Report No: PP33/21

Eden District Council Executive

23 November 2021

Zero Carbon Eden Strategy

Portfolio:	Sustainability	
Report from:	Assistant Director Delivery	
Wards:	All	
OPEN PUBLIC ITEM		

1 Purpose

1.1 This report is to seek authorisation to approve the new strategy regarding to the implementation of the action plan to make the council's operations zero carbon by 2030.

2 Recommendation

2.1 It is recommended that the strategy and action plan set out in appendix 1 be approved.

3 Report Details

- 3.1 In order to respond to climate issues that have been caused by an increase in anthropogenic greenhouse gas emissions, Eden District Council is taking action to reduce our emissions and to find solutions to mitigate the effects of climate change.
- 3.2 Eden District Council declared a Climate and Ecological Emergency in July 2019. The objective is to make the Council's operations zero carbon by 2030, to encourage initiatives which help Eden District to become net zero carbon; to improve biodiversity while preserving our working cultural landscapes and economies. Our wish is for Eden to be a sustainable place where everyone has an opportunity to prosper.
- 3.3 This strategy has been produced to show the actions that the Council will take to achieve net zero carbon emissions across the Council's activities, as well as working to influence the wider district to work towards the same objective by 2030.
- 3.4 The Zero Carbon and Biodiversity Strategy is fundamental to the delivery of our Council Plan. This underpins the Council's work by setting out its clear vision for the district and the priorities it will focus on in order to deliver that vision.
- 3.5 This strategy will support the delivery of all corporate priorities with a particular focus on improving the Council's Carbon Footprint (becoming a net-zero district) and protecting Eden's working cultural landscapes and biodiversity, aiming to store more carbon than is produced in the District. In addition to this and in conjunction with the Housing Strategy 2021-2026 there will also be an

- emphasis on improving housing (both new and existing) to be more energy efficient.
- 3.6 The full Zero Carbon Strategy and action plan is detailed in Appendix 1.

4 Policy Framework

- 4.1 The Council has four corporate priorities which are:
 - Sustainable;
 - Healthy, safe and secure;
 - Connected; and
 - Creative
- 4.2 This report meets Sustainable, and Healthy, safe and secure corporate priorities.

5 Consultation

5.1 Consultation has taken place with members who are part of the zero carbon working group.

6 Implications

6.1 Financial and Resources

- 6.1.1 Any decision to reduce or increase resources or alternatively increase income must be made within the context of the Council's stated priorities, as set out in its Council Plan 2019-2023 as agreed at Council on 7 November 2019.
- 6.2.2 Budget has been allocated to the activity outlined in the zero carbon strategy in appendix 1. There are no proposals in this report that would reduce or increase resources at this present time.

6.2 Legal

6.2.1 In June 2019, the UK became the first major country to legislate for a net-zero target for carbon emissions by 2050.

6.3 Human Resources

6.3.1 This work will be carried out within the sustainability team and will be dependent on recruiting to current vacancies.

6.4 Environmental

6.4.1 There are significant effects on carbon emissions and ecosystems which are detailed in full in Appendix 1.

6.5 Statutory Considerations

Consideration:	Details of any implications and proposed measures to address:
Equality and Diversity	N/A
Health, Social Environmental and Economic Impact	A wide range of actions will be introduced over time, saving carbon in a multitude of ways; ultimately offsetting and sequestration will be required to balance the 'un-saveable carbon', all plausible savings will be targeted, overall

Consideration:	Details of any implications and proposed measures to address:
	resulting in a below net zero carbon balance.
Crime and Disorder	N/A
Children and Safeguarding	N/A

6.6 Risk Management

Risk	Consequence	Controls Required
Risks to public, financial or reputational risk to Council – By failing to take action to reduce impact on climate change.	In the future, Cumbria should expect more variance during the seasons with hotter and drier summers and wetter and milder winters.	Implementation of a wide range of activity and engagement to raise awareness and reduce emissions.
	Reputational damage if seen to not be taking suitable action.	

7 Other Options Considered

7.1 None.

8 Reasons for the Decision/Recommendation

8.1 It is recommended that the Council approve this report in order to address issues outlined in the Climate and Ecological Emergency declaration made in July 2019.

Tracking Information

Governance Check	Date Considered
Chief Finance Officer (or Deputy)	10/11/2021
Monitoring Officer (or Deputy)	10/11/2021

Appendices: Appendix 1 - Zero Carbon and Biodiversity Strategy

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Appendix 1



November 2021

Zero Carbon & Biodiversity Strategy (2021 – 2030)







Contents

1.	Introduction	3
	1.1 Climate Change	3
	1.2 Cumbria	3
	1.3 Eden District	4
2.	Eden District Council's Role	7
	2.1 Climatic and Ecological Emergency	7
	2.2 The Corporate Plan 2019-2023	7
	2.3 Recovery Plan	8
	2.4 Carbon Footprint	8
	2.5 Eden District Council's Carbon Footprint	9
	2.6 Eden District's carbon footprint	10
	2.7 Parish level	11
3.		
4.	Eden District's Action Plan	14
	4.1 Carbon Reduction and Biodiversity Action Plan – The Context	15
	4.2 Initial Action Plan	15
	4.3 Our Asset and Energy	0
	4.4 Sustainable Transport	1
	4.5 Waste	3
	4.6 Support	4
	4.7 Community Engagement and Publicity	5
	4.8 Land Use	6
5.	Biodiversity	0
	5.1 Introduction	0
	7.2 Biodiversity in context	0
	7.3 Legislation and policy	0
	7.4 Eden District Council's role	1
	7.5 Our vision	1
	7.6 Biodiversity Net Gain.	2
	7.6 BNG Methodology:	2
	7.7 Priority habitats and species	3
	7.1 Priorities habitats	3
	7.2 Priorities Species	5
6.	Biodiversity Objectives and Action Plan	0
9.	Monitoring progress	2

Reference0



1. Introduction

1.1 Climate Change

Climate change can be characterised as a long-term change in the average local, regional, weather patterns and global climate. The changes observed in the Earth's climate since the early 20th century are primarily driven by human activity and particularly, by burning fossil fuels which increases the amount of heat-trapping greenhouse gases in the Earth's atmosphere¹. An increase in global temperature has contributed to more regular and intense extreme climatic events such as floods, droughts, storms and many more that are impacting human lives and ecosystems across the globe.

Figure 1 shows that the average temperature of the United Kingdom has been steadily increasing since the 2000s. Since 1884, the 5 warmest years in the United Kingdom have been reported in the last 14 years.

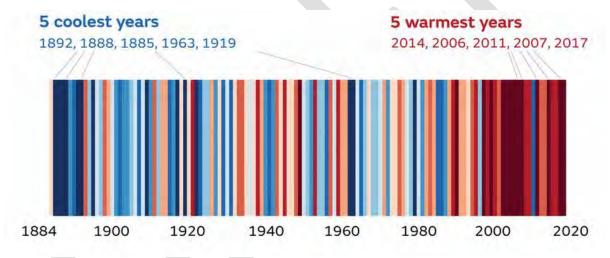


Figure 1, Warmer and cooler years in the UK since 1884 (Met Office, 2019)

1.2 Cumbria

In Cumbria the climate is influenced by the North Atlantic Drift which, along with the mountainous terrain makes it the wettest region of England. The average annual precipitation is about 3,000 mm but this varies greatly depending of the location².

Over the past decade, Cumbria has been affected by the effect of climate change through 3 flooding events, including Storm Desmond in2015, which caused much damage and disruption across the region.

These storms are predicted to be more frequent due to the actual trends of climate change, which mean that Cumbria will be more vulnerable to more frequent and intense floods and storm episodes.

¹ NASA. 2020. Overview: Weather, Global Warming and Climate Change:

² Met office. 2020. What is Climate Change?

In the future, Cumbria should expect more variance during the seasons with hotter and drier summers and wetter and milder winters.

1.3 Eden District

Similar to the general climate of Cumbria, the Eden District experiences the same maritime climatic influence, but due to its location, the district appears to be much dryer than the average of Cumbria with only 800mm per year³.

Figure 2 shows the evolution of temperature and precipitation recorded by Newton Rigg's weather station. The average temperature has risen by around 1 degree Celsius since 1959, but 60% of the average annual temperature reaching >9°C have been recorded after 2000.

The precipitation overall has increased by 200mm in 60 years.

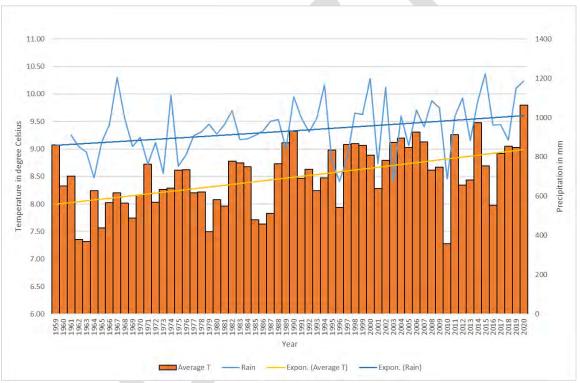


Figure 2, Annual temperature and precipitation variation since 1959 (Cortiula C.)

The climate across the Eden District will be further affected by the rise in average temperature and precipitation leading to an increase in frequency and severity of extreme weather events (storms, draught, hails, etc.). Due to its geographical location, the landscape of the Eden District is mainly composed by lowland (below 60m) making the area more subject to frequent and long periods of flooding³

According to the Paris Agreement, 196 parties including the United Kingdom have agreed to curb global warming to well below 2 degrees Celsius, preferably by 1.5 degrees Celsius, compared to pre-industrial levels. To help tackle the effect of climate

³ Met office 2016; North West England & Isle of Man: climate

change, most levels of government must act urgently. Nowadays, 74% of local authorities throughout the United Kingdom have already declared a climate emergency. Small scale actions are essential to tackle the climate and ecological emergencies⁴

Strategic Planning

The following action plan fits with and alongside all other council plans and strategies and ultimately the Sustainability objectives outlined in this document will need to be reflected in all future policies and provision of services.

COP₂₆

This year the UN Climate Change Conference (COP26) is bringing together almost every nation in the UK to reach agreement on how to tackle climate change and how to implement the Paris Agreement made in 2015.

The COP26 will be the moment for countries to update their plans for reducing carbon emissions and focus on more effective means to adapt to the impacts of climate change and climate-resilient development to keep temperature rise to 1.5 alive. The decade out to 2030 will be crucial and the COP 26 needs to be decisive.

More than 190 world leaders, tens of thousands of negotiators, government representatives, businesses and citizens will meet in Glasgow for twelve days to talk and explore solutions.

The mains goals of the COP26 are:

- 1. Secure global net-zero by mid-century and keep 1.5 degrees within reach
- 2. Adapt to protect communities and natural habitats
- Mobilise finance
- 4. Work together to deliver

Eden District Council's Carbon Reduction and Biodiversity Action Plan has aligned its sustainability actions in relation to the above COP26 goals.

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⁴ United Nation, 2015. Paris Agreement

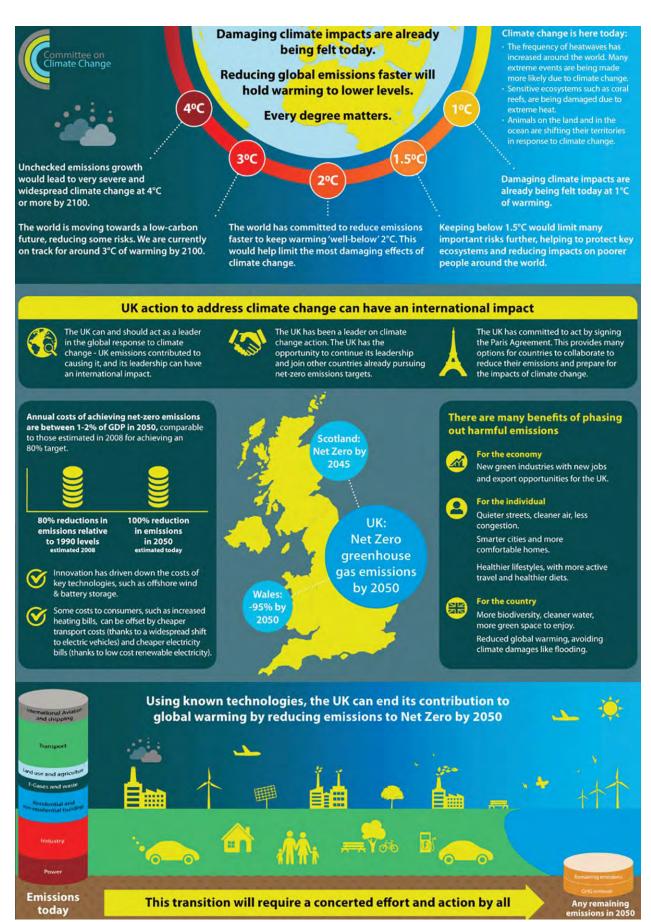


Figure 3, Impact of Climate Change and UK action plan to be carbon neutral by 2050 (Committee on Climate Change, 2019)

2. Eden District Council's Role

In order to respond to climate issues that have been caused by an increase in anthropogenic greenhouse gas emissions, Eden District Council is taking action to reduce our emissions and to find solutions to mitigate the effects of climate change.

2.1 Climatic and Ecological Emergency

Eden District Council declared a Climate and Ecological Emergency in July 2019. The objective is to make the Council's operations zero carbon by 2030, to encourage initiatives which help Eden District to become net zero carbon; to improve biodiversity while preserving our working cultural landscapes and economies. Our wish is for Eden to be a sustainable place where everyone has an opportunity to prosper.

This strategy has been produced to show the actions that the Council will take to achieve net zero carbon emissions across the Council's activities, as well as working to influence the wider district to work towards the same objective by 2030.

At Eden District Council we are responsible for our own emissions and aspire to set an example to other organisations and residents that net zero carbon is achievable. As a local authority we also have the ability to directly and indirectly influence the emissions of the district as a whole.

2.2 The Corporate Plan 2019-2023

The Zero Carbon and Biodiversity Strategy is fundamental to the delivery of our Council Plan. This underpins the Council's work by setting out its clear vision for the district and the priorities it will focus on in order to deliver that vision.

The Council Plan identifies its vision as "For Eden to become a place where the people act together to meet the needs of all and ensure the wellbeing of future generations." In order to achieve this goal there is a focus on four priorities:

Eden District Council's Corporate Priorities				
Sustainable	Healthy, Safe and	Connected	Creative	
Co-produce	Secure	Improve digital	Support Businesses to	
economic	Improve housing,	connectivity, transport	respond to national	
opportunities and	both new build and	and access to attract and	and global changes	
strategies that will	existing, working	support businesses,	and encourage	
protect Eden's	towards self-	employees and families,	innovation in tourism,	
working cultural	sufficiency in energy	connecting Eden with the	food and green	
landscapes and	and co-produce	global economy and	industries and develop	
biodiversity aiming	healthy, connected,	knowledge industries.	arts and cultural	
to store more	prosperous	People are connected in	activities to add to	
carbon than is	communities for all,	communities with access	town centre vibrancy,	
produced in the	urban and rural	to education, work,	support communities	
District		healthcare and leisure	and improve health	
			and well-being	

This strategy will support the delivery of all corporate priorities with a particular focus on improving the Council's Carbon Footprint (becoming a net-zero district) and protecting Eden's working cultural landscapes and biodiversity, aiming to store more carbon than is produced in the District. In addition to this and in conjunction with the Housing Strategy 2021-2026 there will also be an emphasis on improving housing (both new and existing) to be more energy efficient.

2.3 Recovery Plan

The COVID-19 pandemic has highlighted the importance of the environment around us, bringing many of us closer to nature. The pandemic has also provided us with a unique opportunity for change as we have had to reconsider the way we live. It is essential that we continue to welcome change as we recover from the pandemic, to create a future that sees healthy populations living in harmony with a thriving natural environment.

The strategic aim of our Recovery Plan is to Build Back Better in a way that rebalances the relationship between the economy, communities and the environment to ensure repaid rebuilding where needed and sustainable growth and improvement into the future. Our Recovery Plan contains many cross cutting interventions working within our key priorities. Many of these interventions fall under sustainability, aiming to reduce carbon and support biodiversity while promoting our other priorities. This Strategy builds on the Recovery Plan, developing sustainability initiatives and showing what can be done to reduce Eden District Council's carbon footprint, as well as the carbon footprint of the district.

2.4 Carbon Footprint

Carbon footprint is defined by the total amount of greenhouse gases (GHG) emitted directly and indirectly to support a business or a person's lifestyle and activities. Carbon footprints are usually measured in equivalent tonnes of CO₂ over a year and can be related to an individual, an entity, an event, a production chain, and many other activities⁵.

To aid analysis and to understand the greenhouse gas emissions sources, the different gas emissions are generally broken down into 3 major categories ⁶

- <u>Scope 1:</u> All direct emissions produced from or under the control of an organisation's operations.
- Scope 2: Indirect emissions from electricity consumed by the organisation.
- Scope 3: All other indirect emissions from activities linked with the organisation that derive from sources that it doesn't own or control.

⁵ Solé A., Miro L., F.Cabeza L., 2018. High temperature Thermal Storage Systems Using Phase Change, Chapter 10 – Environmental Approach. Academic Press.

⁶ GHG Protocol and Carbon Trust Team, 2013. Technical Guidance for Calculating Scope 3 Emissions (version 1.0)

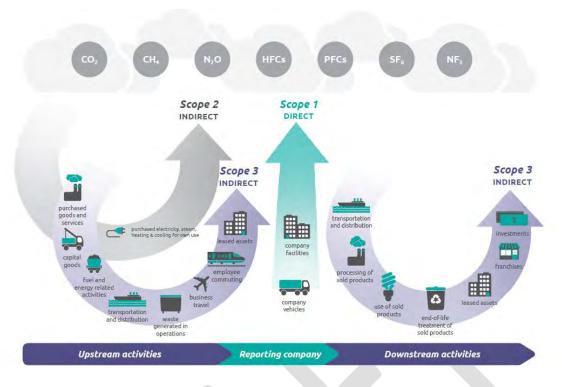


Figure 4, sources of GHG emissions categorised in their scopes. (Greenhouse Gas Protocol, 2013)

2.5 Eden District Council's Carbon Footprint

The following carbon footprint data measures the greenhouses gas emissions that have been emitted under the council's direct and indirect control. This includes emissions from the council buildings, energy consumption, and fleet vehicles, use of personal vehicles for staff, as well as transmissions and distribution.

During 2018/19, Eden District Council has released about 221.75 tCO₂e. This is a 4.44% decrease from 2017/18; a positive note that inspires us to work towards our ambition to be carbon free by 2030.

Figure 5 shows the estimated CO₂e emissions from Eden District Council for 2018/19. Electric use represents 71.5% of our total emissions, this includes electric use in our properties, but also from street lighting and other street scene functions. Followed by staff business travel, at 17%, accounting for the journeys made by staff for work. Therefore these are the main areas to focus our effort to internally to reduce our impact on the environment. Heating and water related emissions have a much smaller impact of 3% and 1% respectively, however and whilst they are still important areas to manage when considering our targets.

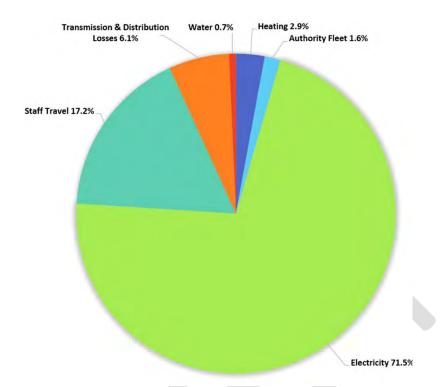


Figure 5, Eden District Council Overall CO2e emissions

2.6 Eden District's carbon footprint

The carbon footprint of each Cumbrian local authority area has been individually estimated by *Small World Consulting* in their Carbon Baseline for Cumbria report⁷, allowing us to observe the disparity in carbon footprint from one district to another.

Production-based greenhouse gas emissions calculate emissions that are generated from the domestic production of goods and services regardless of whether they are consumed domestically or abroad⁸.

As shown in Figure 6, Eden District produces 703ktCO₂e per year. Compared to all other districts, Eden District register the highest CO₂ emissions in Cumbria, followed closely by South Lakeland with 665 ktCO₂e. A part of the calculation has integrated our potential CO₂e offsetting from Land Use, Land Use Change and Forestry (LULUCF), which has the potential to offset 30ktCO₂e.

(Carbon offsetting is a way to compensate for our CO2e emissions by funding an equivalent carbon dioxide saving elsewhere).

⁷ Moss J., Berners-Lee M., Freitag C., and Donaldson S., 2020. A Carbon Baseline for Cumbria. Small World Consulting Ltd

⁸ Karakaya E., Yılmaz B., and Alataş S., 2018. How Production Based and Consumption Based Emissions Accounting Systems Change Climate Policy Analysis: The Case of CO₂ Convergence. MPRA

As previously stated, the CO₂e emissions associated with industrial and commercial use and agriculture are the highest in Eden compared to the other districts. However, emissions related to domestic energy are amongst the lowest in Cumbria.

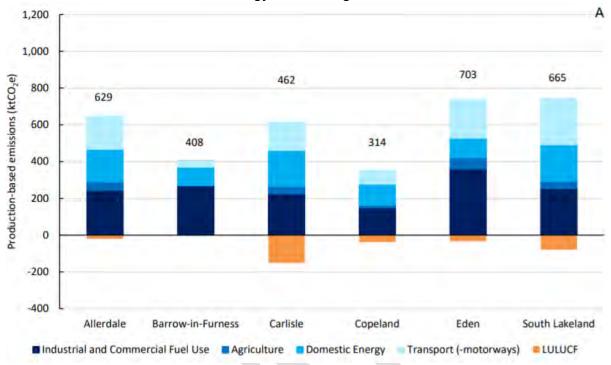


Figure 6, Emissions of CO2e according to each Cumbrian Districts (Moss J., et al, 2020)

Production-based emissions do not integrate the production of goods and services that are used in the district (by tourists, industries and/or residents) when they are produced somewhere else in the United Kingdom or abroad. In order to provide a more reliable carbon footprint for the district, it is necessary to take into account the consumption-based emissions as well.

2.7 Parish level

To assess the carbon footprint of the different parishes that compose Eden District, a carbon calculation tool has been created by Centre of Sustainable Energy.

This <u>online tool</u> will allow Eden District Council to observe carbon emissions emitted locally and to engage with parishes to find mitigation and adaption solutions that will help them reduce their carbon footprint.

3. Vision for low carbon Cumbria.

Cumbria has used the services of *Small World Consultancy* to assess the carbon footprint of the county and Cumbrian districts. In the report Carbon Baseline for Cumbria, Small World Consulting provides a vision of what Cumbria's activities could look like in zero carbon scenario.

"The targets and recommendations that follow are intended as part of wider roadmap to a better future for Cumbria. We imagine them to be implemented in ways that maximise co-benefits, especially in terms of health, community and economy. This overall vision for Cumbria is broken down in the Carbon baseline Report from the perspective of residents, visitors and businesses. This is summarised as follows:



Zero Carbon Cumbria: The Vision



For Residents...

- Although there are more visitors, Cumbria feels less crowded
- People are spending less time on roads and exercising more
- Diets are improved and food is sustainably sourced
- Homes are more comfortable to live in and cheaper to run and more resilient to the climate crisis



For Visitors...

- Cumbria is more beautiful, quieter and cleaner
- It is easier to leave cars behind as bikes are more accessible
- The stunning landscape looks all the more beautiful with more wildlife, trees, less erosion and no pollution in our lakes and rivers

For Businesses...

- Economy thrives with more jobs, especially in Tourism, Land Management and Green Energy
- Emphasis on the green economy sectors shows that Cumbria is leading the way toward Net Zero and this is encouraging young, educated workers to take up job opportunities in the County
- Plenty of leisure time provides opportunities for employees to live active, healthy outdoors lives and this is a major draw for inward investment

4. Eden District's Action Plan

According to the Carbon Baseline for Cumbria, the county generated around 3.18 MtCO₂ in 2017. This includes emissions related to railways and carbon sequestration from land use (peat restoration and tree planting) but excluding all the emissions from the M6 motorway.

On average, a Cumbrian resident emits 12.7 tCO₂ per year which is 35% higher than the national average UK citizen (9.4tCO₂/year).

Figure 7 shows the improvement required in the tourism industries, consumption of goods and services and energy emissions to achieve the net-zero by 2030 in Cumbria. Land Use, Land Use Change and forestry will play an important role in the absorption of greenhouse gases and in the reduction and negation of our CO₂e emissions.

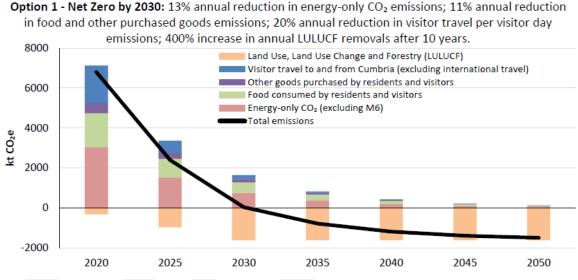


Figure 7, Actions needed to reach net-zero emission by 2030 (Moss J., et al, 2020)

In order to achieve the objective to make Eden District Council and the wider district net zero carbon by 2030, there are significant changes and actions that need to take place across the district to tackle the effects of climate change.

Eden District Council has started to implement several changes to reduce its carbon footprint:

What has the Council done?	How have /will the Council achieve this?	
Improving the energy efficiency of Eden District Council owned buildings.	Improve the insulation of Council owned buildings in order to reduce our energy usage.	
Reduce emissions related to transport.	Introduce new transport solutions to reduce direct and indirect carbon emissions.	

Introducing better waste management.	Reducing the amount of waste produced and improving recycling across Eden district.
Making Eden's communities sustainable.	Implementing new green energies and supporting residents and businesses to live in more sustainable way.
Protecting and enhancing biodiversity.	Taking actions to improve natural habitat and different ecosystems.

Eden District Council will also work with others to reduce the overall impact of and on the district

What will the Council do?	How will the Council achieve it?	
Providing a lead and setting an	Providing a phased action plan with a budget	
overall "direction of travel".	allocation up to 2030.	
Taking joint action with partners and	Supporting the actions and activities of	
organisations.	government, non-government and private	
	group.	
Working with businesses in the	Supporting an audit system and a grant	
district.	programme to support businesses in making	
	changes that benefit zero carbon and	
	biodiversity.	
Encouraging and enabling	Providing information sign posting and	
communities to take action.	support for local people to take positive	
	action on climate change.	
Providing a framework for action for	Provide a "visitor charter" to encourage	
visitors to the region.	considerate and sustainable tourism.	
Making room for Nature.	Talking small local action in support of habitat	
	and species diversity.	

4.1 Carbon Reduction and Biodiversity Action Plan – The Context

Eden District Council has ambitions to address the climate and biodiversity emergency with solutions focused on low carbon emissions and biodiversity enhancement.

This action plan is considered as a working document that will be annually reviewed, modified and updated.

4.2 Initial Action Plan

The plan that follows identifies key objectives and the necessary actions to achieve them.

Budgets will be allocated following a prioritisation process, focussing initially on achievable goals and long term projects that will build the impacts over time until 2030.

The plan is designed to be repeated over the period to 2030, and is primarily focused on the first 2 years of activity. The plan will be reviewed and updated annually and with the progress monitored. Feedback from monitoring and assessment of progression towards targets will be used to set subsequent actions, targets and budgets. As technology changes and the global advances towards more sustainable practices become available the plan will evolve.

A wide range of actions will be introduced over time, saving carbon in a multitude of ways; ultimately offsetting and sequestration will be required to balance the 'unsaveable carbon', all plausible savings will be targeted, overall resulting in a below net zero carbon balance.

For clarity the following Plan is split into 6 key themes:

- 1) Our Assets and Energy
- 2) Sustainable Transport
- 3) Waste
- 4) Support
- 5) Community Engagement and Publicity
- 6) Land Use

4.3 Our Asset and Energy

	Our Assets and Energy				
2021-2023 Objectives	Associated Actions	Measurement/ Target	Internal or External Action	Corporate Objective	
Reduce carbon emissions and improve environment / sustainability of Council's Properties	Retrofit Voreda House to Passivhaus standard - Replacing windows - Wrapping buildings - Natural ventilation system Improve energy management practises in Town Hall and Mansion House	Implement the new Pilio tool to measure the energy usage of EDC buildings to explore opportunities to reduce energy consumption and carbon emissions. Use the same tool to determine the energy, carbon and financial savings of Voreda. Action feasible when officers will move and start working in Voreda house (2023).	Internal	Sustainable	
Carbon Management Plan - EDC buildings*	Assess the carbon footprint of each building owned / managed by EDC and identify measures to reduce their carbon emissions.	Finished to complete the carbon management plan document and assess the potential retrofit / improvement that could be made in each EDC buildings to reduce our carbon footprint (2022). Find some funding to retrofit / improve / change our building to reduce our energy consumption. (Ongoing action).	Internal	Sustainable	

		Reduce by 10% our energy usage every year until reaching the minimum achievable.		
Increase staff awareness of carbon impacts and low carbon solutions	Provide accredited Carbon Literacy Training to staff	60% of the EDC staff and members should be carbon literacy trained by 2022.	Internal	Sustainable

4.4 Sustainable Transport

Sustainable Transport					
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective	
Encourage the use of electric vehicles for work	Introduce electric car charge points in the staff car parks Introduce electric pool cars or introduce electric car incentive	Install 2 charging points in EDC parking for staff by end of 2022 Change our EDC vans for Electric vans by 2024. Implementation of electric car incentive by end of 2023	Internal	Connected / Sustainable/ Healthy Safe and Secure	
Reduce amount of Employee Travel	Continue to develop digital connectivity and skills to ensure service continuity and encourage home working	Encourage officers of EDC to car share to come to work by end of 2022. Target of 75% of workforce to work all or part of their week remotely	Internal	Connected	

Reduce amount of Member Travel	Use of virtual meetings where consistent with legal and constitutional requirements	Already in place due to covid19	Internal	Connected
Encourage active travel for Employees and Members	Promote the Council's cycle scheme Improve office facilities to accommodate cyclists/walkers/runners	Target of 30% of officers to apply for the Cycle Scheme by 2023. Inclusion of 2 changing areas with showers in Voreda House.	Internal	Connected / Healthy, Safe & Secure
Improve online accessibility to council services for customers to minimise required travelling to Council officers	Continue to develop online platform My Account to provide more council services remotely Continue work on improving accessibility of online forms	Number of My Account registrations each quarter (This is already measured as part of Corporate Performance) Target of 50% Forms by end of Strategy Period changed from paper to online	Internal	Connected
Encourage increased cycling in the district through improved facilities and support	Work with Cumbria County Council to review County Cycling Strategy Assessment of needs for active transport provision in other towns (in addition to Penrith)	Actions not managed by the sustainability team at the moment, please ask objectives and target to the department in charge. (sustainability team only supporting these actions)	External	Connected/ Healthy, Safe and Secure

4.5 Waste

Waste				
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective
Minimise the Council's Office Related waste production	Reduce paper printing cross departmentally by the inclusion of more paper recycling bins throughout Departments Continue recycling redundant IT equipment, and find ways to recycling/reusing other	Introduction of 10 paper Recycling Bins for officer in each EDC buildings by 2022 Setting up recycling bins (e.g. tins, glass) in all communal kitchens by 2022	Internal	Sustainable
	equipment	Counting number of recycled pieces of IT equipment and recycle the maximum as possible or resale equipment still working (circular economy)		
Increase the emphasis of Sustainability in procurement	Introduce sustainability into our next update of the Council's Procurement Strategy Review Procurement Templates to include sustainability in tenders and contracts	New Procurement Strategy adopted by end of 2023 Implement sustainability into procurement strategy by end of 2022	Internal	Sustainable
Support Initiatives that preserve resources, minimise waste and promote circular economy	Continue to work with Cumbria Strategic Waste Partnership Support organisations working with businesses to promote	Explore ways to promote waste reduction, low carbon technology and circular economy with businesses in Eden	External	Sustainable / Creative

waste reduc	
technologie	

4.6 Support

Support					
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective	
Improve the environmental sustainability of local businesses	Through Greening Eden Businesses programme provide specialist advice and grants to businesses on measures to reduce both costs and carbon emissions Establish a web portal for businesses to match supply needs with other sustainable, local businesses	30 Eden business carbon audited by CBEN by end of 2022. 15 grants to be awarded by end of 2022.	Internal	Sustainable / Creative	
Support communities to develop low carbon projects	Establish community support schemes to help residents develop low carbon projects	20 parishes sign up to the Greening Campaign by end of 2022.	Internal	Sustainable / Connected	
Reduce levels of fuel poverty and improve energy efficiency of dwellings	Continue through the affordable warmth partnership to address fuel poverty Using Green Homes Grant to improve energy efficiency of low income, low efficiency households in the district	Accessing up to date Fuel Poverty Statistics when available Analyse data to estimate how much carbon emissions have been saved through at the end of this grant.	Internal	Sustainable/ Healthy Safe and Secure / Housing	

No. of Improvement Measures carried out via Green Homes Grant projects (Phase 1A, 1B and 2)	

4.7 Community Engagement and Publicity

Community Engagement	Community Engagement and Publicity					
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective		
Promotion of low carbon communities amongst Parishes	Engage with Parish Councils about community actions that will support the delivery of the vision, including commissioning specialist support work with parishes to use the carbon calculator to develop projects. Establish a fund to support project delivery. Develop (fund) projects with community such as community energy, greening development, community resilience, circular economy, etc.	20 parishes to sign up to the Greening Campaign by end of 2022 £15,000 allocated to community for green projects by mid 2023	Internal	Sustainable, Healthy Safe and Secure		
Establish communication	Engage with the wider public	Continue to engage with Parishes	Internal	Sustainable,		
campaign to inform	over possible and desirable	through the Greening Campaign to		Healthy,		

residents about	actions individuals could take to	reach 50% of participation by mid	Safe and
sustainability	reduce their environmental	2023	Secure
	impact.		

4.8 Land Use

	Land Use					
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective		
Balance carbon footprint through carbon sequestration projects and	Identify areas of EDC land for carbon sequestration	Assessment for carbon footprint sequestration potential of all the lands owned by EDC by end of 2022 to explore any potential for offsetting projects	Internal	Sustainable		
Cooperate and coordinate with external bodies to support biodiversity and conservation	Upland, moorland and heath management in partnerships Increase woodland coverage working with landowners, community groups, volunteers and other partners	Establish good partnerships with external organisations to promote and enhance biodiversity and natural habitat across Eden by end of 2023.	External	Sustainable		

5. Biodiversity

5.1 Introduction

The term biodiversity is define as:

"The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" 9

The world is witnessing a severe decline in the worldwide biodiversity. Since 1970, the mammals, birds, amphibians, reptiles and fish populations has decreased by 68%. The United Kingdom is one of the most nature depleted countries in Europe, with 15% of UK species threatened with extinction. The United Kingdom is one of the most nature depleted countries in Europe, with 15% of UK species threatened with extinction.

In acknowledgement of the pressures facing by our wildlife and natural habitats both locally and internationally, Eden District Council declared a biodiversity emergency in July 2019.

The biodiversity emergency requires all the different Council services to consider their impact on biodiversity and the ecosystems in their operations.

7.2 Biodiversity in context

An environment full of biodiversity is essential for supporting human life. In the recent years more and more documented examples of economic and environmental benefits have been demonstrate for the human being to take in consideration the natural environment and to work and live alongside nature.

Due to a constant growing population, the demand for food and energy production keep increasing, leading to a degradation, fragmentation and loss of natural habitats. With a constant decrease in the species diversity and the degradation of the ecosystems, the nature productivity, resilience and adaptability is at risk of long term damage or to collapse.

Nature also plays a significant role to reduce the effect of climate change. From the top of the mountains to the bottom of the seas, there are various natural processes that sequestrate carbon naturally. The degradation of natural habitats would hinder these processes and then accentuate the effect of Climate Change.

7.3 Legislation and policy

To protect and enhance Eden's biodiversity, this strategy has taken into consideration the different range of national, regional and local policies to ensure the interrelation of this document with wider strategic initiatives.

http://www.cbd.int/convention/articles/default.shtml?a=cbd-02 [Accessed May 13, 2013].

⁹CBD, 1992. Convention on Biological Diversity. Available at:

¹⁰ Biodiversity in the UK: bloom or bust? (parliament.uk)

¹¹ UK has 'led the world' in destroying the natural environment | Natural History Museum (nhm.ac.uk) Biodiversity and Wildlife - Our World in Data

National Legislation:

- The Wildlife and Countryside Act 1981
- The Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- The Conservation of Habitats and Species Regulations 2019 (EU Exit)
- Environment Bill 2019-2021

National, regional and local Policy documents:

- UK Post-2010 Biodiversity Framework
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services
- Local Nature Partnerships (LNPs)
- Eden District Local Plan

Plans and policy drivers:

- Natural England Nature Networks
- 25 Year Environment Plan 2018
- Dasgupta Review 2021

7.4 Eden District Council's role

Eden District Council's biodiversity strategy is a plan of actions to ensure that the fauna, flora and ecosystems are preserved, protected and enhanced and that progress is tracked through measurable targets.

The Biodiversity Strategy sets out the ambitions of Eden District Council for the next 9 years. It provides a framework and set objectives for improving biodiversity across the Eden district and highlighting the organisation's role.

This strategy defines Eden District Council work directions both internally and externally through partnership with external organisations and will sit in conjunction with other important policies for sustainability in Eden.

The strategy will enable Eden District Council to actively fulfil its role to preserve and enhance biodiversity under the Natural Environmental and Rural Communities (NERC) Act 2006¹² and its statutory obligations under the Conservation of Habitats and Species Regulations 2017¹³, by taking a collective approach to protect natural habitats.

To develop and deliver more successful actions to improve land for biodiversity and bring awareness about biodiversity, Eden District Council recognised the importance of establishing strong internal and external partnerships.

7.5 Our vision

Our ambition is to put biodiversity at the front of everything that we do. Over the next ten years period the Council want to develop more opportunities for collaboration, to

¹² Natural Environment and Rural Communities Act 2006 (legislation.gov.uk)

¹³ The Conservation of Habitats and Species Regulations 2017 (legislation.gov.uk)

work in partnership with residents, businesses and other external organisations upon existing strategies related to climate change and biodiversity to achieve this goal.

Our vision is to promote a vibrant, biodiversity rich and thriving naturals habitat throughout our landscape.

To achieve this Eden District Council will take action to:

- stop habitat loss
- halt species loss
- Establish a good management of existing habitats
- Create and redevelop opportunities for key indicator species
- Control and manage invasive species and disease in the local fauna and flora

7.6 Biodiversity Net Gain.

To protect and enhance the biodiversity throughout our landscape, this document introduces a concept of Biodiversity Net Gain (BNG). This concept has been developed to ensure that every new development will improve the natural habitats and protect wildlife, plants and ecosystems. BNG requires a 10 % increase in biodiversity after development compared to the level of biodiversity before the development. This concept has been nationally mandated for all Local Planning Authorities¹⁴.

Biodiversity Net Gain is define as:

"Development that leaves biodiversity in a better state than before, and an approach whereby developers work with stakeholders to support their priorities for nature conservation."

Eden District Council set an aspiration for the district to add the concept of Biodiversity Net Gain into our Local Plan by 2023.

7.6 BNG Methodology:

In preparation to implement the Biodiversity Net Gain, it is important to establish a baseline taking into account the types of habitats and their state for the key natural habitats own and managed by the Council.

This process will help to plan and monitor management and enhancement to deliver measurable and to assess the Biodiversity Net Gain.

Eden District Council will explore opportunities to work with Government bodies and external organisations to develop or use a tool suitable for Eden's landscape and biodiversity. (A Biodiversity Metric tool has already been developed by Natural England in Partnership with DEFRA). This tool will provide support to developers, planners and land managers to measure the value of the biodiversity under their authority. It will use the size, types and condition of habitats as a proxy for this importance and value for nature.

¹⁴ Net gain: summary of responses and government response (publishing.service.gov.uk)

7.7 Priority habitats and species

The choice of natural habitats and species for action across Eden district is based upon strong ecological principles, database and studies from national and regional guidance, such as natural habitats for which the United Kingdom has some international obligations¹⁵.

(E.g. Conservation of Habitats and Species Regulations 2017, Bern Convention, Oslo and Paris Convention "OSPAR", Boon and Ramsar Conventions).

7.1 Priorities habitats

56 habitats of principal importance are included in the S41 list (NERC Act 2006 – Section 41). These habitats in England were identified as requiring action in the UK Biodiversity Action Plan ¹⁶ and continue to be regarded as conservation priorities in the UK Post 2010 Biodiversity Framework¹⁷.

Eden District Council considers all natural and semi natural habitats important in the district Landscape but some habitats required a more particular attention due to their importance nationally and internationally.

In Eden the key priorities habitats are (but not exclusive to):

¹⁵ https://www.legislation.gov.uk/ukpga/2006/16/pdfs/ukpga 20060016 en.pdf

¹⁶ Biodiversity: the UK action plan - GOV.UK (www.gov.uk)

¹⁷ UK Post-2010 Biodiversity Framework (jncc.gov.uk)

THE KEY HABITAT PRIORITIES

GRASSLAND HABITATS



- · Calaminarian (metal rich soils)
- Calcarious
- Hay Meadows and Pastures
- . Lowland Dry Acid Grasslands.

UPLAND HABITATS

- Bogs
- · Heathland
- Montane Habitats





WETLAND HABITATS

- · Bog
- · Fen, Marsh, Swamp
- Rivers
- · Lakes, Ponds, Tarns

WOODLAND AND SIMILAR HABITATS

- Hedgerows
- · Semi-natural Woodland
- Traditional Orchards
- · Wood Pastures and Parkland





OTHER PRIORITY HABITATS

- · Open mosaic on Brownfield Sites
- Rock Habitats

7.2 Priorities Species

943 species of principal importance are included on the S41 list. These species are found in England and were identified as requiring action under the UK BAP ¹⁸ and which continue to be considered as conservation priorities under the UK post -2012 Biodiversity Framework ¹⁹.

Eden District Council considers all species important as they are part of ecosystems and natural cycles. In Eden, numerous native species population are in decline. The species of particular national importance found in the Eden district are (but not exclusive to):



¹⁸ https://data.jncc.gov.uk/data/cb0ef1c9-2325-4d17-9f87-a5c84fe400bd/UKBAP-BiodiversityActionPlan-1994.pdf

 $^{^{19}}$ https://data.jncc.gov.uk/data/587024ff-864f-4d1d-a669-f38cb448abdc/UK-Post2010-Biodiversity-Framework-2012.pdf



6. Biodiversity Objectives and Action Plan

	Land Use / Biodiversity					
2021-2023 Objectives	Associated Actions	Measurement/Target	Internal or External Action	Corporate Objective		
Established a biodiversity baseline in Eden	Assess the state of the biodiversity across Eden district to implement a better management and enhance the habitats at risks	Established a baseline and map on priority lands and priority species by end of 2022.	Internal / External	Sustainable		
Manage our land sustainably	Asses areas of council land suitable for biodiversity enhancement Plant trees and wildflowers on council lands. wildflower beds and Plant Trees Increase the collaborative action with Cumbria Wildlife Trust and Cumbria County Council over road side verges, waste land and management of green spaces across Eden.	Assessment of all the lands own by EDC suitable for biodiversity by end of 2022 Plant trees on French Field and Carleton Park by end of 2022 10 successful wildflower beds and tree Planting projects by 2023 Develop relationship and project with Cumbria Wildlife Trust and CCC by end of 2022	Internal	Sustainable		
Assess the ecological impacts of all council decisions and actions	Ensuring climate change and ecological impact assessment in all decision making	Creation of Climate Change and Ecological Impact Assessment Template and adoption across all Council Departments by 2023	Internal	Sustainable/ Creative		

		Regular report to committee and full council		
Create a Biodiversity Information Campaign	Publish a strategic document and activity plan. Initiate a Climate Champions group that will also look at Biodiversity issues	Publish a strategic document and activity plan on biodiversity across Eden by 2022. Engage with climate champions about biodiversity.	Internal	Sustainable/ Creative
Support communities, partners and stakeholders on green initiatives	Work with community to support initiatives that promote the recovery of priority habitats	Issue SLA to 5 organisations, CWT, ERT, FoLD, CAfS & The Farmer Network to deliver activity in sustainability and biodiversity on EDC's behalf Develop partnerships and schemes by mid 2022	External	Sustainable
Support farming networks to promote biodiversity	Help farmer to assess the carbon footprint of their farms and activities and find solution to help them reduce them.	Launch and support a pilot Farm Carbon auditing scheme (end of 2022)	Internal / External	Sustainable
Incorporate the Biodiversity Net Gain in our local Plan	Integrate the concept of Biodiversity Net Gain and promote the right Biodiversity Metric tool to start enhance Eden's biodiversity	Incorporate the concept of Biodiversity Net Gain into our local plan and policies by 2023. Start promoting a Biodiversity Metric tool for developers, land owners and planners	Internal / External	Sustainable / Policies/ planning

9. Monitoring progress

In order to continue toward our objective to be net-zero by 2030, the different actions composing this action plan will measured via methods shown in the Zero Carbon and Biodiversity Action Plan and will be monitored quarterly a part of the corporate performance monitoring system.



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