Local Environment (Climate Change) Strategy

Framework for Action Planning

Contents

Introduction	2
Performance Reporting	2
Methodology	3
Themes	3
LECCS Strategic Objectives (LECCS Obj.)	3
Priority	4
Finances	4
National Net Zero Strategy	5
Carbon Accounting	5
Cumbria Baseline (Extracts from Report)	5
Cumbria Residents' total footprint	10
Carlisle City Council Baseline	11
Targets	12
UK National net zero by 2050	12
UK National target for 2035	12
Cumbria net zero by 2037	12
Carlisle City Council net zero by 2037	14
Organisation Actions (2022/2023)	15
Local Actions (2020-2025)	17
Action planning through regional and countywide partnerships	21
Areas for action planning, 2025-30 and beyond	23
Definitions and glossary	24
Links and references	25

Version 2.0

February 2022

Introduction

This framework for action planning is a working document for the delivery of the Local Environment (Climate Change) Strategy (LECCS).

To help link the actions to the different carbon footprint baselines (organisational or Cumbria) this plan has been split into two separate sections:

- 1. Organisational Actions: the actions that the Council can take with its own assets, policies, procedures and practices.
- 2. Local Actions: the actions that the Council will work on locally through partnerships and collaboration.

The second section covers the 5 years (2020-25), matching the Zero Carbon Cumbria Programme (ZCCP), which is funded for 5 years for £2.5million. This project is working towards a zero carbon Cumbria by 2037. The ZCCP will run from September 2020 and invest £2.65m (including £195k match), to provide the 'step change' needed to deliver decarbonisation over the following 12 years to 2037.

The final part of the action plan covers the longer term, the future periods 2025-30 and beyond, it is included as a set of indicative actions.

The action plan has been developed from several sources and is a working document:

- Member Advisory Group (MAG)
- Health & Wellbeing Scrutiny Panel feedback
- Economic Growth Scrutiny Panel feedback
- The public feedback on the LECCS in August/September 2020
- Feedback from ZCCP partners
- The Local Authority Climate Policy Group
- Climate Change Working Group (July/August 2019, replaced by the MAG)
- Internal Officer Working Group
- Internal Audit Report and Recommendations (December 2021)

The actions have been cross-referenced against two checklists and compared to other plans published on the Climate Emergency Action website:

- Ashden Toolkit
- Friends of the Earth 33 Actions for Local Councils
- Climate Emergency Action Planning
- LGA COP26/Climate Change Hub websites

Performance Reporting

Quarterly performance report will be produced for Executive and Scrutiny, updating on the key actions as they are progressed.

Methodology

The actions within this plan have been subjected to a set of criteria and coding to ensure that the actions remain relevant, purposeful and effective in delivering the overall Strategy. The actions are coded against the following criteria and definitions:

- Theme
- LE(CC)Strategy Objectives (1-5)
- Timeframe
- Outcome
- Carbon Accountancy
- Finances

Read together, this criteria makes the actions specific, measurable, achievable, realistic and timebound.

Themes

The themes have been developed from existing strategies, topics raised in the consultation and the key actions in the Zero Carbon Cumbria Programme Proposal.

LECCS Strategic Objectives (LECCS Obj.)

The strategy is built around five objectives.

Objective 1: Reducing emissions from the City Council estate and operations.

This objective focuses on the Greenhouse Gas (GHG) emissions from our operations, fleet and estate. The main components being the procurement of electricity, gas and vehicle fuel. It will also include the energy efficiency of our estate and the fuel consumed through business miles. The themes included under this objective are assets, finance, people (staff and Members), transparency (data) and communications and engagement.

Objective 2: Reducing energy consumption and emissions from homes and businesses in Carlisle and tackling fuel poverty, by promoting energy efficiency measures, sustainable construction, renewable energy sources and behaviour change.

Domestic energy consumption is a major component of our district carbon footprint, the local roll-out of smart meters and the Council's own initiatives to tackle fuel poverty and improvements to energy efficiency are good medium term actions. The longer term challenge is around the sustainable construction and local renewable energy networks. The themes included under this objective are Local Plan, regeneration, housing, Building Control, and renewal energy.

Objective 3: Reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion and encouraging behaviour change.

Transport is likely to be the largest component of our district carbon footprint and continues to present a risk to the success of the national strategies aimed at reducing GHG. This objective will focus on the opportunities for countywide and local action. The themes included under this objective are movement and air quality.

Objective 4: Reducing consumption of resources, increasing recycling and reducing waste.

As a waste collection authority this is our core business, the GHG emission from the service need to be considered alongside the whole process of collection and disposal. As well as the 'embodied carbon' in the waste itself. This is the service that all of our residents use and has come to symbolise the 'greenness' of a council and an area through its recycling rate. This objective is linked directly to objectives 1 and 5. The themes included under this objective are waste, recycling, food and community development.

Objective 5: Supporting Council services, residents and businesses to mitigate against and adapt to the impacts of Climate Change.

This broad objective recognises the challenge of mitigating against Climate Change and adapting to the potential impacts. This objective will be central to the Local Environment (Climate Change) Strategy's Communication and Engagement Plan. The themes under this objective are equally as broad, crossing-over the objectives 1-4. They include wildlife and habitats (bio-diversity), green infrastructure, countryside and landscapes, contaminated land, Future Flood Risk Management, and severe weather and related risks. It also includes the theme of governance in the context of partnership working, monitoring performance and evaluating outcomes.

Priority

The final decision on prioritising any action that requires a key decision is determined through the Council's Constitution.

The potential for co-benefits is a consideration in prioritisation, for example an action to reduce the consumption of carbon intense heat within the home through improved energy efficiency will also have a positive impact on fuel poverty. There are clear health benefits from improved air quality, healthier diets and more walking and cycling. The drive for clean growth has the potential for industrial and commercial opportunities. The replacement of petrol powered hand tools with battery powered hand tools has the co-benefits of less vibrations and less noise, with less disturbance to surroundings.

Finances

The Council is committed to becoming carbon neutral in the future and there may be a requirement for significant investment in achieving this goal, with recovery through the achievement of efficiency savings and/or by maximising any external grants and contributions available to support the strategy and action plan through the Council's Funding Strategy. However, any carbon reducing schemes will initially have to be funded from resources currently contained with the Council's existing Revenue and Capital budgets; with any new climate change initiatives, following the formal adoption and approval of the Local Environment (Climate Change) Strategy, being supported by robust business cases with a cost benefit analysis provided.

The Council also maintains a vehicle Plant and Equipment Replacement Plan which outlines the anticipated replacement lifecycle for the main items of fleet it requires to operate services. This plan is updated annually and is fed into the budget process to determine the capital requirement.

National Net Zero Strategy

The Government published its 'Net Zero Strategy: Build Back Greener' in October 2021. The strategy includes:

- Decarbonisation pathways to net zero by 2050, including illustrative scenarios
- · Policies and proposals to reduce emissions for each sector
- Cross-cutting action to support the transition

Local Climate Action is included in the strategy, the extract is presented in figure 1 below:

4v. Local Climate Action

Supporting decarbonisation and regeneration in our local areas and communities

- Of all UK emissions, 82% are within the scope of influence of local authorities.
- Government analysis suggests that over 30% of the emissions reductions needed across all sectors to deliver on our Carbon Budget 6 target, as set out in this strategy, rely on local authority involvement to some degree.
- · Central and local government will need to work closely together to deliver net zero and our interim carbon budgets.
- There are currently no net zero statutory targets on local authorities or communities in the UK, and we do not believe
 that a new general statutory requirement is needed. This is because of the existing level of local commitment with the
 sector, and because it is difficult to create a uniform requirement that reflects the diversity of barriers and
 opportunities local places experience.
- However, we do understand that there is a real need to ensure local leaders across the board are supported by
 enhancing the capacity and capability of local areas to deliver net zero, coordinating engagement with local
 authorities, and clarifying expectations at a national level to accelerate local progress towards net zero

Figure 1: National Net Zero Strategy and Local Climate Action

Carbon Accounting

In 2017, the UK emitted 460 million tonnes of carbon dioxide equivalent, compared with 794 million tonnes of carbon dioxide equivalent in 1990.

Cumbria Baseline (Extracts from Report)

The Cumbria Baseline Report rests on a simple principle:

'We have operated from the principle that it is more informative to make best estimates of even the most poorly understood components of the footprint, and to discuss the uncertainty openly, than to omit them from the analysis.'

The report acknowledges that:

'The complexity of supply chains and the difficulties in obtaining accurate data dictate that footprinting can only offer an estimate rather than an exact measure, and the figures in this report should be viewed in that context.'

Overall, the report is a broad guide to the size and relative significance of different components of its approach to carbon accounting. They components are:

Production based emissions

The data behind these emissions estimates is from the Office of National Statistics Local Authority CO₂ Emissions Estimates 2005-2017, calculated by Ricardo Energy and Environment¹.

As an example, emissions resulting from the purchase of goods by residents and visitors would not feature in a production-based emissions assessment, since all the emissions take place in the supply chains of the products rather than at the point of purchase. The largest part of the production-based carbon footprint comes from transport, closely followed by industrial and commercial fuel use. Emissions from vehicles on the M6 motorway have been excluded.

Consumption-based emissions

We assess the greenhouse gas 'footprint' of residents, visitors and industry, including the supply chains of everything that residents and visitors buy and do whilst in Cumbria. Consumption-based reporting attributes the emissions from product and service supply chains to Cumbria, *regardless of where emissions are physically released during production*. The inclusive treatment of supply chain emissions, as presented here, differs from more standard 'production-based' emissions assessments, but gives a more complete and realistic view of impacts of final consumption.

Consumption-based reporting is important for looking at the climate change impacts that people and businesses have through their entire lifestyles, including the food they eat and the things they buy. Thus, in the case of car travel the final figure is typically around double that of the exhaust pipe emissions.

The consumption-based assessment includes emissions resulting from everything residents do and buy in their personal lives and everything that visitors do and buy while in Cumbria, as well as their travel to and from the county. More specifically, the following is within the scope of this report:

- all residents' personal travel and visitor travel to, from and around Cumbria;
- fuel and electricity consumed in homes and places to stay;
- emissions from food and drink and other purchases;
- emissions resulting from the use of services, including public services; and
- the supply chains of all the above (e.g. fuel supply chains and embodied emissions).

As a separate analysis, we also include a simple assessment of industry emissions. Consistent with the consumption-based reporting approach, this includes both direct emissions and supply chain emissions.

Cumbria's Production-based CO₂ emissions

¹ BEIS, June 2019, UK local authority and regional carbon dioxide emissions national statistics: 2005-2017. https://tinyurl.com/UKCO2PB

Cumbria's total production-based emissions for 2017 were 3.18 MtCO₂ (Figure 1). This includes emissions railways passing through the county, and removals from land use, such as through peat restoration and tree planting. Emissions from vehicles travelling along the M6 motorway have been excluded.

Broken down by local authority, the highest emissions (excluding removals from Land Use, Land Use Change and Forestry – LULUCF). Removals from LULUCF in Cumbria are estimated to be around 0-20 tonnes Carbon per km² from Forest Land, with minor removals from grassland and cropland management².

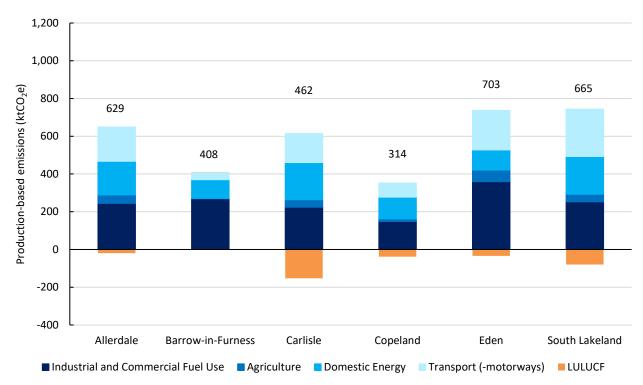


Figure 1: Total production-based CO₂ emissions by sector, broken down by Cumbrian local authority, net figures are labelled on the top of each district bar.

7

² Centre for Ecology & Hydrology for BEIS (2019). Mapping Carbon Emissions & Removals for the Land Use, Land Use Change and Forestry Sector: Report based on the 1990-2017 Inventory. See: www.gov.uk/government/statistics/uk-local-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017.

Cumbria's Consumption-Based GHG Emissions

The total GHG 'footprint' of residents and visitors is estimated at 11.5 MtCO₂e for 2018. This includes visitors' travel to and from Cumbria, their consumption within Cumbria, and everything residents do, whether within or outside of the boundary of Cumbria. The consumption-based assessment includes all GHG emissions associated with everything that residents and visitors buy or consume – this includes the supply chains involved in provision of goods and services.

Emissions by consumers are broken down into two categories: Residents of Cumbria and Visitors to Cumbria. Resident emissions account for 51% of the total. Visitors travelling to and from Cumbria make up 36% of the total footprint, and 13% of the emissions come from visitors within Cumbria. The emissions per resident per day are 35 kgCO₂e which is the same as the UK average, whereas the emissions for visitor are 26 kgCO₂e.

In Figure 2 this is broken down by category, highest emissions arise from visitor air travel (2.1 MtCO2e), visitor fuel consumption (1.4 MtCO2e travelling to Cumbria and 540 kilotonnes (kt) CO2e within Cumbria) and resident food and drink (1.5 MtCO2e; Figure).

On a per capita basis, Cumbria residents' consumption-based footprint is broadly in line with the UK average.

Cumbria visitors have a greater proportion of driving emissions (both fuel and wear and tear) in their footprint whilst in Cumbria (approximately three times the UK average), and a higher proportion of emissions from eating out and recreational activities than residents. Overall, visitors' footprint is less than that of the UK average due to lower emissions from household energy and other services. These differences reflect the difference between typical activities of residents and visitors. In contrast to residents, visitors' emissions are dominated by air and road travel. Visitors emit more carbon travelling to and from Cumbria than they do during their stay.

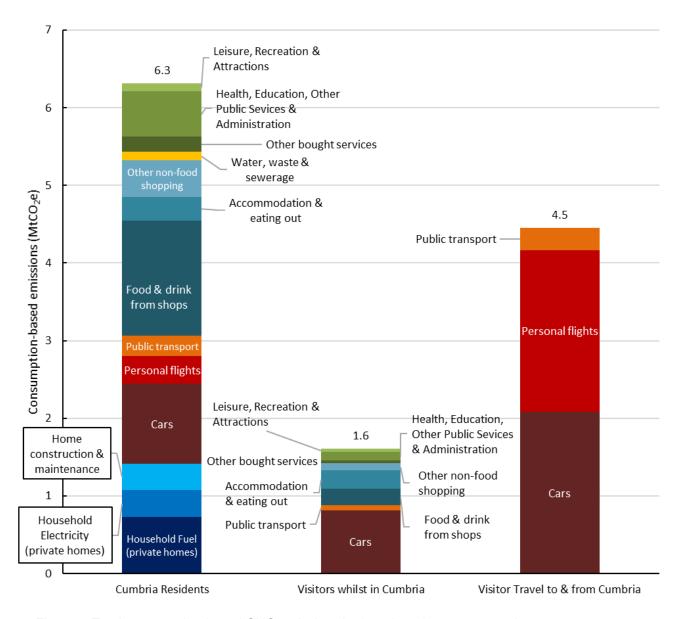


Figure 2: Total consumption-based GHG emissions broken down by category and consumer

Cumbria Residents' total footprint

Figure 2 present the Cumbria residents; total footprint, broken down by category.

Cumbria residents' total footprint = 6.3 million tonnes CO₂e per year (12.7 tonnes per person)

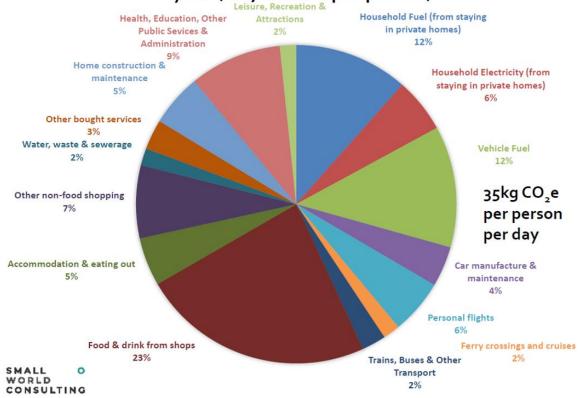


Figure 2: Cumbria residents' total footprint

The overall scale of industry's footprint is 13,174 ktCO₂e.

This simple analysis of industries gives a broad perspective on emissions from businesses in Cumbria. It should not form part of the baseline figure because there is double counting between this and the footprint of residents and visitors. It is not based on local information about the characteristics of each industry in Cumbria.

Carlisle City Council Baseline

The Council's gross³ carbon footprint for 2018/19 was 3288⁴ tonnes CO₂e.

We have used production accounting for the Council's carbon footprint. Production accounting only considers day-by-day emissions from sources such as buildings and vehicles. Production emissions are relatively straightforward to measure and account for, consumption emissions are much more difficult to quantify as most emissions are occurring elsewhere and produced by other parties.

This approach is the same as the National UK Baseline approach (page 5 and 11), for the Council we are measuring:

Scope 1: Emissions by authority owned vehicles and emissions from gas and oil boilers, the energy used for operational work such as collecting waste and maintaining our parks. **(1677t CO₂e.)**

Scope 2: Grid Electricity across the estate. 439t CO₂e.)

Scope 3: Business travel, transmission & distribution losses¹, and selected leased out assets such as the leisure centre. (1172t CO₂e.)

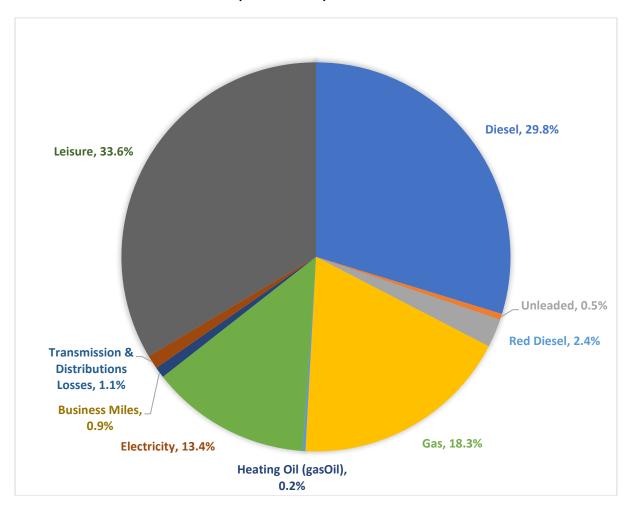


Figure 3: Main sources of the Council's carbon footprint

 $^{^3}$ The Council's microgeneration of renewal energy is estimated at 47,000kwh, saving 13(t)co₂e. The Council's net carbon footprint is estimated at 3275 tonnes CO₂e.

⁴ This is a working figure, and it will be updated as definitions and data are refined.

Targets

UK National net zero by 2050

The UK Government's net zero target was passed into law in June 2019. This target is measured through the Estimates of the UK's greenhouse gas (GHG) emissions, published by the Department for Business, Energy and Industrial Strategy (BEIS), are used as the baseline for monitoring the Climate Change Act net zero target. These estimates, known as territorial and which are **production-based** estimates, include GHG emissions or removals from:

- businesses based in the UK regardless of where in the world they are registered.
- the activities of people that live in the UK as well as non-UK visitors.
- land such as forest, crop or grazing land.

They exclude emissions or removals from:

- international air travel.
- international shipping.
- UK residents abroad.
- UK Crown dependencies and overseas territories.
- the burning of biomass such as wood, straw, biogases and poultry litter for energy production.
- land such as peatland.
- the production of goods and services that the UK imports from other countries.

UK National target for 2035

The UK government has passed a law (April 2021) to reduce emissions by 78% by 2035 compared to 1990 levels. For the first time, this Carbon Budget will incorporate the UK's share of international aviation and shipping emissions .

Cumbria net zero by 2037

This is the most feasible target that can be regarded as being in line with the requirements laid down by the IPCC for "well below 2 degrees and in pursuit of 1.5 degrees" of global warming.

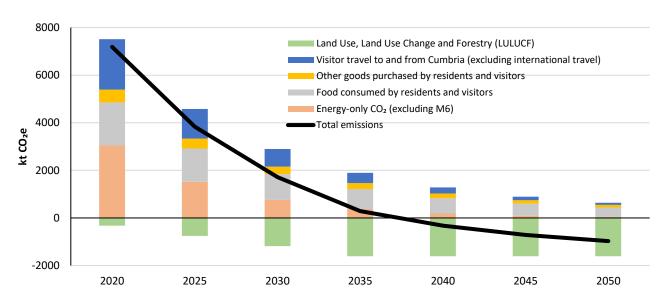
The target includes the following:

- Energy-only CO₂ measured on a production basis, excluding the M6 (over which Cumbria has little influence);
- GHG emissions from food consumed by residents and visitors;
- GHG emissions from other goods purchased by residents and visitors:
- GHG emissions from visitor travel to and from Cumbria, excluding international visitor travel; and
- Land Use, Land Use Change and Forestry (LULUCF) these are net negative emissions.

Business supply chains are included where businesses supply the local and visitor economy. However, businesses should still be encouraged to manage their own supply chain carbon.

A trajectory for achieving Net Zero by 2037 is set out in the graph and table in figure 4, the annual percentage changes are set out against the categories in scope for the overall target.

Net Zero by 2037 Trajectory, data and percentage reductions



Raw Data	Net zero by 2037					
Breakdown of projected emissions (kt CO ₂ e)	2020	2035	2040	Changes starting from 2019 baseline		
Energy-only CO ₂ (excluding M6)	3048	377	188	Annual reduction of 13%		
Food consumed by residents and visitors	1807	837	648	Annual reduction of 5%		
Other goods purchased by residents and visitors	535	248	192	Annual reduction of 5%		
Visitor travel to and from Cumbria (excluding international travel)	2117	436	257	Annual reduction of 10%		
Land Use, Land Use Change and Forestry (LULUCF)	-322	-1611	-1611	Increase of 400% in annual removals after 15 years (negative emissions)		
Total emissions (tonnes)	7185	287	-326			

Figure 4: Net Zero by 2037 Trajectory, data and percentage reductions

Carlisle City Council net zero by 2037

A five year scenario (2020-2025) for cumulative reductions in the Council's carbon footprint, from the 2018/19 baseline, includes:

- Hybrid working
- Completion of the Sands Centre Redevelopment and closure of the Pools.
- Completion of the Civic Centre Ground Floor Reinstatement.
- Completion of the footway lighting replacement project.
- Replacement of machinery, cars and small vans with Electric Vehicles operating out of an improved depot, suitable for supporting this new fleet.
- Replacement of petrol powered hand operated equipment with battery powered equipment.
- Energy efficiency improvements to operational assets delivered through the Asset Management Plan and externally funded projects.
- Reduction in business miles claimed for petrol and diesel vehicles, as employees switch to Electric Vehicles.
- Net biodiversity gains and negative emissions through green spaces strategy.
- Net biodiversity gains and negative emissions from 'Start with the Park' approach to St. Cuthbert's Garden Village.

Beyond the first five years (2025-37) the following scenarios would enable further reductions in the Council's carbon footprint, subject to available technology without incurring excessive costs:

- Replacement of waste fleet with alternative fuelled vehicles operating out of an improved depot, suitable for supporting this new fleet.
- Switching from non-renewable to renewable energy supplies for gas and electricity across all operational assets.
- Reduction in business miles claimed for petrol and diesel vehicles as employees continue to switch to Electric Vehicles.
- Increased microgeneration of renewal energy from Council's operational assets.
- Inclusion of all Council's Green and Blue Infrastructure in Land Use, Land Use Change and Forestry (LULUCF).

Organisation Actions (2022/2023)

Theme	Action	LECCS Obj.	Timeframe	Outcome	Carbon Footprint	Finances
Assets	Heat Decarbonisation Plan	1	2022/23 onwards	The focuses on identifying carbon reduction measures, with a specific focus on the decarbonisation of heat. The plan describes the current position with the portfolio's energy use and its plans for reducing/or decarbonising its energy use.	Production (Scope 1: Gas and Heating Oil and Scope 2: Electricity)	Bid for externally funding
Assets	Crematoria Infrastructure	1	2022/23	New infrastructure for the crematorium including replacement cremators, assuming electric replacement.	Production (Scope 1: Gas and Heating Oil and Scope 2: Electricity)	Budget 2022/23
Assets	Sands Centre Redevelopment	1	2020/21- 2022/23	Improved energy and heat efficiency from the Leisure estate. Reduced demand on asset management and future maintenance.	Production (Scope 3: Leisure centre) and Consumption (Leisure and recreation, attractions)	Capital Budget
Assets	Asset Management Plan Maintenance Plan	1	2022/23	Improved energy and heat efficiency of the operational and community building assets	Production (Scope 1: Gas and Heating Oil and Scope 2: Electricity)	Budget 2022/23
Assets	Energy Management System	1	2022/23	Improved energy and heat efficiency.	Production (Scope 1 and 2)	Funded through existing budgets
Assets	Fleet Strategy: Vehicle replacement reviews for each service area.	1	2022/23	Regular review of fleet replacement programme to forecast future costs for vehicle replacement.	Production (Scope 1: Petrol and Diesel and Scope 2: Electricity)	Budget 2022/23 and future external funding bids
Assets	Future fleet and depot options: Depot infrastructure	1 & 5	2023/24	Assess capacity and step-up charging infrastructure in depot to support this expansion.	Production (Scope 1: Petrol and Diesel and Scope 2: Electricity)	None required

Theme	Action	LECCS Obj.	Timeframe	Outcome	Carbon Footprint	Finances
Assets	Fleet: Energy Saving Trust Consultancy (EST)	1	2022/23	Advice and recommendations on fleet and mileage to improve energy efficiency.	None	None required
People	Staff competencies: Promoting Personal Wellbeing and Environmental Responsibility	1 & 5	2022/23	Core values and competencies included in Appraisal round.	Production and Consumption	None required
Technology	ICT Strategy: Agile working ICT equipment and networks	1	2022/23	Reduction in travel to and from work and between work settings.	Production and Consumption	Current budget
Finance	Funding Strategy: Identifying CAPEX Opportunities for decarbonisation and renewal energy.	1	2022/23	Maximising external funding.	Production (Scope 1 and 2)	None required

Local Actions (2020-2025)

Theme	Activity	LECCS Obj.	Outcomes
Local Plan	St Cuthbert's Garden Village : Strategic Design Framework	2.	The Masterplan Framework appraised several spatial alternatives for the distribution of homes, jobs and community infrastructure. This took account: landscaping (such as topography and physical features); the need to retain a village-like character; sustainable mobility (prioritising walking cycling and public transport to new local centres, schools and services); and provision of a range of housing densities and usable open spaces and green infrastructure.
Local Plan	Local Plan / Annual Monitoring Report: 106 'planning gain' projects	2	Projects that will: Prescribe policy interventions Compensate for local loss of value or amenity Mitigate with positive impacts.
Local Plan	Introduce a Consequential Improvements Policy as part of the Local Plan	2	Energy efficiency improvements through planning, development control and building control.
Local Plan	Supplementary Planning Document adapt to the impact of Climate Change	5	Existing policies: CC4_Flood risk and development CC5_Surface water management and Sustainable Drainage Systems
Local Plan	Promote low carbon and renewable energy provisions in new developments through Local Plan policies.	2	Current policies are: CC1_Renewal energy CC2_Energy from wind CC3_Energy conservation, efficiency and resilience.
Local Plan	Biodiversity net gain	5	Strengthened biodiversity duty Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity •
Regeneration	Town Investment Plan	2,3 & 5	The focus will be on clean housing growth and low carbon lifestyles. To enable Carlisle's businesses, people and communities to be resilient to current and future economic and environmental challenges including climate change, economic exclusion and unemployment, and recovery from the Covid-19 pandemic.

Theme	Activity	LECCS Obj.	Outcomes
Regeneration	Carlisle Station Redevelopment	2,3 & 5	These improvements will increase connectivity and help future proof the station.
Regeneration	Future High Street Fund	2,3 & 5	Revitalising the Historic Quarter and evening economy are key regeneration priorities.
Regeneration	<u>Caldew Riverside</u>	2,3 & 5	The development of this site will fundamentally improve the vitality and viability of Carlisle's city centre by delivering a modern urban living opportunity.
Housing	Private Sector Housing Enforcement Policy and action	2	The Private Sector Housing function is to improve the standard of private sector properties through, education, advice and enforcement. Enforcing the minimum level of energy provisions within their area.
Housing	Empty Homes	2	The need to bring empty private sector dwellings back into use is a key objective that is part of a wider strategy to tackle housing affordability.
Housing	An integrated model and Housing Stock Condition Database (HSCD) and report (SAP)	2	The detailed housing stock information provided in this report will facilitate the delivery of housing strategy and enable a targeted intervention approach to improving housing, sections on Fuel poverty and energy efficiency. Includes improvement scenarios.
Housing	Homelife- home improvement grants	2	Homelife Carlisle has various fully funded home improvement grants to help residents stay safe and warm and promote independence and healthy.
Housing	Homelife – Green Homes Grant (LADS Round 1b and Round 2) Sustainable Warmth Cumbria	2	A bid for funding under this scheme to improve the energy efficiency of low-income households in their area.
Housing	Work with developers to deliver sustainable housing developments in Carlisle and promoting sustainable construction methodologies.	2	Promoting sustainable construction.
Housing	Work in partnership with social landlords, developers and architects to share knowledge and learning on sustainable construction.	2	Promote the application of these principles on new developments and refurbishment of existing stock.
Building Control	Energy Efficiency of developments (Part L Compliance)	2	Building Regulations are set by the Government to protect the health and safety of people in and out of buildings, to promote energy saving and to make sure building works provide enough access and facilities for workers.

Theme	Activity	LECCS Obj.	Outcomes
Movement	Carlisle Local Cycling & Walking Infrastructure Plan	3	A plan to invest in active travel.
Movement	Local Transport Plan Projects	3	LTP3 & LTP4 Implementation Plan.
Movement	Electric Vehicle Charging: On street Charging Infrastructure Working with partners to expand provision	3	Stimulate demand for EV's in areas without off street parking Increased take up of electric vehicles, allowing people to save money on fuel costs Reduction air pollution and CO2 emissions
	of EV charging points in Carlisle including electric bikes		
Movement	Support and promote a Travel to Work Partnership to develop travel options for employees.	3 & 5	Low carbon, active transport options (walking and cycling) for commuting and work travel.
Waste & Recycling	Partnership: Coordinate local response to Government Waste Strategy	4 & 5	Delivery of a new Waste Strategy through the Cumbria Strategic Waste Partnership. Reducing carbon from Waste Sector in line with Cumbria-wide target of Carbon neutral by 2037.
Enforcement	Local Environment ASB Strategy	5	Tackling local ASB related to the local environment.
Air and water quality	Air Quality Annual Status Report Action Plan	3	Improved respiratory health and a reduction in associated health inequalities. Help people live healthier lives by preventing ill health and harm and promoting public health. Air pollution removal
Future Flood Risk Management	Multi-agency Flood Plan	5	Small area plans to respond to and recover from future flooding.
Future Flood Risk Management	New Coastal Strategy	5	This strategy forms a key step in setting out our future approach to managing risks and will feed into our local plans.
Severe weather and related risks	Work with partners of the Cumbria Local Resilience Forum to ensure that plans are in place to respond to climate change risks.	5	Ensure that these plans are regularly tested and reviewed.
Green infrastructure, countryside and landscapes	Green Infrastructure Strategy	5	Evidence base for Local Plan.

Theme	Activity	LECCS Obj.	Outcomes
Green infrastructure, countryside and landscapes	Green Spaces Strategy	5	To manage our green estate as a diverse and flourishing natural resource which provides a range of environmental services including resilience against future flooding, reducing the impacts of climate change and providing rich and varied wildlife habitats.
Green infrastructure, countryside and landscapes	Cumbria Coastal Community Forest	5	Potential sites that would be suitable for the Cumbria Coastal Community Forest project. The aim is to create a minimum of 5,000 hectares of new woodland along a 56 mile stretch of the western coast of Cumbria over the next 25 years.
Wildlife and habitats (biodiversity)	Get Cumbria Buzzing	5	Biodiversity and carbon capture co benefits.
Wildlife and habitats (biodiversity)	Co-benefits of Phase 1 Flood Defences enhancements	5	Enhancing habitats in Melbourne Park and improving recreation facilities, including new park benches and entrance features.
Wildlife and habitats (biodiversity)	Cumbria Local Nature Recovery Strategy	5	Local Nature Recovery Strategies to support a Nature Recovery Network
Engagement	Place Standard Project (Climate Lens)	5	The Place Standard tool provides a simple framework to structure conversations about place. It allows you to think about the physical elements of a place (for example its buildings, spaces, and transport links) as well as the social aspects (for example whether people feel they have a say in decision making). The 'Climate Lens' is intended to add a local view on global trends.
Community Development	Carlisle Resilience Group ~Community Resilience 'future shocks'	4 & 5	Ensure our communities are resilient and prepared for winter and consider planning for future emergencies.
Community Development	Collaborative Funding Pilot	5	Explore the opportunity to pilot a collaborative funding model across the locality.
Food	Work with partners on the Sustainable Food Action Plan to achieve Sustainable Food City Status.	5	A holistic approach to food and that are achieving significant positive change on a range of key food health and sustainability issues.

Action planning through regional and countywide partnerships

The key countywide partnerships are listed below, each of these partnerships have multi-agency, countywide strategies and plans in progress or in place. Working across these partnerships will help deliver this strategy:

Borderlands Inclusive Growth Deal

Encouraging Green Growth: Borderlands is committed to becoming a carbon neutral region. Our whole system approach to investing in green energy, coupled with our plans to maximise the benefit from our outstanding natural resources will lead to a vibrant economy driven by clean energy.

Energy Investment Company

A newly established Borderlands Energy Investment Company will act as a strategic coordinator and investment route to establish a Borderlands Energy Masterplan. A successfully managed and delivered Energy Masterplan with priorities, that complement the UK and Scottish Government's' policies for clean growth and energy will establish a route to bringing Borderlands closer to a carbon neutral region whilst making our area more attractive to live and work in. The Borderlands' Energy Investment Company will be established and operated by the five member authorities, along with the UK and Scottish Government. These seven public sector bodies would be the main members further supported by a technically skilled energy-specific governance structure highlighted in this Strategic Outline Business Case and further supported by the established wider Borderlands governance structure.

Energy Masterplan

The overarching Borderlands Energy Masterplan will be developed following a Scottish Enterprise designed approach, and will establish: The role of green energy in delivering growth through new business opportunities and investment and a basis for future planning and investment decisions. Masterplanning is identifying investment activity that needs to be taken forward at a Borderlands wide geographic area, and activity that needs to take place at a more local level.

The masterplanning covers private sector investment appetite, feasibility of securing investment, and role of public funds in levering this investment, which will provide important direction in generating project ideas for the company to assess The master planning exercise will draw on the baseline of information and strategic planning that is already available or underway. This includes baseline evidence for each of the four geographies which comprise Borderlands. For the South of Scotland this is collated in a study undertaken for Scottish Government in Spring 2018 (BuroHappold study), while in Cumbria and Northumberland, baseline information can be derived from sub-national data held by BEIS and analysed in the development of the respective local energy strategies for each area.

Natural Capital Innovation Zone: Linked to the Innovation Centres for Dairy and Forestry, this designation will present opportunities to introduce new ways of working. These will fuse together the best practice from both environmental stewardship initiatives (such as the Defra pioneers, landscape partnerships, river trusts, forestry investment zones) and economic and social growth initiatives (such as the LEADER, neighbourhood and community planning, and strategic economic plans) to maximise the full benefit from our countryside within the context of responding to climate change.

Zero Carbon Cumbria Partnership

• Project Plan 2020-2025

Cumbria Strategic Waste Partnership

New strategy and sub groups in progress.

Cumbria Strategic Flood Partnership

• Strategy works underway.

Cumbria Local Resilience Forum

• Strategy and Programme in place.

Cumbria Public Health Alliance

• Joint Public Health Strategy and action plan.

In addition the following strategies will be important in achieving the countywide target:

- Cumbria Transport Strategy (Previously Local Transport Plan LTP).
- Cumbria Cycling Strategy /Cycling and Walking Infrastructure Plan (CWIPs).
- LEP Local Industrial Strategy.
- Local Energy Plan (LEP).
- Minerals and Waste Local Plan.

Areas for action planning, 2025-30 and beyond

Theme	Action	LECCS Obj.	Outcome
Assets	Fleet Strategy: Alternative fuels vehicle replacement plan for each service	1	Increase fleet challenge with further fleet reductions, increased use of alternative travel options and increased introduction of alternative fuelled vehicles.
Assets	Future fleet and depot options: shared resources such as pool cars and car clubs.	1 & 5	Continue to explore options to share resources.
Local Plan	Urban Consolidation Centres (UCC)	2	Urban Consolidation Centres can enable last mile deliveries to be made using electric freight vehicles (including e-bikes) rather than diesel-powered HGVs.
Local Plan	Pennine AONB Plan	5	Land Use, Land Use Change and Forestry (LULUCF) interventions to help offset within the UK.
Local Plan	Solway AONB Plan	5	Land Use, Land Use Change and Forestry (LULUCF) interventions to help offset within the UK.
Future Flood Risk Management	Natural Flood Management Projects	5	Reduce flood and coastal erosion risk through measures that help to protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast.
Wildlife and habitats (biodiversity)	Net Bio diversity Gain for all our parks and open spaces	5	Biodiversity and carbon capture co benefits.

Definitions and glossary

The definition of local environment for the strategy is the surrounding conditions or forces, these can be local or global conditions or forces. Covering topics to include:

- Air and water quality
- · Ambient noise and light
- Climate change, adaptation (Future Flood Risk Management)
- Climate change, mitigation and low carbon energy
- Contaminated Land
- · Green infrastructure, countryside and landscapes
- Tackling pollution
- Severe weather
- Waste minimisation
- Wildlife and habitats (biodiversity)

t tonnes

kt thousand tonnes mt million tonnes

CO₂e Carbon Dioxide equivalents

IPCC Intergovernmental Panel Climate Change.

GHG Greenhouse Gas

GGP Greenhouse Gas Protocol.

Carbon Footprint A carbon footprint measures the total greenhouse gas emissions

caused directly and indirectly by a person, organisation, event or

product.5

Net- zero Carbon neutral or net zero carbon is the goal of ensuring that any

given activity does not cause any additional carbon dioxide (or other greenhouse gas) to be added to the atmosphere. The net zero position can be achieved by balancing a measured amount of carbon

released with an equal amount of carbon offsetting activities.

Decarbonisation The process of removing or reducing the carbon dioxide (CO2) or

equivalents from human activities.

LULUCF Land use, land-use change and forestry.

-

⁵ Carbon Trust

Links and references

Local Environment (Climate Change) Strategy (LECCS)

https://www.carlisle.gov.uk/Council/Council-and-Democracy/Climate-Change

National Net Zero Strategy: Building Back Greener

https://www.gov.uk/government/publications/net-zero-strategy

Zero Carbon Cumbria Programme

https://cafs.org.uk/our-projects/zero-carbon-cumbria-programme/

Ashden Toolkit

https://ashden.org/climate-action-co-benefits-toolkit/

Friends of the Earth 33 Actions for Local Councils

https://policy.friendsoftheearth.uk/insight/33-actions-local-authorities-can-take-climate-change

Climate Emergency Action Planning

https://climateemergency.org.uk/session-one/

Committee on Climate Change Net Zero report

https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf

National Climate Assembly Report recommendations

https://www.climateassembly.uk/report/

UK Baseline

https://www.ons.gov.uk/economy/environmentalaccounts/articles/netzeroandthedifferentofficialmeasuresoftheuksgreenhousegasemissions/2019-07-24

Cumbria Baseline Report

https://www.cumbriaobservatory.org.uk/environment/environment-further-information/

BEIS, June 2019, UK local authority and regional carbon dioxide emissions national statistics: 2005-2017. https://tinyurl.com/UKCO2PB

Centre for Ecology & Hydrology for BEIS (2019). Mapping Carbon Emissions & Removals for the Land Use, Land Use Change and Forestry Sector: Report based on the 1990-2017 Inventory. See: www.gov.uk/government/statistics/uk-local-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017.

Carbon Trust

https://www.carbontrust.com/resources/carbon-footprinting-guide

Local Government Association

https://www.local.gov.uk/our-support/climate-change