



Lancashire County Council Environment and Climate Strategy

2023 – 2025





Our Environment and Climate Strategy will spearhead major reductions in waste and emissions and provide for the recovery of nature in our outstanding county. It signals a clear direction of travel for joint work with public, private, and third-sector leaders to stimulate growth and improve public health.



Foreword



Cllr Shaun Turner

Cabinet Member for
Environment and
Climate Change.

Lancashire County Council has placed protecting our environment as one of its top priorities.

We want a county that is cleaner, healthier, and greener, with natural habitats helping wildlife to thrive, and helping to protect the county from flooding and other impacts of climate change - and in doing so, supporting economic growth, health, and prosperity.

The council has resolved to transition Lancashire's economy away from harmful carbon emissions and to help nature recover. We know this will be difficult, and it will rely on working collaboratively with others. But we have a good track-record of acting to improve our environment.

Over fifty years ago, Lancashire led the way nationally in reclaiming derelict land; and in the early 1990s, the council's work on the Green Audit was celebrated internationally. In recent times we've worked with partners on large scale programmes - tree planting, peatland restoration and home energy efficiency.

We will continue to work innovatively. But we also recognise that we don't have all the answers, and this strategy is a first step in setting out the action being taken by the council now and in the future. It's an important milestone in the process of improving the quality of the environment that we pass on to those who follow us.





Executive Summary

This Environment and Climate Strategy presents a high-level view of how we will deliver our corporate priority to Protect Our Environment.

The focus is on action Lancashire County Council has direct or strong control and influence over - our own estate, services, our policy making and our role as a community leader.

We aim to show how a strategy focused on the environment and climate can contribute to wider strategic objectives. For example, it can create the conditions to align low carbon industries with the skills of our workforce as a driver of economic growth, improved resident health and other priority outcomes for Lancashire and the organisation.

Communication, engagement, and collaboration with partners, communities and our residents will be important in achieving our objectives. Small changes we make as individuals can have an impact and alongside developing our policies and projects we will need to engage and raise awareness to help everyone take the steps needed to make changes to lifestyles and behaviours. Young people have been at the forefront of raising awareness on environment issues and we will engage with them through our schools and local youth councils.



Crook O Lune countryside site

The strategy provides a single point of reference on the council's environment and climate priorities. It gathers the action that is underway or proposed, and organises it under three areas of activity and ten objectives:



Reducing waste and pollution

- Reducing waste and increasing reuse and recycling
- Improving air quality
- Improving water quality



Climate change

- Reducing greenhouse gas emissions to lessen the impacts of climate change
- Ensuring our infrastructure, assets and services are resilient to the impacts of climate change
- Managing flood risk and water resources



Natural and historic environment

- Conserving, restoring and re-establishing habitat quality and species diversity
- Ensuring our residents have access to high quality, natural spaces
- Conserving and enhancing our historic environment and outstanding landscapes
- Using nature-based solutions to tackle climate change



These objectives will inform our action planning. Progress will be monitored through a range of departmental and corporate key performance indicators.



The Lancashire environment

Where are we now?

Lancashire has a strong track-record of taking action on the environment and monitoring change. Four pioneering reports were published in 2021, setting out environmental conditions in the county. The reports found:

The use of landfill continues to decrease but is still the predominant treatment method for waste in Lancashire. The long-term trend has been increasing recycling rates, however rates peaked at 51.6% in 2015/16.

46%

decrease in Lancashire's carbon dioxide (CO₂) emissions since 1990, mainly driven by a large reduction in the amount of coal used for electricity generation. The rate of reduction has levelled in recent years.

Average annual temperatures in the Northwest of England are already around 1.5°C higher in the 21st century compared with the end of the 19th century. At Heysham, recent rates of sea level rise are around 4 mm per year, a faster rate of change than the long term average for the UK¹.

Lancashire has a rich and diverse natural environment; there has been an increase in the number of protected wildlife sites. However, we don't yet know enough about their condition to fully understand their contribution to biodiversity.



Lancashire's current woodland cover is around 5.7%, further work will be needed to work towards the government's ambition of 12% woodland cover by 2050.

88% of Lancashire's surface water bodies were classified as having 'moderate' water quality.

There are nineteen Air Quality Management Areas in Lancashire, designated because of poor air quality caused by vehicle emissions.

Young people from Lancashire recently took part in the North West Net Zero Youth Network to discuss the issues important to them. They highlighted green jobs and growing the green economy, low carbon energy generation, they also want to see good access to green space, improved public transport, and safe cycling routes.

Lancashire carbon dioxide emissions (KtCO₂) 2005 - 2020



Click the links below to read more about:

The state of Lancashire's environment

The impacts of Climate Change

Lancashire's emissions and pathway to net zero

Renewable energy in Lancashire

[lancashire.gov.uk/council/strategies-policies-plans/climate-change](https://www.lancashire.gov.uk/council/strategies-policies-plans/climate-change)



Links to other strategies

Within the context of the council's corporate priorities, this environment and climate strategy complements similar documents on health and education. This strategy is principally focused on the council's corporate priority of 'Protecting Our Environment' together with a number of Cabinet responsibilities, including: -

- **Climate change**
- **Nature recovery, biodiversity and environment strategies**
- **Local air quality management**
- **Waste management and recycling**
- **Flood risk management**
- **Rural affairs including the county council countryside sites and Area of Outstanding Natural Beauty**
- **Public Rights of Way**
- **Planning, archaeology and development control**

This strategy is one of three council strategies covering the economy, environment and climate, and transport. The strategies are linked, and action to deliver our environment and climate objectives may sit in one or more of these strategies.

Whilst the document focuses solely on the council's own activity, it will contribute to and complement the wider joint work of Lancashire's councils by supporting delivery of the eight priorities set out in the sub-regional vision and strategy, 'Lancashire 2050'.

This diagram illustrates how corporate themes and priorities overlap between the three core strategies.

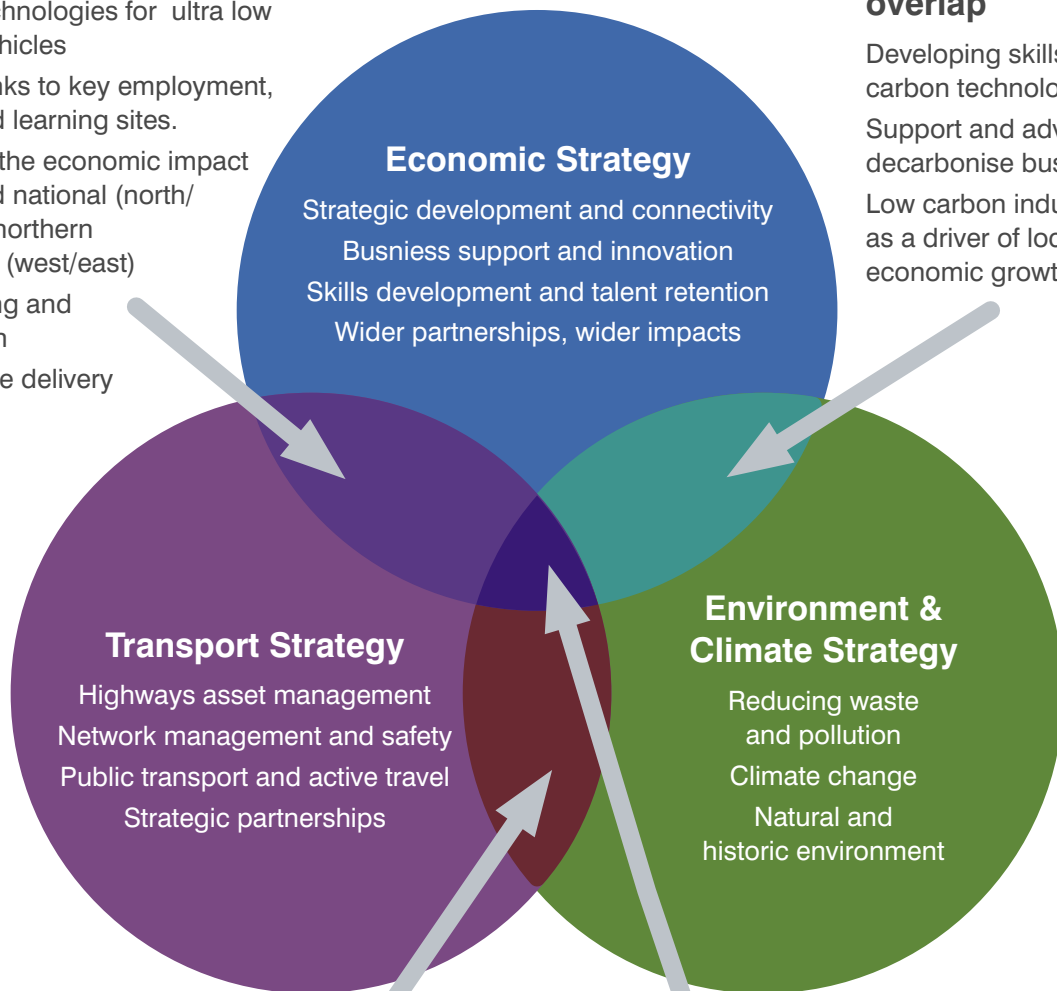


Economy and transport overlap

Growing technologies for ultra low emission vehicles
Transport links to key employment, housing and learning sites.
Maximising the economic impact of enhanced national (north/south) and northern connectivity (west/east)
Place-making and regeneration
Infrastructure delivery

Economy and environment overlap

Developing skills in low carbon technologies
Support and advice to decarbonise businesses
Low carbon industries as a driver of local economic growth



Economic Strategy
Strategic development and connectivity
Business support and innovation
Skills development and talent retention
Wider partnerships, wider impacts

Transport Strategy
Highways asset management
Network management and safety
Public transport and active travel
Strategic partnerships

Environment & Climate Strategy
Reducing waste and pollution
Climate change
Natural and historic environment

Transport and environment overlap

Managing travel demand and traffic emissions
Ultra low emission vehicles/electric vehicles infrastructure
Promoting and enabling sustainable travel, cycling & walking

All three strategies support

Promoting clean and sustainable growth
Connecting communities with economic opportunity
Transition to net zero
Climate resilience & adaptation
Health & Wellbeing



Reducing waste and pollution

Our 2025 Vision

Lancashire will have reduced waste, and improved air and water quality

How we will get there

We will

- Reduce waste and increase reuse and recycling through delivery of our waste services.
- Improve air quality by reducing pollution from road transport.
- Improve water quality by working with partners to improve Lancashire's rivers and water bodies.

Reducing waste and increasing reuse and recycling

As the 'Waste Disposal Authority' for Lancashire, we have a statutory duty to treat and dispose of the waste collected by district councils in their role as 'Waste Collection Authorities'. The Environmental Protection Act 1990 also places a duty on all Waste Disposal Authorities to 'provide places at which persons resident in its area may deposit their household waste' which we achieve through the operation of our recycling centre network.

The Environment Act 2021 has three elements which have specific importance for local authority waste services:

- Extended Producer Responsibility (EPR) – Making those that produce packaging responsible for the cost of its recycling.
- Deposit Return Scheme (DRS) – putting a levy on certain beverage containers refundable at the point of return.
- Collection Consistency – the introduction of nationally consistent waste collection arrangements.





The key aim of EPR is to drive down the amount of waste produced and encourage the use of more recyclable materials in packaging. At the same time the DRS will fundamentally change what is presented to local authorities in the recycling bin. The collection consistency proposals will impact this further, with the separate collection of food waste becoming mandatory and the potential requirement to collect additional materials such as tetra-pak or plastic film (amongst others) at the doorstep.

Much of the detail around these proposals is still under consideration by Government and importantly the potential impacts they may have on the tonnages of waste collected is unclear.

This is particularly important as the council's contract for the landfilling of residual waste ends in March 2025. Upon expiry of the contract our aim is to process the majority of Lancashire's residual waste through our waste recovery parks, reducing the mass of the waste and creating a fuel which can be used to produce energy. It is intended that Lancashire will only landfill those waste types that cannot be treated or disposed of in any other way.

It is also our intention to employ anaerobic digestion processes at our waste recovery parks to treat our separately collected food waste. This will create electricity which will help to power both the food waste and residual waste treatment processes.

Over the course of this strategy modifications will be made to our facilities to allow for the in-house treatment of these wastes. The impact of these changes along with those of the Environment Act will significantly reduce Lancashire 'waste' carbon footprint.

As the Minerals and Waste Planning Authority, we must plan for facilities to meet the waste needs of Lancashire. We must also ensure there are enough minerals for construction to meet the county's needs. This helps us to determine planning applications for waste and minerals, ensuring the economy is supported but residents and the environment are also protected.



Reducing waste and pollution

Improving air quality

Poor air quality is the largest environmental risk to public health in the UK, as long-term exposure to pollution can cause chronic conditions and lead to reduced life expectancy. Where pollutants exceed national limits, an Air Quality Management Area (AQMA) must be declared. There are currently 19 AQMAs across the county, all declared due to exceeding nitrogen dioxide (NO₂) limits because of emissions from road transport.

The council has an important role to play, with responsibilities for transport planning, network management, highway maintenance, public health and procuring local vehicle fleets. Many of the actions we are taking will help improve air quality, such as providing alternatives to petrol and diesel car use, promoting active travel and the use of public transport, supporting the transition to electric vehicles (EVs) and improvements to traffic flow.

The Environment Act 2021 strengthens the Local Air Quality Management framework to share responsibility for tackling local air pollution and enabling greater collaboration. We will focus our efforts on reducing pollution from road transport, working with district councils to address the issues in AQMAs.

Improving water quality

In Lancashire some 88% of rivers and waterways were classified as having 'moderate' overall status, 8% were 'poor', and 4% were 'bad'. No water bodies in England achieved the desired 'good' rating due to failing the chemical classification status following the introduction of new assessments for additional substances in 2019².

The Environment Agency estimates that storm overflows lead to around 30% of river and sea pollution in the North West, with water quality in the natural environment affected by rain running off highways and farmland, and private drainage being incorrectly connected.

The council will continue to work with United Utilities, the Environment Agency, landowners, and other partners to improve the quality of Lancashire's rivers and water bodies.



²State of the water environment indicator B3: supporting evidence - GOV.UK (www.gov.uk)



*Artist's impression of Broadgate CYCLOPS junction,
Preston*





Climate change

Our 2025 Vision

Lancashire will reduce emissions by enhancing our services and operations. We will be better prepared for the impacts of climate change, building resilience into our services, communities, and businesses.

How we will get there

We will

- Work with partners to transition Lancashire's emissions towards net zero.
- Reduce greenhouse gas emissions from our estate and operations.
- Ensure our infrastructure, assets and services are better adapted and resilient to the impacts of climate change by carrying out risk assessments for key services.
- Manage flood risk and water resources by working with partners, businesses and communities to deliver our Local Flood Risk Management Strategy.

Work with partners to transition Lancashire's emissions towards net zero

Transport is the largest source of carbon emissions in Lancashire. In the council's roles as Highway Authority and Local Transport Authority, how we prioritise walking, cycling and public transport as an alternative to the private car, will be an important factor in enabling our communities to decarbonise. We will position this alongside supporting the transition to ultra low emission vehicles (ULEVs) and electric vehicles (EVs).

We have already acted by installing 150 public [Electric Vehicle charge points](#) either at the side of the adopted highway or in county council carparks. Our Electric Vehicle Infrastructure strategy helps us understand the size and shape of the future public ULEV infrastructure that is needed, and how the council can support residents who are unable to charge at home. Further approaches to reducing our transport emissions are set out in the accompanying Transport Strategy. We will work closely with partners to implement transport improvements.



The priority for the domestic sector will be to drive down emissions across all existing and new households. We will continue to work with the local housing authorities across Lancashire to support our residents to make changes. For example, supporting schemes such as [Cosy Homes in Lancashire](#) which provides help and assistance on energy efficiency and domestic heating measures, particularly for those living in fuel poverty and more vulnerable to the effects of living in cold homes.

Emissions from business and industry make up 29% of emissions. Boost, Lancashire's Business Support Hub, works in partnership to provide a range of support to help businesses improve their energy and environmental efficiencies.

The way we use land can both emit carbon and act as a carbon store. Grasslands, peatlands, and woodlands are all important land uses for carbon storage. Restoration of peatlands, tree planting and woodland creation are actions that can be taken to capture more carbon from the atmosphere. Our action on this with partners is set out under the natural and historic environment section of this strategy.

Reducing emissions from our estate and operations

Our organisational carbon footprint comprises emissions from the wide range of activities we undertake to deliver services. The bulk of our footprint is made up of methane emissions from the disposal of municipal waste, which is a statutory responsibility. Our approach to reducing these emissions will be set out in our Waste Management Strategy.

Excluding waste disposal, most of our emissions come from heating and the electricity used in our buildings. This is a key priority and we are developing a carbon reduction strategy for our property portfolio to address this. More information on our organisational emissions is set out in the council's carbon emissions baseline report.





Climate change

Over the last ten years we have achieved large reductions in emissions from our streetlighting through the installation of LED lanterns and seen reductions in emissions from the energy we use in buildings. Through our energy contracts we purchase 100% Renewable Energy Guarantees Origin (REGO) backed green electricity for all buildings on the retained portfolio.

We are investing in new electric vehicles and charging infrastructure for our fleet vehicles, as well as trialling small and medium battery electric plant, for example hedge trimmers, mowers and mini-diggers that will help us move away from conventional petrol and diesel plant.

Our award winning [Highways Decarbonisation Strategy](#) sets out how we will achieve carbon reductions from our highways maintenance work, and our digital innovation is supporting new ways of working to reduce emissions.

Our procurement policy requires companies bidding for council contracts with a value above £5 million per annum are required to provide a Carbon Reduction Plan as part of the tender selection criteria.

The Lancashire Pension Fund has a comprehensive [Responsible Investment Policy](#) in place with climate change and the depletion of natural resources identified as core environmental priorities in the policy.

We have achieved good reductions from the action we've already taken, and we now have the challenge to reduce our emissions further, with savings becoming harder to achieve. We will use data to further analyse our emissions and develop plans for carbon reduction to reduce our organisational carbon footprint.

Ensuring our infrastructure, assets and services are adapted and resilient to the impacts of climate change.

Even with carbon reduction, the impacts of climate change will be felt and we need to adapt our communities, economy, natural and built environments to be resilient.

The council manages key transport infrastructure, cares for the vulnerable and supports the education of young people. We need to ensure we are fully prepared to continue delivery of our services and help build resilience within our communities and businesses, and some will be more vulnerable to the impacts of climate change than others. We will therefore carry out risk assessments for key services as part of our service resilience planning - assessing preparedness for more frequent extreme weather events in the short, medium and long term.



Lancashire's climate is projected to be significantly warmer by the 2080s with a

20-30%

increase in
winter rainfall

20-40%

decrease in
summer rainfall

...and an increase in rainfall intensity³

Managing flood risk and water resources

Lead Local Flood Authorities bring together all relevant Flood Risk Management Authorities to manage flood risks. No single organisation has the means to manage all sources of flooding and therefore everyone has a part to play in effective flood risk management for Lancashire.

The flood risk management authorities in Lancashire include the Environment Agency, Water and Sewerage Companies (United Utilities and Yorkshire Water), our district councils, National Highways and Lancashire County Council as both the local Highway Authority and the Lead Local Flood Authority (LLFA). Flood risk management authorities have distinct and well-defined roles and responsibilities. The [Lancashire Local Flood Risk Management Strategy](#) sets out the key risks, challenges and opportunities and how we intend to work with partners, businesses, and communities to manage the risk of local flooding in Lancashire up to 2027.



River Ribble Ribchester

³www.lancashire.gov.uk/media/933545/climate-resilience-study.pdf



Natural and historic environment

Our 2025 Vision

Lancashire's green spaces and wildlife are enjoyed by residents and visitors, and better protected for future generations.

How we will get there

We will

- Conserve, restore and re-establish habitat quality and species diversity by delivering a strengthened Biological Heritage Site (BHS) system and providing specialist advice.
- Ensure our residents have access to high quality, natural spaces by managing our countryside sites and public rights of way.
- Conserve and enhance our historic environment and outstanding landscapes through our historic environment service and our landscape partnership work
- Use nature-based solutions to tackle climate change including peatland restoration, tree planting and soil management.

Conserving, restoring and re-establishing habitat quality and species diversity

Biological Heritage Sites (BHSs) are non-statutory but locally designated important wildlife sites in Lancashire, over 1,100 have been designated since the system was set up by the council in 1993. We have recently strengthened the BHS system, and we are advising farmers on land management practices and grants to help protect the sites. We will continue to support the BHS system as a key element of our work to conserve and enhance the biodiversity of Lancashire.

The council hosts the [Lancashire Environment Record Network \(LERN\)](#) which acts as the record centre for biodiversity information in the county. The information is used to inform planning decisions, helping to protecting nature in the county.

We are carrying out work to revise the Ancient Woodland Inventory for Lancashire to identify all ancient woodlands of 0.25 hectares or more. The Inventory identifies sites that have supported centuries of continuous woodland cover. As a group, they are our most important woodlands for their rich wildlife and cultural heritage. Once lost, they cannot be recreated.

Local Nature Recovery Strategies (LNRS) are a new England-wide system of spatial strategies introduced by the Environment Act 2021. They will establish priorities and map proposals for specific actions to drive nature's recovery and provide wider environmental benefits. The LNRS will underpin the delivery of Biodiversity Net Gain (BNG) through the planning system.

We are the provisional 'Responsible Authority' and we will lead the LNRS development for Lancashire in collaboration with Blackburn with Darwen Council and Blackpool Council, and a partnership of other partners.

Ensuring our residents have access to high quality, natural spaces

Green space is important for our communities, providing areas for leisure and recreation and a quality environment which attracts people and investment. Access to parks, woodlands and greenspaces became increasingly important through times of lockdown and pandemic restrictions.

In Lancashire, people can roam openly over 14% of the county, mainly in the uplands, and there is a further 5,749km of public rights of way providing access to the countryside around our towns and villages. The council is responsible for maintaining most public rights of way, which cover a wide spectrum of different physical paths, tracks and unmarked ground

The council also manages 63 countryside recreation sites. Most of the sites were acquired during the 60s, 70s and 80s as part of land reclamation activity, or the delivery of landscape, wildlife and recreation strategies. Many are in urban or urban fringe areas, very close to large populations and are an integral part of local greenspace provision.





Natural and historic environment

This map shows Lancashire's green spaces, parks, woodlands and waterbodies.



Conserving and enhancing our historic environment and outstanding landscapes

The council's Historic Environment service provides information and specialist advice and maintains a record of known sites of historic / archaeological interest in the county. In the last three years, 141 reports of significant archaeological work have been added to the Historic Environment Record. Such sites range in date from the Palaeolithic (more than 14,000 years ago) to the 1960s.

The UK's finest landscapes are protected by statute as Areas of Outstanding Natural Beauty (AONB) or National Parks. Lancashire has three of these nationally important landscapes, with AONBs at Arnsdale and Silverdale and the Forest of Bowland and a small part of the Yorkshire Dales National Park. Each designated landscape has its own distinct, sometimes unique set of characteristics or special qualities – whether in its nature, culture, or its history.

The council has a duty under the Countryside and Rights of Way Act to jointly prepare a plan for the management of these landscapes, and it does this by working in partnership with other local authorities and organisations. We are the host authority for the Forest of Bowland AONB, a partnership organisation made up of local authorities, national environmental agencies, and local representatives from landowning, farming, and recreation interest groups.

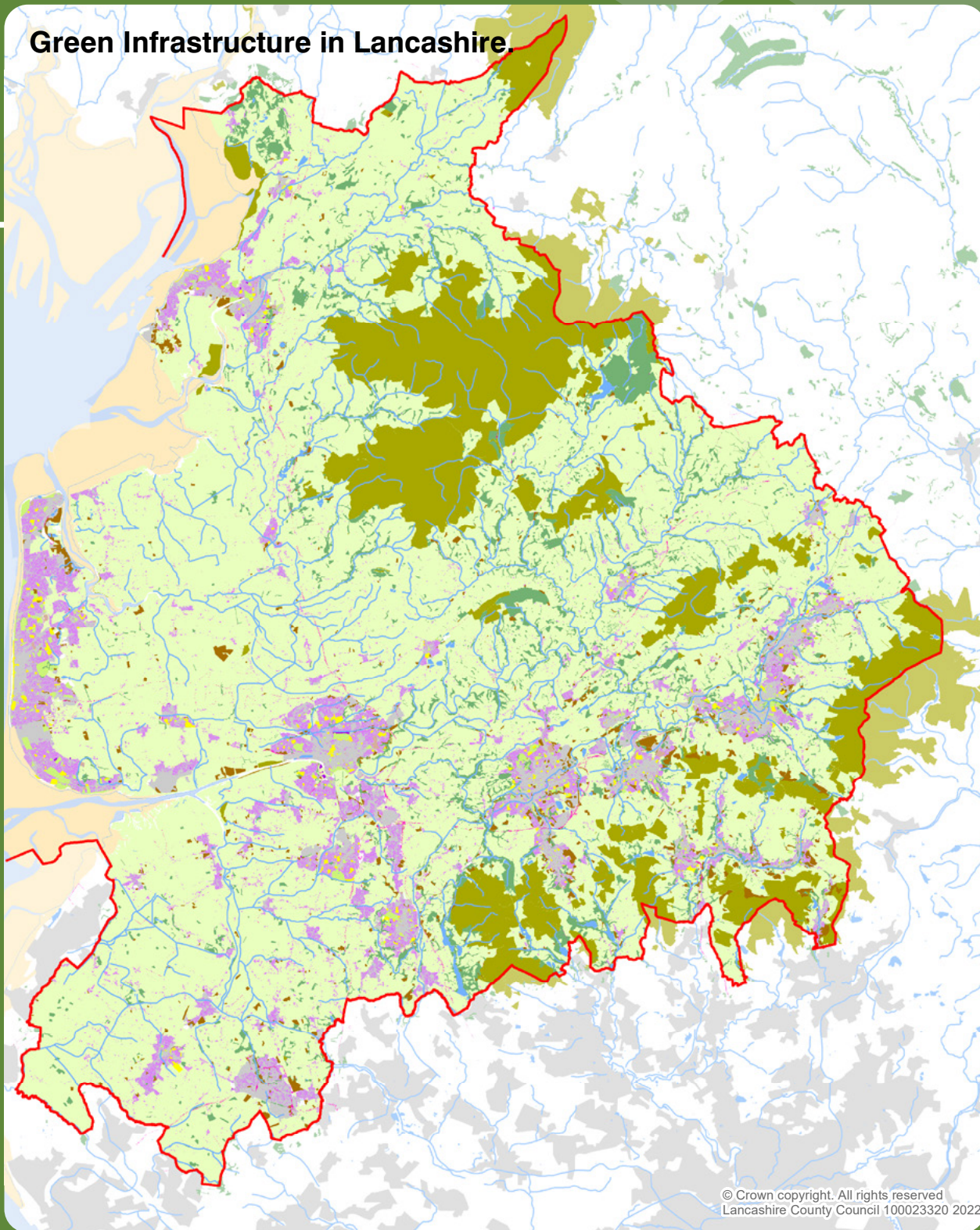
Using nature-based solutions to tackle climate change

Nature-based solutions are actions that involve working with nature to address challenges such as climate change, water security, water pollution, biodiversity loss and human health. Actions provide benefits for both human well-being and biodiversity.

















The council has a long history of using nature-based solutions to capture carbon and to provide wider benefits through major tree planting programmes and large-scale peatland restoration projects, which we continue to deliver alongside looking at innovative new ways of using nature to capture carbon.



Green Infrastructure in Lancashire



Green Infrastructure

- | | |
|--|---|
|  Agricultural land |  Private Gardens |
|  Allotments, Community Gardens & Farms |  Verges of Transport Corridors |
|  Cemeteries, Church yards, Burial Grounds |  Waterbodies |
|  Derelict Under Utilized and Neglected Land |  Woodland |
|  General Amenity Space |  River and Canal |
|  Unenclosed Moor and Marsh |  Foreshore |
|  Outdoor Sports Facilities |  Sea |
|  Parks and Public Gardens |  Urban Area |



Natural and historic environment

UK peatlands store as much carbon as all the forests of UK, France and Germany combined. Conversely, degrading peatlands release carbon into the atmosphere. Restoration of peatland is therefore seen as a valuable and cost-effective way to tackle climate change, and 14% of Lancashire's area contains upland peat.

Since 2011, the council has helped secure over £2.5m investment in peatland restoration and managed the restoration of 755 hectares across 18 different sites.

Our partnership in Bowland has recently secured an additional £1.4m of funding and over the next two years this will lead to a restoration of a further 168 hectares, meaning a further 38,000 tonnes of CO₂ equivalent will be saved by 2050. This is the carbon-saving equivalent of the energy use in 4,890 homes for one year.

Over the last ten years the council has planted over 149,000 trees, sequestering 37,000 tonnes of carbon dioxide.

We have secured funding to enable us to work with partners to create 170 hectares of rural woodland plus 30,000 trees (urban and semi-urban) over the next two years. This will capture 98,000 tonnes of CO₂ in their lifetime. We will also strengthen the Lancashire Woodland Partnership and work with partners to develop a tree and woodland strategy for Lancashire to support the delivery of tree planting.

The council owns, and is responsible for a large number of trees, whether they stand alone or are part of a large and diverse forest, and we have a responsibility to ensure they remain safe. We are developing our strategy for future planting schemes across the council's estate.

The council is currently part of an international project looking at ways to measure carbon capture in soil. Our project is pioneering a soil management technique using 'biochar', which has the potential to remain in the soil for thousands of years, effectively locking up carbon.

Our project aims to understand how biochar could be applied to agricultural land and to managed grasslands such as parks, playing fields, and highway verges.



Restored peatland





Working as one - Wider impacts / Wider outcomes

Integrated programmes

The three priorities set out in this strategy can all act independently of one another but work best when working in combination, including with other strategies, to deliver and maximise environment and climate action and opportunities within Lancashire. Working with partners on decarbonising the Lancashire economy, helping nature to recover, and reducing waste and emissions can create the conditions to stimulate economic growth and improve resident health.

Building knowledge and skills

Lancashire is forecast to have more than 60,000 jobs across low carbon infrastructure, retrofitting, car electrification, nuclear and onshore wind industries. This poses a challenge in terms of employment and skills, but is also an opportunity for Lancashire residents to secure good jobs. Building local knowledge and skills, developing new technology and digital innovation will be key enablers to delivering our environment and climate objectives.



Delivering wider council priorities

Health

The council is committed to the promotion of a 'Health in all Policies' approach. From cleaner air, warmer and more energy efficient homes, increased physical activity, more access to greenspace, and creating well adapted, resilient communities - taking action to improve our environment has many benefits for our health and wellbeing.



Measuring progress and performance

The core priorities and activities set out in this strategy will provide the framework for action planning. A separate implementation plan will sit alongside this document which will be reviewed annually, enabling us to refine our activity and develop new projects. Performance indicators and/or milestones will be established in our implementation plan to track progress against our projects and actions.

Key performance indicators to measure progress against the council's priority to protect our environment are being identified and will become part of the council's corporate performance framework being reported to Cabinet.

The council has also joined the global [Race to Zero](#) campaign by signing the Cities Race to Zero pledge. As part of our pledge, we have committed to report annually on our climate action and we will do this through the recognised Carbon Disclosure Project [cities questionnaire platform](#). Our first report was submitted in July 2022.

Governance

The milestones and performance indicators will be led by the council's Growth, Environment and Transport directorate, though the wider input and contribution that all council services will have in delivering this strategy is recognised, with responsibility sitting with the relevant cabinet portfolio and scrutiny responsibilities.



Ancient bluebell woodland



lancashire.gov.uk

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