# **Shropshire Hills AONB Partnership Climate Action Plan**



#### March 2023

#### **Summary**

This plan sets out actions for the Shropshire Hills AONB Partnership (both the staff team and the Partnership group) to address the challenges of climate change. The AONB Partnership has a modest amount of influence and this varies across the topics and sectors of emissions. However the aspiration has to be to achieve net zero across the whole Shropshire Hills AONB, in a manner which is compatible with a credible global net zero scenario, and hand in hand with nature recovery. Evidence shows that per capita emissions in the Shropshire Hills are higher than the national average. This is partly a consequence of the rural nature of the area leading to higher emissions from domestic energy and transport, but is also linked to high levels of consumption. There is a long way to go and the current decade to 2030 is crucial.

#### Some key points from topic narratives in the NAAONB Climate Change Framework (2022):

**Nature-based Solutions** – Carbon offsetting mustn't harm nature or be used as an easy way out of deep emissions cuts in other sectors. Existing carbon stores in good habitats need to be protected, peatlands re-wetted and restored to stop emissions, and tree cover expanded in ways which also benefit nature.

**Agriculture** – Greenhouse gas emissions from land and farming need to be reduced while continuing to produce food. We need farming systems which improve soil condition and integrate with nature (such as regenerative/ agroecological), plus changes to the food system and diets.

**Sustainable tourism & transport** – We need to adapt tourism infrastructure and influence visitor behaviours, connect people better to nature, support active travel, and access for all.

**Renewable energy** – We need to be part of the solution to increasing renewables in ways which are compatible with AONBs. We need a better national strategy and local planning for renewables.

**Building design & planning** – We need better resilience and sustainability in new buildings, retrofit for large numbers of older existing houses, and to take account of landscape sensitivity.

#### Summary of AONB Partnership influence activity across the topics:

Topic	AONB Partnership influence	Key AONB Partnership Influencing Activities	Key AONB Partnership Delivery Activities
Nature-based	Significant	AONB Management Plan	Peatlands project
solutions		Strategic input	Ancient Woodlands project Farming in Protected Landscapes Stepping Stones project
Agriculture	Moderate	Support for farmer clusters	Farming in Protected Landscapes
Sustainable Tourism & Transport	Modest	Strategic input Support to businesses Communications & public engagement	Shuttles Walking & cycling promotion
Renewable energy	Low	AONB Management Plan Consultation responses	
Building Design & Planning	Very low	AONB Management Plan Consultation responses	

## **Background**

The national statement of commitment from AONB Chairs on Climate Action of April 2022 states that "AONB teams and partnerships must now more than ever confirm their leading role and ambition in addressing this challenge" and contains a commitment to "lead the development of a local action plan in our own AONB partnership by the end of 2022." This will set out a series of actions that the AONB Partnership can deliver - for short to medium term action up to 2030. It is not a full blueprint for climate change action for all of the Shropshire Hills AONB, but focuses on role of AONB Partnership (both the Partnership group and the staff team). The Colchester Declaration includes a pledge that 'by 2024, to ensure all AONB Management Plans include meaningful measures around climate change mitigation and adaptation, including clear, measurable targets to support Net Zero'.

The scope of this plan **covers both climate change mitigation and adaptation**, and actions will help to deliver net zero in the Shropshire Hills and well as increasing the resilience of the AONB to climate change. These two are not alternatives and must go hand in hand.

The AONB Partnership has been championing shifting to low carbon and better care for nature for a long time, and has also championed the need to consider nature and the ecological emergency as integrally connected with climate, both in terms of the problems and of solutions. Virtually all of the actions in the Shropshire Hills AONB Management Plan contribute to nature recovery and lowering carbon emissions.

Recent specific activity on the topic has included:

- Detailed recommendations made to the local authorities in October 2019 following declaration of climate emergency, and working with Council colleagues and working groups.
- Convened a gathering of local community groups working on climate and nature in Feb 2020 attended by over 100 people <a href="https://www.shropshirehillsaonb.co.uk/a-special-place/climate-and-nature-recovery/community-led-climate-action">https://www.shropshirehillsaonb.co.uk/a-special-place/climate-and-nature-recovery/community-led-climate-action</a>
- Very active role over 2021-22 in the NAAONB Climate Change Collaboration programme as part of the national core group, leading two of the five topic working groups, and being on the small group preparing the Chairs' Statement and the land carbon audit steering group.
- The team and some Partnership members have been closely involved with both Zero Carbon Shropshire and South Shropshire Climate Action and sub-groups of these.
- Held an AONB Partnership meeting in July 2022 themed to climate change.

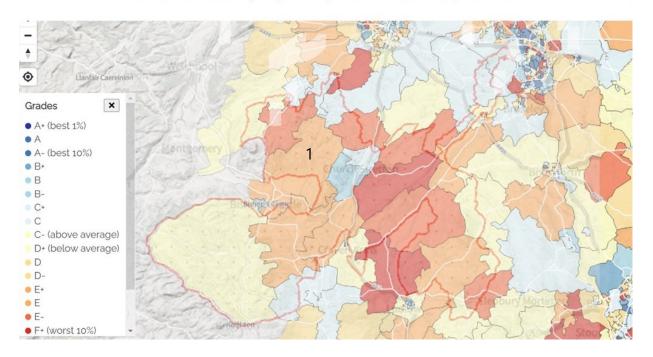
Clearly more needs to be done to respond to the urgency and extent of these issues. Following the Glover Review there is also now an active discussion in government about the updating of AONB legal purposes, potentially to include reference to climate change.

Some actions and activities will need new resources at achieve them. But we cannot solely rely on this, and climate change also needs to be a cross-cutting theme influencing everything that the AONB Partnership already does.

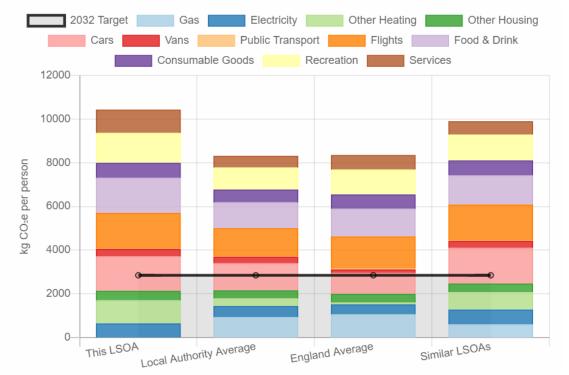
## Carbon emissions in the Shropshire Hills AONB

We do not have a full carbon audit specifically for the AONB, but we have access to data which will give similar insights. The figures below are from the Place-Based Carbon Calculator, a free tool which estimates the per-person carbon footprint for every Lower Super Output Area (LSOA) in England, drawing on a wide range of data and research. <a href="https://www.carbon.place/#8/51.482/-0.151">https://www.carbon.place/#8/51.482/-0.151</a>. Most of the AONB has higher than average carbon emissions (the orange and red colours).

Carbon emissions by super-output area in the Shropshire Hills



Breakdown of emissions in E01028991 a typical 'Remoter communities' LSOA (marked 1 on map)



The horizontal black line represents the UK's target footprint per person set out in the Committee on Climate Change's 6<sup>th</sup> Carbon Budget, covering 2032 to 2037. This is intended to provide an indication of how far we must go in the next ten years to have any chance of reaching net-zero by 2050.

## **AONB Partnership Carbon emissions and activity**

A 'corporate' carbon footprinting exercise for the AONB Partnership was undertaken in 2007 with results as follows:

Sector	tCO <sub>2</sub> 2005/6		
Built Estate	19.14		
Travel:	24.01		
Staff Commute	16.4		
Business Travel	5.47		
Travel to meetings	2.15		
TOTAL	43.16		

It has not been possible yet to conduct a comparable repeat audit across all these headings. However, business travel by the team in 2021-22 was 2,475 miles, compared to 23,665 miles in 2005-6, a decrease of 89.5%. Staff commute has decreased significantly due to ongoing higher levels of home working, and some shifting in the mode of transport. Heating and electricity use have decreased significantly due to downsizing to smaller and more energy efficient office premises, reduced space rented and more recently reduced occupancy of the office. There will of course be a 'hidden' increase in heating and electricity use in the homes of team members, which has not been quantified. Overall however the Partnership's carbon footprint is estimated to have reduced by around 60% since 2007.

The AONB Partnership's own carbon footprint is relatively small. Steps can and will be taken to improve this but the Partnership group and the team together have roles of delivery and of influencing which can have a much greater impact on reducing emissions. Direct delivery by the AONB team of 10 people is modest and targeted, and our methods also include convening partners and enabling others as well as delivering ourselves. More widely, the organisations represented by Partnership members have a lot of combined delivery capacity and the Partnership seeks to help them work effectively together. The Partnership encourages members to bring their knowledge and also to take back things to their organisations and/or communities. As a group it brings together many stakeholders and with the team has the capacity to support land managers and communities to take action. We need to harness all of this potential to take action on climate change.

#### A new framework and goal

Urgent climate action is now almost universally pledged, but whether in protected landscapes, businesses or politics, it often jostles for position against other priorities and may even sometimes be seen as conflicting with other aims. Focussing solely on carbon carries the risk of unintended harm to nature and missing other dimensions of the broader ecological emergency. On the other hand, the prosperity and stability sought by traditional economic models will be drastically disrupted by climate breakdown as a result of business as usual or current trajectories. We need to integrate climate within a holistic framework setting an overall unifying goal – one of meeting people's needs fairly within the planetary boundaries that protect Earth's life-supporting systems.



There is growing interest in application of the 'Doughnut Economics' model shown above, to geographical areas (including cities and National Parks).

There are related ideas in the 'circular economy' – eliminating waste and pollution, circulating products and materials, and in efforts to redefine measures of societal success beyond Gross Domestic Product. There is also a realisation that a 'just transition' is needed to ensure no communities are negatively impacted in the UK or overseas.

#### **Vision for a future Shropshire Hills**

The scientific predictions of climate change impacts are important, but can be frightening and sometimes overwhelming, and there is a place for positive visioning as well as to motivate towards a positive goal.

In 2050 the Shropshire Hills, the UK and the world have reached Net Zero. Changes in economies and behaviour have improved people's wellbeing with more active travel and connection to nature. Food security and health have improved but farming is also caring for soils and nature. Habitat networks are strong and nature is recovering. The Shropshire Hills are enjoyed and understood by local people and visitors alike. Vibrant, diverse and inclusive communities, with a strong sense of identity, live and work sustainably, supporting the local economy and conserving and enhancing the area's natural beauty and resources for future generations.

#### Climate change adaptation

Projections indicate that global heating will result in warmer wetter winters, hotter summers, and more extreme weather events e.g. heat waves, torrential downpours of rain, extreme wind and storm events. These changes in climate are likely to create significant impacts which will affect all aspects of the economy, society, infrastructure and the natural environment.

Defra leads on the government's second national adaptation programme (2018-2023). NAAONB has been consulted on relevant work within the programme, and AONB organisations may at some stage be asked or expected to contribute to the regular reporting under the programme.

# **Action areas by topic**

The tables below set out actions for the AONB team, the Partnership and partners. These relate to the five topics considered by the NAAONB Climate change collaboration programme, addressed in the order of greatest influence of the AONB Partnership. This document doesn't aim to be a detailed source of information or analysis on all these topics – many other good sources are available.

The description of actions is deliberately kept short. There are different kinds of action, but what is apparent is that there are many things the AONB Partnership can do with regard to climate change, in essence by bringing it into everything we do.

For some actions it may be possible to calculate a carbon saving e.g. specific delivery actions such as peatlands and woodlands projects, or relating to office energy use. However many actions are based on influencing roles and for these it will not be possible to calculate a direct result in terms of reduction in GHG emissions. The actions should however be evaluated, even if only informally, to enable prioritisation of effort.

#### **Nature-based solutions**

Overall goal - Safeguard the carbon stores in our landscape, reduce emissions from land and increase carbon sequestration, in ways which are compatible with nature. Halt and reverse the loss of good quality habitats and restore and recreate habitat networks across the landscape.

	AONB team	Partnership	Partners
Continue development of Shropshire Hills peatlands project work to reach implementation stage of peatland restoration, initially in the Upper Clun catchment and then more widely	Х		Х
Optimise delivery through the Farming in Protected Landscapes programme of nature-based solutions for climate	Х	Х	Х
Implement Shropshire Hills AONB ancient woodland restoration project to help restore our best woodlands to the healthiest ecosystem possible	Х		Х
Advocate for increase in appropriate tree planting and provide advice and guidance on suitable types of location, species, deign etc.	X	X	Х
Seek opportunities to support and implement Natural Flood Management measures including headwater restoration and flood plain restoration	X	Х	Х
Through consultation input, advice and projects, seek to safeguard existing habitats and develop habitat networks	Х	Х	Х
Continue active involvement in the Stepping Stones project	Х	Х	Х
Disseminate and use recent Cranfield University carbon audit of English AONBs to raise understanding of carbon in soils and vegetation, and to identify the best actions and inform projects	Х	X	Х
Participate in development of Local Nature Recovery Strategy	Х	X	Х
Continue to explore and better understand the potential and implications of Carbon and Natural Capital markets and Green Finance	X	X	Х
Seek support from businesses and consumers to end use of peat in horticulture	Х	Х	Х
Explore possibilities for joint funding bids for Nature-Based Solutions through NAAONB	Х		
Explore the potential for biochar as a way of locking up more carbon in soils	Х	X	Х

# **Agriculture**

Overall goal – Reduce greenhouse gas emissions from farming (including CO2, methane and N2O) while continuing to produce healthy and nutritious food, improving long and short term food security and enabling nature recovery.

	AONB team	Partnership	partners
Support and promote farming systems which improve the health of soils and ecosystems (e.g. regenerative and agroecological farming)	Х	Х	Х
Use the Farming in Protected Landscapes programme to support nature and climate friendly farming and help the Agricultural Transition programme	Х	X	Х
Continue active involvement in the Stepping Stones project, including facilitating farmer engagement and climate and nature work with the Upper Onny Farmers Group	X		
Support new and emerging farmer clusters and groups	Х	X	Х
Support and participate where possible in development of the Environmental Land Management scheme (ELM)	Х	Х	Х
Continue support for Our Upland Commons project	Х	Х	Х
Support and participate in the Shropshire Good Food Partnership, especially in relation to theme areas of wise land stewardship and local food networks	Х	X	Х
Share and disseminate learning on Carbon in land including through Zero Carbon Shropshire Land & Biodiversity group	Х		Х
Promote a low carbon local economy with a strong farming and local food sector	Х	Х	Х
Support and promote events and case studies showcasing carbon and nature friendly farming	Х	X	Х
Promote and support larger volume hedgerows, new hedge planting and hedgerow trees, agro-forestry & wood pasture	Х	X	Х
Support consistent models for farm advice, bringing farm business and environment into one unified plan	Х	X	Х
Support and encourage changes to uses of fertiliser and manure to lower GHG emissions	X	X	Х
Support development of local supply chains for livestock feed, especially proteins, to reduce transportation	Х	Х	Х
Support greater storage and retention of water on farms	Х	X	Х

# Sustainable transport and tourism

Overall goal – Reduce greenhouse gas emissions from transport and tourism, continuing to meet people's needs but challenging hypermobile trends of travel and reducing demand, at the same time improving health and wellbeing.

	AONB team	Partnership	partners
Promote and support active travel – walking, cycling etc through promotion and creation of walking and cycling routes and improvement of infrastructure	Х	Х	Х
Promote "Avoid – Shift – Improve" hierarchy of action to decarbonise transport	Х	Х	Х
Continue to operate and develop the Shropshire Hills Shuttles bus service	Х		
Continue an ongoing level of homeworking among the team and plan carefully to make efficient use of business journeys	Х		
Locate Partnership meetings to minimise travel, and encourage car sharing arrangements		Х	
Provide strategic input to encourage managing demand - people consuming and travelling less	Х	Х	Х
Support improved public transport in the Shropshire Hills	Х	Х	Х
Support for tourism businesses on sustainability	Х		Х
Promote use of local food and products by tourists and visitors	Х	Х	Х
Support roll-out of further EV charging points	Х	X	Х
Encourage greater use of speed limits and averaging speed cameras to reduce emissions	Х	Х	
Resist upgrade of major roads which may increase traffic and journeys		X	X

## **Renewable energy**

Overall goal – Facilitate an increase in generation of renewable energy in the Shropshire Hills which does not harm the special qualities of the AONB.

	AONB team	Partnership	partners
Active dialogue with local authorities and stakeholders to improve guidance on renewable energy in the AONB	Х	X	Х
Provide input to assessment processes for renewable energy proposals, including landscape character and sensitivity	Х	X	
Highlight good examples of renewable energy within the AONB	Х	Х	

# **Buildings and energy efficiency**

Overall goal – Reduce greenhouse gas emissions from domestic and commercial buildings, new and existing.

	AONB team	Partnership	partners
Work with Shropshire Council Estates team to identify energy efficiency measures for the AONB Partnership offices	Х		
Consider energy use including minimising car transport as part of a process to find new office accommodation	Х		
Through input to planning policy and casework support the highest standards of energy efficiency in new development	Х	X	Х
Support programmes for retrofit of energy efficiency measures to existing buildings	Х	X	Х
Highlight good examples of energy efficiency within the AONB	Х	Х	Х

#### **Engagement, communication and collaboration**

While our scope for direct delivery may be modest, across all of the above topics we can work through engagement and communication with stakeholders and the wider public, and through collaboration – locally and nationally.

Through this we can support and encourage behaviour change for climate action by individuals, businesses and community groups, and we can influence strategic activity to optimise climate action while integrating with nature recovery and other ecological priorities.

- Use web, newsletter, social media and talks in a considered and structure way to engage people on climate action
- Explore Carbon literacy training for staff and Partnership members
- Seek to integrate climate as well as nature themes into delivery of the John Muir Award
- Continue delivery of Young Rangers programme and develop Green Leaders
- Integrate climate strand within engagement through the AONB Trust, Friends and Conservation Fund
- Seek new opportunities to engage and re-engage young people and adults with nature, to harness their energy and improve their wellbeing
- Use insights from Climate Outreach's segmentation of the population, and appropriate messaging to inform engagement
- Support individuals to reduce their carbon footprint promote carbon calculators. Support wildlife gardening, domestic food growing and composting, reducing food waste
- Make climate-related input in strategic work, including responses to consultations, and work with partners
- Take opportunities through Defra to participate in the National Adaptation Plan
- Work collaboratively through NAAONB and with other AONB teams, including input to the creation of a collective, broad-level climate action plan for all AONBs
- Collaborate locally with partners and communities, using the AONB designation to influence relevant stakeholders
- Work with other climate groups and plans in the area including South Shropshire Climate Action and Zero Carbon Shropshire and foster community links and action on climate
- Promote and use the NAAONB Climate Action Framework and Toolkit
- Take part in relevant events to share knowledge
- Increase our understanding and evidence base
- Develop and include tangible climate mitigation and adaptation actions in the forthcoming review of the AONB Management Plan
- Seek funding opportunities to expand climate action
- Promote a framework of seeking to meet people's needs within planetary boundaries and explore local application of the Doughnut Economics model

#### Selected bibliography and further information

Climate Action in AONBs Toolkit, NAAONB, October 2022

Nature Based Solutions Supplementary document, NAAONB, April 2022

'Next Steps' Climate Action Plan for the Ludlow Constituency to reach Net Zero by 2030, South Shropshire Climate Action, May 2021 <a href="https://southshropshireclimateaction.org/plan/">https://southshropshireclimateaction.org/plan/</a>

Zawadzka, J.E., Keay, C., Hannam, J., Burgess, P.J, Corstanje, R. (2022). National Landscapes Carbon Audit & Metric (land management), Bedfordshire: Cranfield University.

https://www.gov.uk/government/collections/climate-change-adaptation-reporting-third-round-reports

Ausden, M, Field, R, (2022) A guide to conservation land management and greenhouse gas emissions. Conservation Land Management Summer 2022 Vol 20 No2

Further information on Doughnut Economics at <a href="https://www.kateraworth.com/doughnut/">https://www.kateraworth.com/doughnut/</a>.

Brecon Beacons National Park application of doughnut economics <a href="https://doughnuteconomics.org/stories/127">https://doughnuteconomics.org/stories/127</a>