High Peak Borough Council Climate Change Annual Report

November 2023

This is the second Climate Change Annual Report following High Peak Borough Council declaring a <u>Climate</u> <u>Emergency</u> in October 2019.

Terms of Reference of that declaration were that this Council declare a Climate Emergency as many councils have already done all over the UK and will undertake to:



The aim was to translate the aspiration expressed in the emergency resolution for a carbon neutral High Peak 2030 into a deliverable action plan.

The Terms of Reference objectives have been established.

Reporting is annually with an interim report at six months along with monthly updates to Climate Change Working Group.



Context

In 2018, emissions from High Peak as a district totalled 1,181 ktCO₂e. The majority resulted from buildings (78%) and on-road transport (12%)

Although emissions are reducing in High Peak, the rate of reduction needs to increase to avoid breaching the limits of the carbon budget as aligned to the <u>2015 Paris Agreement</u>.

Local authorities across the UK are thought to have a combined 3% contribution to overall UK emissions. In addition it is thought that local authorities can influence up to 33% of emissions in their areas.

KEY STATISTICS AT A GLANCE -HIGH PEAK



15.8% is recommended to keep High Peak aligned with Paris Agreement targets

An annual reduction rate of



According to BEIS statistics, between 2005 and 2019 the average annual emissions reduction rate in High Peak was just over 1%

If High Peak continues along a business-as-usual scenario, the carbon budget (2020 -2100) will be exceeded by 2026

Corporate Plan 2019

The Council approved a new <u>Borough Plan 2023-2027</u> that includes an aim to: "*Protect and improve the environment and respond to the climate emergency*" and a new aim to future proof housing. The Council's Borough Plan sets out objectives to implement the Climate Change Plan which encompasses the related Borough Plan objectives.

Climate Change Plan Part 1 2021/22

This plan sets out how the Council will tackle emissions from its own operations. The plan can be found here

The aims have been combined with the Part 2 Plan to address district-wide emissions.

Climate Change Plan Part 2 - 7 Ways to Net Zero

The <u>Climate Plan for the borough emissions</u> has ambitious targets to meet net zero across the district by 2030.

This report uses extracts from a scenario forecasting exercise to demonstrate the scale of delivery to achieve the ambitious targets. The forecast was created by Anthesis for the Council in 2022.

The plan is set out in 7 broad themes as noted on the table on the following page.



1 The Way We	2 The Way We	3 The Way We	4 The Way We	5 The Way We	6 The Way We	7 The Way We Can
Live	Travel	Work	Make Energy	Look After Our Environment	Manage Waste	Help Change to Occur
			Actions			
Support new buildings to be energy efficient and minimise emissions	Reduce emissions from Council vehicles	Reduce emissions from Council buildings	Look at generating green energy for Council buildings	Increase tree cover and improve nature	Reduce carbon emissions from our waste and recycling service	Consider Climate Change in all Council decisions and policies
Tackle fuel poverty and reduce emissions from homes	Support sustainable travel and development	Switch to green energy	Promote the use of renewable energy	Protect and extend the existing green infrastructure	Encourage recycling and the green initiatives	Provide Councillors and staff members with appropriate skills and training
	Support the increased use of EV vehicles	Buy low carbon products and services		Reduce the risk from flooding	Support community initiatives designed to reduce, recycle and repurpose waste	Promote climate change projects
	Encourage people to make journeys by walking or cycling	Support the green economy		Work in partnership with our communities, including the most vulnerable		Encourage communit climate change and nature projects
		Support the development of a circular economy				Work with Parish Councils
		Help businesses to get advice and support				Involve and engage our communities and create a more inclusive society
		Encourage Council staff to adopt energy saving/low carbon				Lobby for change

Operational Carbon Footprint

The Council is now able to report on annual operational carbon emissions through setting up reporting and collating mechanisms. Using the baseline of 2019 to 2020, there has been an overall reduction in emissions by 43%. This does not include leisure or the Pavilion Gardens complex owing to missing data. This will be added once available.

A breakdown of this and other performance indicators is set out later in this report.

Below tables the tonnes of carbon dioxide equivalent emitted through the Council's operations in the listed functions.

The Council's social housing stock does not form part of the operational footprint.

Operational Footprint	Year	2019-20	2020-21	2021-22	2022-23	Compared to baseline	%age reduction
Energy in Buildings	tCO2e	2,460	1,322	1,227	1,186	-1,274	52%
Business Travel	tCO2e	53	16	19	26	-27	50%
Fleet	tCO2e	299	410	372	379	80	-27%
Total	tCO2e	2,812	1,748	1,618	1,592	-1,220	43%

Table 1 Operational Footprint total by year



Figure 1 Operational Footprint total by year

The emissions footprint is calculated using the Local Government Association tool using the metered kilowatt hours as the raw data input.



The Council is an active member of Vision Derbyshire working along with all boroughs and districts across the county on climate change programmes. In parallel with this the Council have been members of the Nottinghamshire and Derbyshire Local Authority Energy Partnership for over 20 years, sharing peer to peer support on emerging schemes and delivery.

The Council normally includes leisure and waste services in the emissions total as these are core services, despite having third party management organisations. The council works closely with these organisations to support emissions reductions initiatives.



The Way We Live

This theme looks at domestic energy use in our homes.

Involvement with Vision Derbyshire enables us to utilise the co-designed Climate Change and Sustainable Design Supplementary Planning Document. This includes a toolkit to help developers make better choices when considering a planning application and design. The Planning and Climate Change Assessment Tool is available <u>on line here</u>

The second aim of this theme is to tackle fuel poverty and climate emissions in existing homes. Whilst there are several complex funding streams for domestic energy efficiency and small scale renewables, these are targeted at low income households with poor energy performance. It is assumed that those groups would be termed as living in fuel poverty. The latest data suggests 14% (5,719) households are living with fuel poverty¹. A map below shows the areas worse and least affected.



Source: Sub-regional Fuel Poverty England 2023 (2021 data) Contains OS data © Crown copyright and database right 2017 © OpenStreetMap contributors

Figure 2 Fuel poverty map

The Energy Performance of 45% of all houses has been rated in the last 10 years. Of these, 11,4420 have ratings of D to G which are the lowest bands. If this is indicative of houses needing improvement, then the total number of properties potentially with low EPC ratings is 25,427. Bearing in mind, this improves the energy performance, making the house warmer, healthier and



¹ Sub-regional fuel poverty 2023 (2021 data) -GOV.UK (www.gov.uk)

hopefully cheaper to run and reduce emissions, it will not take the household to net zero.

The Council is a consortium member of the Sustainable Warmth Competition which successfully secured funding for energy efficiency in homes. This was separated into two project strands with Local Authority Delivery 3 (LAD3) aimed at properties heated with mains gas and Home Upgrade Grant (HUG) for those not heated with mains gas. All properties had to have an EPC of D or below and the householders' total income below £31,000.

LAD3 finished in September 2023. The number of homes improved was 29. This is to be validated for final sign off. HUG finished in the summer and no installs were completed. However, some properties were moved into the new HUG2 programme as it would be more beneficial for the householder owing to the new scheme parameters.

HUG2 is currently recruiting properties without mains gas heating with low income or in areas with Indices of Multiple Deprivation 1-3. We are working with Marches Energy Agency as the Customer Support Journey organisation to target specific areas which may benefit. The programme with run until March 2025.

The figure below shows a map of the proportion of off mains gas properties across the borough. The darker blue has a higher proportion. Around 21% of High Peak Properties are thought to be off mains gas. This often means higher energy costs and higher carbon emissions.



Figure 3 Off Mains Gas

Source: Census 2021 Contains OS data © Crown copyright and database right 2017 © OpenStreetMap contributors



There is no LAD4 funding. Currently properties with mains gas heating can only apply for funding through the Energy Company Obligation (ECO) programme.

The ECO programme is administered through Energy Companies. For specific eligibility criteria, this has to be approved by a Local Authority, Derbyshire County Council manage this on our behalf through the <u>Derbyshire Healthy Home</u> <u>Programme</u>.

As you can see from the figures below, the number of measures installed under these schemes and the rate of delivery is low compared to the scale of problem to be addressed . These schemes also do not provide help for non-fuel poor or the willing or able to pay, whose emissions may well be a lot higher.

ECO from 2013 to 2023

Table 2 ECO delivery High Peak

	High Peak
Cavity Wall Insulation	1,017
External Wall Insulation	31
Internal Wall Insulation	10
Loft Insulation	610
Other Insulation	59
Boiler	957
Air Source Heat Pumps	#
Ground Source Heat Pumps	0
Heating Controls	648
Other Heating (excluding Heating	
Controls)	169
Biomass Boilers	0
Solar PV	#
Windows and Doors	0
Total number of measures	3,507

The scale of the task is hampered by lack of skills across the supply chain from advice to installations. Given the rural and conservation nature of many areas of the High Peak, including the Peak District Nation Park, along with hard to treat homes, this is a complex market to stimulate and a difficult audience to convince.

The Council has identified an objective through the UK Shared Prosperity Fund to support energy in homes. The scope of this is yet to be determined.



The Mayoral Combined Authority has given each Local Authority £580k to deliver energy efficiency measures. The Council has applied to use this funding to improve the Social Housing Stock. The Council is also looking at options to apply for the Social Housing Decarbonisation Fund which will open for competitive applications in November 2023.

Through work with the Nottinghamshire and Derbyshire Local Authority Energy Partnership, the Council has actively supported a bid for funding for an innovative demonstrator project. This is aimed at able or willing to pay homeowners who need trusted advice on what they can do in their homes and a plan to help them get there. The HEAT project will run events across the region and will be delivered by Marches Energy Agency who also run the warmer Derby & Derbyshire energy advice support service.

Private rented properties must have a minimum energy performance rating of E. This is to be improved to C by 2030. The Minimum Energy Efficiency Scheme (MEES) is monitored through the Council's licencing team.

LGA programme and case studies

<u>https://www.local.gov.uk/case-studies/decarbonising-derbyshires-housing</u> <u>https://www.local.gov.uk/case-studies/high-peak-and-staffordshire-moorlands-action-plan</u>

The Council have <u>approved the purchase of 40 new social houses</u> at the Crowberries in Gamesley. These have been built with <u>high levels of energy</u> <u>performance</u> which will help the future proofing of the social housing stock.

The extract based of a future scenario in Figure 4 from the Anthesis report, demonstrates the enormity of what is required to improve the energy performance of homes across High Peak. The estimated overall cost of this is around \pounds 450m.



3.1. THE WAY WE LIVE OBJECTIVES MILESTONES

Improving energy efficiency

a) Domestic Buildings

This measure considers changes to the energy demand for heating homes, in both existing properties and newly built homes. Different retrofit options are considered for existing households, as well as the performance of new builds.

The aim of retrofit is to drive down the energy demand for heating and hot water in buildings; typical measures include insulation for floors, windows and ceilings, as well as improved ventilation. Currently household retrofit is led largely by government-supported schemes, such as ECO3 retrofit measures and the Domestic Renewable Heat Incentive (RHI). SCATTER models future energy demand based on the uptake of two "modes" of retrofit:

- Medium a 66% reduction in annual average energy demand through inner wall insulation.
- Deep an 83% reduction in annual average energy demand, through inner & external wall insulation.

New builds must also be constructed to extremely high energy performance standards, and this is of great significance to the borough given the anticipated increase of around 20,000 households by 2036. The Association for Environmentally Conscious Builders (AECB) deems a "high performance" building as requiring 25% of the average energy demand for heating, Passivhaus standards are typically 10% of average demand.

35.000 32,300 Households in receipt of ECO measures* 30,000 "Medium" retrofit Number of Households 25,000 "Deep" retrofit 20,000 PassivHaus new-build 15,000 12,700 10,000 7,800 4,100 2,600 4,000 ,800 5,000 2.976 1,600 1,000 2020 2025 2030 2050

Figure 3.1c: Indicative targets for the improvement of household energy efficiency. *ECO measures are included as a current context proxy, but resulting improvements to efficiency are much more modest than "medium" retrofit described in SCATTER.

Objectives required to achieve High Ambition Pathway						
Current Context 2021	By 2030					
 By 2020, 2,976 households in High Peak have received ECO measures.¹ In 2021, 4,346 (10.5%) of households in High Peak were classed as fuel poor.² In 2021, 46% of EPC-rated domestic properties were rated D or below.³ 	 1,600 houses "medium" retrofit, reducing annual average energy demand by 66% 12,700 houses "deep" retrofit, reducing annual average energy demand by 83% 21% reduction in domestic energy demand 					

	¹ Household Energy Statistics	³ EPC in England		
DRAFT	² Fuel Poverty Data	and Wales	🔁 Anthesis	29

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Figure 4 Extract from Anthesis Scenario Mapping

Suggested Actions

The Council should consider

- using existing data to better target households which could benefit from existing and emerging schemes. <u>See LGA Case Study</u>
- rented properties have a target to have an Energy Performance Certificate rating of C or above by 2030. This does not include social housing properties.
- working with the supply chain to support able and willing to pay households to access good advice, quality installations and finance arrangements and continue working with wider professional networks to learn of and apply good practice and innovative thinking.
- continuing to enforce the Minimum Energy Efficiency Scheme with private landlords.
- setting out a comprehensive housing strategy and leave no one behind.
- continuing to work with regional and national Government to lobby for additional support and funds and a national training programme.
- the resource required to maximise the potential of existing funding and other programmes
- support upskilling of relevant trades and professions to fulfil the retrofit needs

The Way We Travel

Emissions from vehicles are a significant issue in High Peak. Being a mainly rural district, there is considerable reliance on private vehicles for personal journeys. There are also several thoroughfares for haulage vehicles and the source of haulage for major industry.

There are many contributing factors to air pollution across the High Peak. The main pollutant of concern is nitrogen dioxide, and by far the largest contributor to this is road transport.

Separate to the Climate Change Plans is the <u>Air Quality Assessment</u> which sets out the strategy to improve air quality. The co-benefits of this to climate change mitigation are clear as much of the activity is to encourage either modal shift to active transport methods or improving efficiency of vehicles.

Derbyshire County Council, Derby City Council and the borough and district councils of Derbyshire have produced a short <u>video about air pollution</u> to help residents find out what air pollution is and, most importantly, what small changes we can all make to improve air quality in Derbyshire. Air quality is monitored in key problem areas across the borough.



The latest local air quality assessment and results of our local nitrogen dioxide monitoring are available here.(ASR) [3MB]

Further information on Air Quality Management Areas in the High Peak can be found on the High Peak Air Quality Management Areas webpage.

Concerns about air quality

We will investigate any complaints about air pollution, including the emission of:

- smoke
- fumes
- odours
- dust

Derbyshire businesses and all schools can access <u>ModeShift Stars</u>. This is an online portal to support developing travel plans to reduce travel costs and emissions.

The Council is working with Derbyshire County Council on the <u>Low Emission</u> <u>Vehicle Infrastructure</u> (LEVI) project. This will see around £6m spend on improving charge point network. This is aimed at residents who can add an expression of interest for locations of the <u>charge points through the website</u>.

<u>The Local Plan</u> adopted in 2016 sets out ambitions to reduce the need to travel or make it safer and easier to travel by more sustainable forms of transport. (Spatial Objective SO11)

This approach also reflects the aims of the Council's Sustainable Community Strategy and the Borough Plan priorities to promote improved health and protect the environment. The Council will aim to ensure as far as possible that development minimises traffic problems and maximises the potential benefits of accessibility and new infrastructure to the wider community through active travel methods.

The fleet and operation partners' fleets has been analysed by the Energy Saving Trust to support a forward plan to systematically improve engine types, efficiencies and fuel use.

The Alliance's pioneering project to use spent hydrogenated vegetable oil on suitable vehicles, not only reduced CO_2 emissions but also particulates. This was trialled in the Moorlands. Unfortunately the 10 fold increase in price for HVO has meant that it is now significantly more expensive to run the fleet compared to traditional diesel. A decision was made to revert to traditional diesel until a cheaper source is found or prices drop.

Move More High Peak launched in June 2023 with an aim to adopt active travel models for health but also wider environmental benefits.



The figure below demonstrates the scale up electric vehicle uptake to reach 100% by 2050. This assumes that the same number of vehicles would be on the road in 2050. It also assumes that the technologies would be in place for heavy vehicles which have the range needed for a rural, hilly district.

In the second quarter of 2022/23 there were 477 registered electric vehicles in High Peak.

The barriers to adopting electric vehicles are well documented, varying from the environmental and human rights impacts associated with mineral mining for the batteries along with lifespan and disposal of the batteries, cost of the vehicles, range anxiety, access to a private space to charge and more widely the charging infrastructure. Supporting the transition to EV by reducing and removing the barriers and perceptions comes through project such as LEVI as mentioned above and supporting our own staff to make the transition through salary sacrifice scheme and workplace charging options.



3.2. THE WAY WE TRAVEL OBJECTIVES MILESTONES

Switch to electric vehicles (EV)

One of the most important steps to reducing transport emissions in High Peak is the transition to electric vehicles. As with other objectives around electrification, the success of a district-wide switch to EV relies heavily on grid decarbonisation and renewable electricity supply.

This intervention considers switching internal combustion engine vehicles (including buses, private and other vehicles) to electric.

ICE - Internal combustion engine (petrol and diesel vehicles)

ULEV - Ultra-low emission vehicle (currently defined as a vehicle

Charge point infrastructure will also need to be implemented in order to support the shift to electric vehicles. Since 2014, 266 charging points have been installed in High Peak under government grant schemes including the Electric Vehicle Homecharge Scheme (EVHS), the Workplace Charging Scheme (WCS) and the On-Street Residential Chargepoint Scheme (ORCS).¹



Figure 3.2e: Transitioning away from fossil-fuel powered road vehicles. All rail networks (not shown here) are electrified by 2025.

Objectives required to achieve High	Ambition Pathway
Current Context 2021	By 2030
Data from the <u>DfT and DVLA</u> indicates that in 2020, 279 newly licensed cars across High Peak were ULEV.	 89% of cars are EV or HEV 100% of buses and trains are electric

¹ EV charging device grant scheme statistics, DfT

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Transport glossary

HEV - Hybrid electric vehicle

which emits <75 gCO2/km travelled).



Omega States Anthesis 53

Figure 5 Anthesis Electric Vehicle Scenario

The Climate Change fund has supported community groups with walking initiatives to improve fitness and increase journeys by foot and cycling. The Council works with Buxton Travel Forum and Derbyshire County Council on local initiatives to promote and incentivise alternative travel.

Suggested Actions

The Council should consider..

- Working with the County Council to deliver the best electric vehicle charging network possible for a pleasant user experience.
- Continuing to monitor technology shifts for the fleet to demonstrate to other businesses and lead by example.
- Continuing to encourage active travel through engagement and grant funding
- Continuing to raise awareness of air quality
- Developing incentives for staff, councillors and partners to charge EV on site, develop affordable access to vehicles along with car sharing.
- Ensure sustainable travel and access to local service is considered in the Local Plan Review process.

The Way We Work

Climate Change considerations are embedded across our service delivery and operations. All Council reports have a section that sets out the Climate Change implications to inform decision-making. The new Sustainable Procurement Policy supports decision-making on environmental considerations when procuring a service or goods. This, not only makes officers more mindful of the impacts but, pushes up the supply chain to make the economy greener. Training of all budget holders on the policy is being developed. Climate Change reporting is overseen by the Climate Change Working Group and governed through the Executive.

The Climate Change and Biodiversity Group is chaired by the Head of Communities and Climate Change with all relevant Heads of Service. It meets monthly to review and track progress against the aims. Performance indicators are collated and reported annually as part of this report.

The Council is accredited with the Carbon Literacy Association Bronze Award and are close to receiving silver through training more staff and members. Members' climate induction is scheduled for November 2023.

All Heads of Service have had training in Carbon Literacy. Each service has nominated a member of staff to become their 'Climate Champion'. The champions attended Train the Trainer in Carbon Literacy to disseminate through their service to embed across service through project design and delivery.

Targets under the Council operations include reducing emissions from buildings and switching to green energy.



A new <u>Asset Management Framework</u> was approved in September 2023. This sets out priorities for Council operational buildings, depots and leisure facilities including reducing energy use and increasing renewable generation infrastructure.

Buildings which are used by third party service providers include depots, leisure centres and the Pavilion Garden complex in Buxton. Capital works for these are overseen by the Commissiong Team.

Carbon emissions generated by <u>Buxton Leisure Centre</u> are set to fall thanks to a \pm 1.4 million project to improve energy efficiency and reduce the building's impact on the environment.

The Council has secured \pounds 1,281,500 from the Public Sector Decarbonisation Scheme and is supplementing this with a further \pounds 175,000 from Council funds. This will replace inefficient gas boilers with Air Source Heat Pumps and install solar panels to generate electricity. This will reduce operational carbon dioxide emissions by 200 tonnes each year.

An in depth decarbonisation feasibility has been completed for the Pavilion complex, discounting the leisure centre and Opera House.

From 2024, the electricity contract will change to Renewable Energy Guarantee of Origin certificated. This means for every kilowatt hour used, a kilowatt hour is generated by renewables and assigned to the Council's portfolio. This supports the development of renewable energy nationally and reduces the carbon footprint of the council.

Electricity consumption has decreased by 14% since 2019/2020 which is the baseline year. The carbon emissions have reduced by 35%. The variance in percentages is owing to the grid average carbon intensity decreasing as more renewable energy comes on line to phase out old gas and coal supplies.

Gas has decreased by 55% for both use and emissions. Grid emissions per kilowatt-hour have not changed much as is the case for electricity due to low emissions gas not being readily available. Gas use can be more seasonally effected than electricity and consumption would have been impacted on weather. We do not have the granularity of data to make any correlations to weather events within our management tools. However, there is a steep decrease in 2020/2021 which has more or less been sustained.

A performance indicator framework has been established. Baselines and monitoring systems are being set out for each of these aims to be incorporated into the new Corporate Plan and performance framework. Where possible these will be SMART targets using appropriate data streams and frequency of reporting.

The Alliance is members of UK100, APSE and the Local Authority Energy Partnership where we can use peer experience to help build capacity and knowledge.



We are active members of the Vision Derbyshire and sit on other groups with countywide ambitions. The <u>Vision Derbyshire Climate Change Strategy</u> was agreed by the boroughs and districts across the county.

Suggested Actions

The Council should consider

- provide training to support the new sustainable procurement policy and means to monitor the success
- establish incentives for alternative travel for staff
- provide electric vehicle chargers at council offices
- continue to work with County and other partners
- collaborate on verge and management of green spaces

The Way We Make Energy

This aim considers generating renewable energy for the Council buildings and promoting renewable energy more widely.

An initial audit of Council owned buildings has been carried out to assess the feasibility of installing onsite renewables. These are supporting informing the Asset Management Framework and capital investments in renewable energy measures.

The Local Plan Policy EQ 1 states "The Council intends to meet part of its future energy needs through renewable or low carbon energy sources and will therefore encourage and support the provision of renewable and low carbon technologies, including both stand-alone installations, and micro-renewables integrated within new or existing development."

The Local Plan is being reviewed to enhance and revise the policies relevant to climate change mitigation and adaptation delivery. This will include reviewing the approach to renewable developments.

The new Climate Change and Sustainable Design Supplementary Planning Document will encourage the use of renewables in new and majorly renovated properties.

The Council needs to find means to engage with wider renewable energy initiatives, from the larger scale which would feed into a Local Plan, support community energy or the retrofit method by supporting homeowners or businesses get support for renewables

Derbyshire County Council commissioned a <u>Renewable Energy Feasibility Study</u> to identify potential generation opportunities across the county. This is available online and will help to form strategic plans to encourage and facilitate renewable energy installations. As part of the study, interactive maps have been created where a user can layer information relating to technology suitability. In the example below, the constraints for Solar Photovoltaics is mapped for High Peak. The green areas indicate the least constrained areas in terms of ability to install the technology.



Figure 6 Solar Constraints High Peak



The Anthesis report extract in the figure below maps out a proposal for solar photovoltaic generation of electricity to support net zero ambitions, with by far the greatest potential of a virtual solar farm collective across many rooftops.

Through our partnership with the East Midlands Mayoral Combined Authority , the Midlands Net Zero Hub is supporting Derbyshire and Nottinghamshire LAs to develop Local Area Energy Plans (LAEP). These are dynamic mapping tools for energy systems to support planning and develop pathways to Net Zero by fuel type and use and by area. There is a cost to this , however the deliverable tool would support the Net Zero objectives and understanding of where to target our influence. A LAEP also provides evidence to support the Local Plan Review.



3.5. THE WAY WE MAKE ENERGY INTERVENTION MILESTONE

Solar PV

BEIS data on renewable energy installations is split into "large-scale" which relates to any sites owned by Major Power Producers, and "small-scale" which relates to any other sites not owned by Major Power Producers, regardless of size. It is worth noting that the location of sites and the balance between large- or small-scale sites is not set in stone by the modelling.

According to the <u>Energy Saving Trust</u>, the typical household array capacity is between 2-4 kW. The current average square meter of solar PV panel provides a capacity in the region of 0.15-0.20 kW of energy. Large scale installations are typically installed and operated by energy providers or larger organisations, which in many cases can be community-led.

Encouraging PV uptake is a means of improving energy security, for both businesses and households. As the future costs of energy remain uncertain, decentralized power generation is an increasingly valuable asset, particularly when coupled with storage technology.



Figure 3.5b: Comparison of SCATTER outputs against recorded installed capacity from BEIS renewable energy statistics for solar PV energy generated in High Peak in 2020.

Objectives required to achi	ieve High Ambition Pathway
Current Context 2021	Ву 2030
In 2020, High Peak had 1,035 solar PV installations with a capacity of 4.5MW and 4,376 MWh generation. ¹	 Local PV: 112.9 MW installed capacity Large-scale PV: 12.3 MW installed capacity

🔁 Anthesis

¹ BEIS Regional Renewable Statistics

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Figure 7 Anthesis Solar Photovoltaic projections

Suggested Actions

The Council should consider

- Embed renewables into Asset Management Framework for Council buildings
- Investigate investment opportunities in renewables
- Embed renewables in supplementary planning guidance
- Assess and develop schemes for householders and business to encourage uptake.
- Use funding streams in the Way We Live section to target small-scale domestic PV at scale
- Assess renewables as part of Local Plan review
- Consider setting up a dynamic Local Area Energy Plan with partners across the East Midlands Combined Mayoral Authority Area

The Way We Look After Our Environment

The current Local Plan recognises the important biodiversity of the borough:

"The Plan Area has a rich biodiversity, primarily due to its rural nature. The countryside surrounding the Borough's towns and villages and bordering the Peak District National Park, comprises a patchwork of internationally, nationally, regionally and locally designated sites important for their nature conservation value."

Policy EQ 5 states "The biodiversity and geological resources of the Plan Area and its surroundings will be conserved and where possible enhanced by ensuring that development proposals will not result in significant harm to biodiversity or geodiversity interests."

Our <u>Parks Strategy</u> demonstrates our long-term commitment to providing nature-based leisure spaces for our community.

We stopped using weedkiller in our parks and open spaces in 2019 with the exception of use on invasive Japanese Knotweed.

<u>Serpentine Walks</u> Biodiversity Plan was developed in partnership with the biodiversity group from the Buxton Civic Association. This remains an on-going project with Council officers supporting the initiative.

The Council have been piloting some areas with No Mow May to assess how this will impact our operations, and identify suitable sites to roll this out. Derbyshire County Council delegate verge management to the Council and are working on rolling out programmes to improve verge biodiversity whilst maintaining safety. Council Officers have been involved in this project. A paper with the findings and recommendations is to go through Derbyshire County Council Cabinet later in the year.

We are also working closely with Derbyshire Wildlife Trust to deliver A Plan for Nature. This will incorporate the Council's response to the Biodiversity Net Gain requirements under Part 6 of the Environment Act 2021, which is likely to be mandatory by early 2024 subject to further guidance. It will also incorporate our



strategic approach to improve and increase tree cover, create green corridors and improve the ecology of our borough.

As a borough we are already losing a significant amount of tree cover through the loss of many ash trees to Ash Die Back. Ash make up an estimated 14% of all trees in the High Peak area and it is anticipated that between 50% and 90% of all ash tree will be infected and lost within 10 years. That is a lot of trees. Therefore planting more trees is important. ²

Derbyshire Wildlife Trust are delivering a Plan for Nature. This will incorporate the Council's response to the Biodiversity Net Gain requirements under Part 6 of the Environment Act 2021, which is likely to be mandatory by January 2024 subject to further guidance. It will also incorporate our strategic approach to improve and increase tree cover, identify areas to improve, mitigate against climate change and potentially improve air quality.

The Council attend High Peak Biodiversity Network of community groups to support collaboration and peer to peer learning. We support community initiatives through the community climate fund around nature improvements and engagement.

The Council held the inaugural Wilder High Peak event, bringing together a wide variety of over 40 community groups with nature and environmental interests. This was in partnership with Derbyshire Wildlife Trust and was the start of Wilder High Peak. This will become our communications and engagement tool for groups and individuals to replicate actions at home, school, in the park or woodlands. Following from this event there are now plans being hatched for a pilot Swifts awareness project next year.

The new website will host a dedicated area for biodiversity and action. We have improved our social media with relevant messages linking to seasonal activities and national campaigns.

The Move More High Peak Programme encourages people to engage and appreciate nature, place a stronger value on it.

The Council recognises the value to the environment on our peat bogs and moorlands and the devastation when they go on fire and the likelihood that instances may increase. We will maintain communications on prevention of wildfires in our protected areas. The council made a <u>Public Spaces Protection</u> <u>Order</u> (PSPO) in April 2021 making fires prohibited on HPBC land or within the Peak District National Park.

The council recognises the role of landowners and farmers to improve the environment and needs to develop better collaboration with those groups.

Anthesis was commissioned to carry out a more in-depth look at agricultural and land use emissions, and carbon offsetting given the rural nature of the district. This forms part of the Council's on-going commitment to adopting a data-led



² https://www.highpeak.gov.uk/article/4997/Diseased-tree-on-your-land

approach and making information available for use by the Council and others to encourage, inform and shape their work.

The analysis shows that:

- Emissions from agricultural activity are significant, totalling 90ktCO₂e.
- Livestock emissions, dominate agricultural emissions in High Peak
- Over half of the district is permanent grassland, whilst arable crops make up around 20% of land across the district. This includes grazing land, covering wetlands and peatland.
- Peatland plays a significant role in agriculture and land use (ALU) emissions as a carbon sink.
- The emissions reductions scenarios conclude that, under a high ambition scenario, the transition of High Peak's diet away from livestock (18ktCO2e) as well as the transition from grassland to woodland (55ktCO2e) can reduce up to 88% of emissions form ALU sources.
- Carbon offsetting is often considered to address residual emissions or the councils 'gap to target' when analysing reduction scenarios.
- Offsetting for local authorities falls under strong public scrutiny, due to its inability to retain benefits locally.
- Authority Based Insetting can offer an alternative solution to typical offsetting practices.

The report sets out the following steps for the Council to consider:

- Maintain continued engagement with farmers and landowners on this agenda
- Prioritise biodiversity recovery and improvement with a lens of climate change sequestration and adaptation.
- Conduct more specific analysis of potential sites for afforestation.
- Collect more accurate data on local farming practices and landowner carbon emissions
- Build understanding of the importance of soils in mitigating carbon emissions
- Define and communicate suitable finance options for farmers and landholders
- Establish the council's stance on carbon offsetting within their net-zero ambition.
- Explore opportunities for insetting

We are considering the analysis and recommendations within the Anthesis report during the creation of A Plan for Nature with Derbyshire Wildlife Trust which is due to be launched later this year.

Since it was launched last year, Pick-Fit has had over 500 registrations and seen litter-pickers collect over 3 tonnes of litter. It has recently been recognised as <u>highly recommended in the MJ Awards</u>. This project aims to combine health and wellbeing with appreciating the environment and encourage people to consider walking before using the car.

There is a new duty for all Local Authorities to report on their Biodiversity work from January 24.



The Alliance have created a new post of Biodiversity Officer who will lead on the delivery of emerging plans and improve existing plans and community engagement.

Suggested Actions

The Council should consider

- approving, adopting and resourcing the Plan for Nature
- set out priorities and actions from the plan and dedicate a resource to deliver it
- scan for external funding for potential projects with in the plan
- consider declaring a nature emergency
- maintain oversight on the development on Biodiversity Net Gain (BNG) legislation and systems
- use S106 monies/BNG strategically
- continue to work with external groups and improve collaborative relationships to deliver plans and develop new initiatives
- continue communications on impact of wildfires
- maintain a Public Spaces Protection Order in high wildfire risk areas.
- sustain an engaging communications and engagement plan

The Way We Manage Waste

The Council continues to be a high performer achieving a 48.2% recycling rate, which is high compared to national statistics.

We encourage people and businesses to follow the waste hierarchy. AES has used an <u>engagement vehicle called Dennis</u> and officers to visit schools across the High Peak including at the Buxton Climate Youth Conference.

The officers also attend lots of events to disseminate messages about how to reduce waste and dispose any remaining waste appropriately. We also have proactive campaigns on fly tipping to encourage responsible waste disposal.

We will use our sustainable procurement policy to push up the supply chain to encourage the creation of a circular economy and help suppliers consider cradle to cradle product and systems design.

We recognise several community groups are establishing localised repair cafes. We will offer support to promote these types of initiatives where possible.

The Council supports Plastic Free Buxton with Councillor Todd agreeing to support the campaign.

The Council with AES are investigating ways to improve re-use of bulky items where appropriate. This could include partnering with charity shops, upcycling initiatives or repair cafes.

Through the Climate Change and Nature Fund, several re-use and repair initiatives have been supported.



<u>New legislation on single use plastic</u> came into effect in October. This bans takeaways using certain items. Officers from Environmental Health are supporting businesses with advice on this. A wider communication campaign should be aimed at residents.

Officers are looking at creating guidance for event licencing colleagues to support event holders make more environmentally friend decisions. E.g. The use of reusable cups at music events is becoming acceptable and the norm.

The Council should consider

- Supporting other towns set up Plastic Free initiatives
- Support the Refill scheme to reduce plastic water bottles
- Follow waste hierarchy on website, communications and engagement
- Improve mechanisms and awareness of bulk items re-use options
- Promote repair and reuse initiatives
- Promote single use plastic legislation
- Including environmental guidelines to events requiring a licence

The Way We Can Help Change to Occur

We recognise the importance of working with external agencies, community groups, businesses, parish and town councils, academic communities, landowners and so on to support us deliver this cross-cutting agenda.

The Council is engaged with a number of key agencies to assist with the development of our plans including all the other councils of Derbyshire, The Midlands Net Zero Hub, the Energy Saving Trust, Derbyshire Wildlife Trust, Anthesis Sustainability Consultancy and Keele University.

We sit on several steering and working groups with Derbyshire County Council and our peers in other districts and boroughs and the Peak District National Park.

As part of the Alliance, we are able to benefit from learning from colleagues and projects in Staffordshire and the West Midlands which we can use where applicable.

The Council has joined the UK100 group of local authorities with ambitious climate change targets. This includes access to the Countryside Climate Network. We are also active members of many other peer networks to share learning and support including Nottinghamshire and Derbyshire Local Authority Energy Partnership.

We recognise that we must lead by example to other organisations such as with driving the supply chain with a procurement policy and procedures. Meanwhile we must leverage the collective impact of community groups, parishes and town



councils to help each other and be more than the sum of their parts when it comes to taking action to help people to action.

We also recognise our ability to lobby and respond to consultations as a Council and through our networks.

The Council uses existing channels to communicate widely about what it does and why, it has also shared good practice to residents and businesses to engage and inspire.

We are working together with Derbyshire County and all the boroughs and districts on joint communications and projects to embed and enhance messages.

The Council attends the High Peak Green Network and Biodiversity Network which are both made up of active environmental groups and organisations including farmer representatives.

Our <u>Climate Change Fund</u> is open to community groups who need a little help to get a project started or sustain it. We hope this will help to expand our network of interested groups outside those who we know that already doing what they can to move the agenda forward.

Group	Project
High Peak Baby Bank	Reuse baby things
Glossop Allotments	Improve yields
Glossop Men in Sheds	Equipment to extend
Sustainable Hayfield	Energy Audits and advice
Transition New Mills	Thermal Camera
Whaley After School	Veg growing
Grapevine	Nature Walks and garden
Peak Bike Station	Repair equipment
Serpentine	Apple trees and Public workshops
Sustainable Hayfield	Moth and Bat survey
Transition Buxton	extend the community orchards
Zink	extend the café to reduce food waste
New Mills Youth & Community Project	Community garden establish
Buxton Town Team	Walking routes from the station
Charlesworth and Chisworth Cricket Club	Pavilion insulation
Friends of Whitfield Green Spaces	Orchard consultation
Hadfield Coming Together	Slow cooker training
Little Cherubs	Baby clothes recycling
Move More Glossop	School competition
NMVC	Community garden support - poss additional bins
Sustainable Hayfield	Energy project continuation

The groups we have supported so far are



Townend Community Garden	Solar pump and compost help
Tintwhistle Parish Council	Large posters for eco kids designs.
Fields to Fabric	Flax Project
Sustainable Hayfield	Tree Nursery
Sustainable Hayfield	Tree Nursery

Table 3 Community Climate Fund Awardees

Suggested Actions

The Council should consider

- Maintain and promote the Community Climate Change and Nature Fund
- Share good practice from the fund
- Continue to forge partnerships and collaborate
- Continue to share good practice
- Work better with Parish and Town Councils on climate and nature
- Continue to collaborate with Derbyshire County Council and other organisations

Performance Indicators

The performance indicators are aligned to the aims of the Climate Change Plan along with other indicators use in the performance framework of the Council.

The table below collates the most up to date data available on these indicators and shows subsets of the overall operational carbon footprint of the Council.

Sources range from Government data sets, strategic partner and energy and fuel records and our air quality monitoring systems.

Those highlighted in yellow are either new or the methodology to monitor them has changed or is in development.

The data for leisure centres and the Pavilion Gardens building is missing for certain years. This has been followed up with the service providers and will be updated once available. Also we have asked for the waste fleet to be separated out and need to add that to our process.

A new tool has become available for calculation the full emissions of the waste collection process. We are assessing the tool to consider if it would be a useful addition to the performance indicators.

Changes in waste legislation are imminent and may impact future recycling and residual rates.

The Plan for Nature is in development and will provide a framework for nature based targets for the district including a mechanism for canopy cover and other metrics to measure, monitor and target.



								TAR	GET
AIM	MEASURE	Change	Units	2019/20	2020/21	2021/22	2022/23	2025	2030
	Emissions from residential buildings (baseline 2019/2020)		ktCO2e	153	149				Net Zero
We will support action including retrofitting to reduce fuel poverty,	10% of households will be living in fuel poverty by 2025 and 0% by 2030. (baseline 2019/2020)		househo Ids		13.5%	13.8%		10%	0%
prevent health hazards relating to damp and excess cold. and reduce emissions from homes	Proportion of properties with an EPC less than 10 years old (baseline 2019/2020)			13%			19, 803 (45%)		
	Proportion of properties EPC less than 10 years old with rating D to G (baseline 2019/2020)			72%			11,442 (58%)		
	Fleet vehicles - Carbon dioxide equivalent		ktCO2e	299	410	372	379		Net Zero
Reduce emissions from Council vehicles and Council related	Officer business miles (grey fleet) Carbon dioxide equivalent		ktCO2e	52	16	19	26		
activity	Officer business miles (grey fleet)		miles	184,441	59,465	69,448	94,319		
	Councillor business miles carbon dioxide equivalent		tCO2e	1.1	Not available	Not available	Not available		
We will encourage and support the increased use of EV vehicles	Number of Electric Vehicles		vehicles (comme rcial/pri vate/car HGV/LG V/motor bike)	130	208	393	477		

	NEW Indicator Electric vehicle charging points in area - publicly accessible	NEW	Publicly available points per 100k populati on	8.7	25.9	29.1	30.7		
We will work in partnership to reduce travel and transport related emissions	Vehicle-related emissions		ktCO2e	166	138				
We will reduce energy use and improve the energy efficiency of Council buildings including Leisure Centres	Emissions from Council buildings - HPBC including residential landlord supplies		ktCO2e	2,460	1,322	1,227	1,186		
	Emissions from leisure centres and Pavilion Gardens - HPBC incl Water Supply		ktCO2e	1,527	Not available	998	Not available		
We will reduce the number of products purchased by the Council, chose low carbon/carbon neutral products where possible, and seek to use contractors who are working towards carbon neutrality	Develop monitoring for Sustainable Procurement Policy	CHANGE to POLICY and Procedures	ТВС						
We will increase tree cover, and improve wildlife habitats and biodiversity	There will be 20% urban canopy cover by 2025 and 24% by 2030.	Develop methodology		17-19%				20%	24%

We will work in partnership to deliver our Air Quality Action Plan (AQAP)	To reduce the PM 2.5 (highest maximum reading across the district / borough) to 12ugm3 by 2028 and to 10 ugm ³ by 2040.	Change of monitoring means	µgm³	7.2* *Based on defra published background data	7.2*	7.1*	**Based on updated computer model	12 <i>u</i> gm ³ by 2028	10 ugm ³ by 2040
	To reduce NO ₂ levels to below current national Air Quality objective (40 <i>u</i> gm ³) across the district/ borough by 2026 and below 36 <i>u</i> gm ³ by 2030	Change of monitoring means	µgm³	89% < 40 78% <36	100% <40 98% <36	98% < 40 92% <36	95% < 40 89% <36	Below 40 <i>u</i> gm ³ by 2026	Below 36 <i>u</i> gm ³ by 2030
We will implement measures to reduce carbon emissions from the Council's waste and recycling service	Emissions from waste (fleet). Waste emissions	System needed to assess	tCO2e	919 tCO2e					Net Zero
We will work with Derbyshire County Council and other Derbyshire Councils to encourage recycling and the broader greener	% of waste reused, recycled or composted by 2025.		percenta ge of all collected waste by weight			48.66%	48.20%		
аусниа	Residual waste per household in 2021/22		kg			422.77	406.62		

Table 4 Performance Indicators

Develop Delivery Plans

We aim to review the existing part 1 and 2 plans and create a separate strategy and one comprehensive plan which is more easily navigable. Within the plan we will identify those aims that the council has operational control over and those we can influence. This will be done in sections as set out in the Climate Change Plan.

When we have agreed the Plan for Nature that will include the climate change related actions under The Way we Look after the Environment theme.

The Assets Management Framework provides a strategy for decarbonising our estate.

Developing a strategic housing strategy to maximise funding opportunities and target using available data, will scale up the uptake of retrofit for energy efficiency and small scale renewables.

Support the demonstrator project for willing to pay energy efficiency measures.

Working with Derbyshire County Council, we are supporting the improvement of the electric vehicle charging infrastructure across the borough. This is specifically aimed at residents but can be used by anyone. This will provide a coherent and consistent service across Derbyshire which will improve the end use experience. This is key to encourage people to adopt electric vehicles.

The new Sustainable Procurement Policy is to be embedding into operations through training of budget holders to understand the principles and the mechanisms.

Sustain and grow Wilder High Peak.

Reports

Project specific reports will go through the relevant committees.

Annual Climate Change Reports will be put forward by the portfolio for environment to the Climate Change Working Group for comment. It will then be sent to full council for approval.

The suggested actions in the report will be added to the work programme for the following year(s).

Once approved the reports will be published to the Council website.

