage of CO<sub>2</sub> produced by industry.

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

**CO<sub>2</sub>** See carbon dioxide.

**Deforestation** The permanent removal of standing forests that can lead to significant levels of carbon dioxide emissions.

**Fossil fuels** Natural resources, such as coal, oil, and natural gas, containing hydrocarbons. These fuels are formed in the Earth over millions of years and produce carbon dioxide when burnt.

**Global average temperature** The mean surface temperature of the Earth measured from three main sources: satellites, monthly readings from a network of over 3,000 surface temperature observation stations and sea surface temperature measurements taken mainly from the fleet of merchant ships, naval ships and data buoys.

**Global energy budget** the balance between the Earth's incoming and outgoing energy. The current global climate system must adjust to rising greenhouse gas levels and, in the very long term, the Earth must get rid of energy at the same rate at which it receives energy from the sun.

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

trend continues upwards, they suggest, even though the warmest year on record, according to the UK's Met Office, is 1998.

**Global warming** the observed increase in average temperature near the Earth's surface and in the lowest layer of the atmosphere. In common usage, "global warming" often refers to the warming that has occurred as a result of increased emissions of greenhouse gases from human activities. Global warming is a type of climate change; it can also lead to other changes in climate conditions, such as changes in precipitation patterns.

**Green Bus Stops** Green Bus Stops are specifically designed to alleviate the heat intensity and improve the air quality at a bus stop. Features include a layer of plants which act as a shade for the bus stop's roof and will absorb the heat for evapotranspiration, thus reducing the ambient temperature and the amount of heat radiated to commuters. They provide a habitat for many small pollinating creatures and improving biodiversity. They also provide visual amenity and can include solar powered lighting.

**Greenhouse gases** that absorb heat in the atmosphere near the Earth's surface, preventing it from escaping into space. If the atmospheric concentrations of these gases rise, the average temperature of the lower atmosphere will gradually increase, a phenomenon known as the greenhouse effect. Greenhouse gases include, for example, carbon dioxide, water vapor, and methane.

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

**Invasive species** A non-native organism whose introduction within a particular ecosystem causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health.

**IPCC** The Intergovernmental Panel on Climate Change is a scientific body established by the United Nations Environment Programme and the World Meteorological Organization. It reviews and assesses the most recent scientific, technical, and socio-economic work relevant to climate change, but does not carry out its own research.

**Kyoto Protocol** A protocol attached to the UN Framework Convention on Climate Change, which sets legally binding commitments on greenhouse gas emissions.

**Methane** Methane is the second most important man-made greenhouse gas. Sources include both the natural world (wetlands, termites, wildfires) and human activity (agriculture, waste dumps, leaks from coal mining).

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

**Ozone Layer** A colourless gas consisting of three atoms of oxygen, readily reacting with many other substances. Ozone in the upper atmosphere protects the Earth from harmful levels of ultraviolet radiation from the Sun. In the lower atmosphere ozone is an air pollutant with harmful effects on human health.

**Resilience** A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment

**Risk Risks** are threats to life, health and safety, the environment, economic well-being, and other things of value. Risks are often evaluated in terms of how likely they are to occur (probability) and the damages that would result if they did happen (consequences).

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

## Resources

[Chorley Council Carbon Footprint Report 2021](#)

Add link when published

[Chorley Council Clean Air Strategy](#)

<https://democracy.chorley.gov.uk/documents/s122081/Appendix%201%20for%20Clean%20Air%20Strategy.pdf>

The 25-year environment plan

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/693158/25-year-environment-plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf)

[The Clean Growth Strategy Leading the way to a low carbon future](#)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/700496/clean-growth-strategy-correction-april-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf)

[The Clean Air Strategy](#)

<https://www.gov.uk/government/publications/clean-air-strategy-2019/clean-air-strategy-2019-executive-summary>

[The ten point plan for a green industrial revolution](#)

<https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution>

The Intergovernmental Panel on Climate Change (IPCC)  
[Reports — IPCC](#)