Broads Authority

27 February 2026
Agenda item number 12

Climate Action Plan

Report by Sustainability Manager

Purpose

To present the Climate Action Plan and seek member approval.

Broads Plan context

The Climate Action Plan supports all actions under Theme A of the Broads Plan: Responding to Climate Change and Flood Risk.

Recommended decision

Approve the Climate Action Plan and linking future action plans to the Management Plan cycle.

Contents

1. Introduction

1.1. The Broads Authority adopted the previous Climate Change Action Plan in July 2020. This followed on from the recognition of a Climate Emergency in 2019, following the House of Commons declaration of a Climate Emergency in May 2019. The same year the government amended the Climate Change Act 2008 to set the Net-Zero target to 2050, revising the previous target of 80% cuts against the 1990 baseline by 2050.

1.2. It has always been recognised that the National Parks family can have more impact if they work together, so it was agreed with the wider National Parks across the UK to adopt a common methodology. This led to the National Parks Family working with

Small World Consulting to produce the baseline footprint that was presented to members in July 2022.

1.3. Additionally, it was agreed for all Parks to join the Race to Zero Programme. Race to Zero is a United Nations Framework Convention on Climate Change initiative through which sub-national bodies and organisations can commit to taking action to halve global emissions by 2030.

1.4. The Broads Authority agreed to join Race to Zero in 2024. As part of our commitments under Race to Zero we need to produce an updated Climate Action Plan as soon as practical.

1.5. The Management Plan Guidance, issued in 2025, requires that we incorporate a Climate Adaptation Management Plan into the new Broads Plan. The next Broads Plan will also be required to include the Protected Landscapes Targets and Outcomes Framework, which includes key climate targets around Greenhouse Gas Emissions reductions, and restoration of peatland ecosystems.

1.6. Given this, we recommend approving a short-term Climate Action Plan covering the remaining period of the current Management Plan and then linking future Climate Action Plans to the Management Plan cycle going forward.

2. Comment on progress under the previous action plan

2.1. As noted in the report shared to members in December, there has been generally good progress on reducing the Broads Authority emissions. However, we have not made much progress on offsetting residual emissions and are likely to miss the 2030 target to achieve Net-Zero by balancing residual emissions with offsets.

2.2. The following challenges have prevented progress on offsetting;

- Due to landscape considerations, large scale tree planting would not be welcome in the Broads. Therefore, the initial focus is on peatland restoration to achieve offsetting.
- The only certification scheme in the UK for peatland offsetting is the Peatland Carbon Code. This sets a minimum site size of 25ha, which is large in the context of the confines of the Broads. For context, the current Buttle Marsh Project is only 23.5ha.
- The costs of peat carbon offsetting are relatively high vs other forms of offsetting, often around £100 per tonne of CO2 vs a more general UK price of £20 per tonne of CO2. This makes it harder to find private investors for these sites.
- Large sites in the Broads have so far developed more towards the Biodiversity Net Gain Market – for example, the Langley Abbey Environmental Project. We are not aware of any ongoing projects to try and sell carbon credits from the Broads or its hinterlands.

2.3. The full progress report is attached in Appendix 2.

3. Climate Action Plan

3.1. The draft Climate Action Plan for approval is attached as Appendix 1.

3.2. The Climate Action Plan is based on the template developed jointly by the National Parks Climate & Energy Group, which encompasses the Broads and the 14 National Parks across England, Scotland and Wales. It is envisaged that this joint template will be continued to use as a basis for future plans.

3.3. This Climate Action Plan covers the remaining period of the Broads Plan, to the end of 2027. Based on draft Management Plan guidance, we anticipate aligning the periods of future Climate Action Plans with the Management Plan Cycle.

3.4. The Climate Action Plan includes the following targets:

- By 2030 the Broads Executive Area emissions will have fallen by 51% from the 2019 baseline.
- By 2050 Broads Executive Area emissions will be reduced by 90%.
- By 2030 our own emissions as an authority will have fallen by 50% from the 2020 baseline.
- By 2040 our own emissions as an authority will be Net-Zero.

3.5. The 2030 and 2050 target for the Executive Area are based on Small World Consulting's pathway to Net-Zero.

3.6. The Internal targets are based on the original Net-Zero targets agreed by members in 2019, with the offsetting target removed.

4. Financial implications

4.1. The proposed activities sit within existing budgets or we will seek grant funding.

Author: Harry Mach

Date of report: 13 February 2026

Broads Plan strategic objectives: A1, A2, A3

Appendix 1 – Climate Action Plan

Appendix 2 – Summary of Progress against previous Action Plan

Appendix 1 - Broads Climate Action Plan

Introduction

In 2025 the Broads Authority signed up to the Race to Zero, along with the wider National Parks Family in the UK. As part of our commitment, we have pledged to create a Climate Action Plan.

This action plan addresses doing our fair share to deliver the changes called for by the Paris Climate Agreement, and to seek to halve global emissions by 2030. The plan also addresses the adaption we must make to prepare for climate change.

With its low lying nature and habitats vulnerable to saline incursion, the Broads is at particular risk due to climate change, and needs to be an exemplar both in adaptation and mitigation.

About the Broads National Park Climate Action Plan

This document was commissioned by Broads Authority and written by National Park officers, working with National Park Authorities across Britain.

Purpose

The Action Plan is designed to strengthen the ability of everyone living, working and visiting Broads National Park to play their part in response to the climate emergency in at the scale and pace needed to align with the Paris Agreement and UK Climate Change Act goals.

Who the action plan is for

The action plan is particularly intended to be useful for public bodies, companies, landowners and civil society groups in the National Park.

It is also intended to be useful to public bodies beyond the National Park and to inform regional strategies and plans, and to potential investors.

Scope and assumptions

The scope of the framework and plan is the whole of the National Park, not just the actions and operations of the National Park Authority or public bodies. There is a focus on public body action to lead, catalyse and support National Park-wide climate action.

It addresses decarbonisation, sequestration (drawing down excess carbon from the atmosphere) and carbon storage, and adaptation.

Document structure

This document is structured in five parts.

Part one, background and context addresses: the climate, nature and social emergencies, the English context of climate action, local context; and the National Park Authority's commitments and duties in relation to climate action.

Part two, research and analysis presents new evidence commissioned to inform climate action in the National Park including: GHG emissions inventory and scenario and climate risk analysis. It also includes a literature review, gap analysis, and barrier analysis in relation to economy and governance.

Part three, goals and transformational shifts, sets out a net zero goal aligned with the Paris Agreement and becoming climate resilient. It introduces nine transformational shifts needed for the National Park to reach net zero and become climate resilient.

Part four, theory of change and strategic approach sets out a rationale for why the public sector is best placed to lead, catalyse and support county-wide climate action, and how the framework for county-wide climate action can structure an increasingly ambitious and long-term response to the climate emergency in Powys. It introduces the UN-backed Race to Zero climate leadership initiative that all UK National Parks have joined.

Part five, 2025 climate action plan sets out short term action within existing resources that the National Park Authority and partners intend to take, and the plan to scale up National Park-wide action in the medium (2-3years) and long term (by 2030).

Part one: background and context

As the world wakes up to the climate and wider environmental emergency, sustainable land management, including rapid reduction of greenhouse gas emissions alongside food security and nature recovery, is becoming increasingly central to local, national and international policy agendas.

The Paris Agreement, adopted by 196 Parties at the UN Climate Change Conference (COP21) in 2015 set the overarching goal of limiting global warming to 1.5 degrees. In 2019, the UK Government made a legal commitment to reach net zero territorial greenhouse gas (GHG) emissions by 2050. The 2050 net zero commitment covers the 15 National Parks and other designated landscapes in the UK (Figure 1). It is recognised that these designated landscapes present a crucial public-sector opportunity to show leadership on decarbonisation and carbon sequestration, and are important in enabling the country to reach its climate and biodiversity goals.

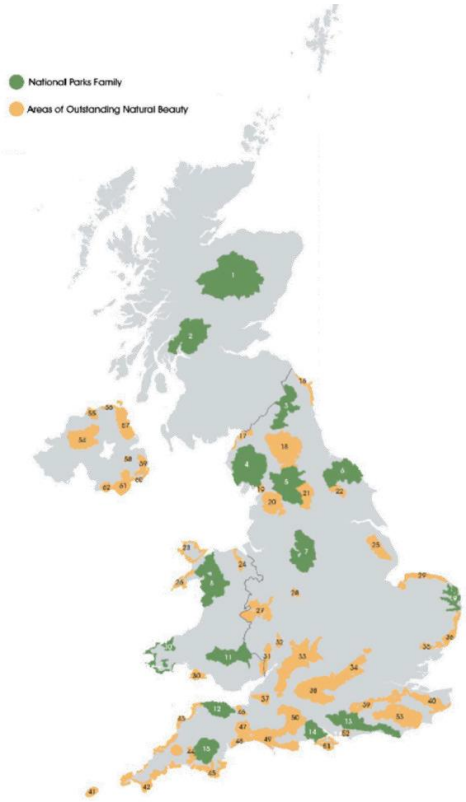

Figure 1. UK's designated landscapes. Source: www.nationalparks.uk.

Together, the UK's 15 National Parks are home to around 0.5 million residents, attract approximately 100 million visitors per year, and account for just under 10% of the UK's land area (2,324,365 ha). If these designated landscapes can become exemplars of low-carbon transition and environment-conscious land management, their national and international profiles could give them a level of influence that exceeds the scale of their own emissions.

The 15 National Parks are already working together in a partnership, which combines their individual strengths and unique placed based decision making to secure the long-term resilience and prosperity of these unique landscapes and their communities. The exciting and creative challenge for the National Parks (and for other designated landscapes know as Areas of Outstanding Natural Beauty or National Landscapes, which together make up a further 8% of the UK's land area) is to find a way to cut emissions in line with current science, and be leaders in land stewardship and planning while simultaneously creating better places for people to live, work and visit.

There are considerable differences between the National Parks in terms of overall land area, types and extents of habitats, resident population sizes and demographics, numbers and types of visitors and businesses, agriculture, road traffic, and public transport. All these factors affect present-day GHG emissions as well as opportunities and priorities to reduce them, alongside increasing land-based (and, where applicable, marine) carbon sequestration.

Despite the unique sets of circumstances in each National Park and the multiple differences between them, there are nevertheless common factors and themes, creating an important

opportunity for the landscapes to address the climate and ecological challenges collectively as a family. These themes include:

- Cutting energy-related emissions from buildings, traffic and industries;
- Reducing the footprints of locally consumed food and local agriculture;
- Embarking on ambitious programmes to restore or recreate semi-natural habitats, including woodlands, peatlands and wildflower meadows where appropriate;
- Engaging with the broad visitor economy sector to reduce its footprint;
- Educating the public on the role they can play in reducing their footprint.

The National Parks could also play an important role in policy advocacy, both for the UK and for the devolved nations, by engaging in large-scale trials to roll out innovative solutions to address the climate and ecological crises.

While the challenges ahead are considerable, and tackling them requires strong national and international policies, the associated opportunities are both wide-ranging and exciting. By working together to respond to the challenges the National Parks and their partners could become global leaders in addressing the joint climate and ecological crises. In doing so, they could inspire decision-makers in other parts of the UK, as well as in many landscapes and countries abroad, to pursue similarly ambitious policies, and commit to the investments and lifestyle changes that are understood to be essential for building a sustainable world for future generations.

Part two: research and analysis

Each National Park has prepared a consumption-based GHG assessment. This approach reflects the full climate impact of resident and visitor lifestyles by tracking the embedded footprint of goods and services purchased, in addition to territorial emissions from the consumption of fossil fuels and electricity, and from land use. It is complemented by setting science-based targets to reduce emissions and scale up carbon sequestration consistent with keeping global warming below the “safer” 1.5°C limit in the Paris Agreement. By pursuing the consumption-based approach to GHG accounting, policymakers, businesses and citizens can take more ambitious steps to reduce emissions and become leaders in responding to the climate and wider environmental emergency.

Across the priority areas identified by the consumption-based GHG assessment, including land use, the collective total (net) GHG emissions baseline for the 15 National Parks is estimated to be around 12.7 million tCO2e per year, as at 2019 (Figure 2). If the recommended decarbonisation and land use change targets were adopted and delivered in full for all the landscapes in 2019 with immediate effect, their collective total (net) GHG emissions should reach net zero and become net negative in mid-2030s as carbon sequestration starts to outweigh the residual emissions, eventually reaching a net negative value of roughly –7.1 million tCO2e per year by 2050 (Figure 2).

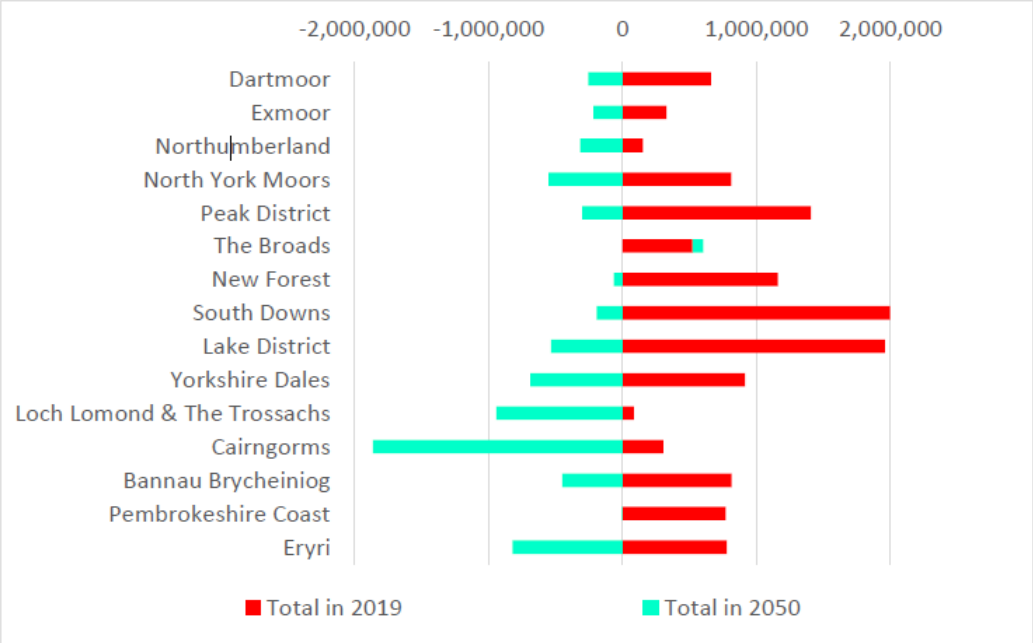

Figure 2. Estimated net GHG emissions in 2019 (baseline year) and projected net GHG emissions in 2050 for the UK National Parks. Units: tCO_2e per year.

The National Parks could therefore play an important role as net carbon sinks that will negate residual emissions from UK's cities, hard-to-decarbonise industries, and global supply chains, helping the whole country to meet its climate targets. This transition would involve:

- Creating over 9,000 ha per year of new woodland for 30 years (12% of total land area of the National Parks);
- Restoring over 12,500 ha per year of peatland for 30 years (17% of total land area of the National Parks);
- Rolling out over 12,000 ha per year of various regenerative agriculture measures6 for 30 years (16% of total land area of the National Parks);
- Reducing emissions from energy (buildings, transport, industrial processes) to 6% of the 2019 levels by 2050;
- Reducing emissions from visitors while travelling to and from the National Parks to 11% of the 2019 levels by 2050;
- Reducing emissions from food (both produced locally, and elsewhere in the UK and abroad) to around 40% of the 2019 levels by 2050.

Part three: Mission pledge

3.1 Pledge

The Broads Authority is committed to reducing its share of Greenhouse Gas Emissions and is taking part in the 'Race to Zero', alongside other UK National Parks. This is the United Nations-backed initiative to halve global emissions by 2030 and reach net zero by 2050.

The Authority's work towards achieving net zero spans its entire operations, from decarbonising its work programme, partnership projects with farmers, landowners, local and district councils, through to working with the tourism industry and the wider public to reduce carbon emissions.

In order to achieve these goals, we have set the following targets;

By 2030 the Broads Executive Area emissions will have fallen by 51% from the 2019 baseline.

- By 2050 Broads Executive Area emissions will be at reduced by 90%.
- By 2030 the Authority's internal emissions will have fallen by 50% from the 2020.
- By 2040 the Authority's internal emissions will be Net-Zero.

In setting these goals we have taken account of the limitations of the geography of the Broads National Park, which consists of narrow river valleys. This means that it will be very challenging to achieve offsets for the residual emissions of over 7 million visitors a year within our geography.

3.2 Climate Resilience Goals

Whilst making our fair contribution to meeting the Paris Climate Goals, there are already changes in our climate that are locked in as a result of historic emissions, and the emissions that will continue to occur as we progress to Net-Zero.

Climate Resilience is often described as being able to withstand or recover quickly from climate driven weather events.

In an area as diverse as the protected landscapes, there are several important characteristics which, when taken together, describe how people and places can become more resilient to flooding. For example, we can protect our natural resources so that, as far as possible, they better cope with climate shocks.

Our built environment can be designed to be more resilient to floods, heatwaves and droughts which cause material damage and negatively impact our urban and rural economies.

Our communities - who have a wide range of skills, networks and ability to influence outcomes - must be empowered to take part in making decisions and developing solutions. In these, and other ways, we can be proactive in our planning and respond appropriately when incidents occur, so that our people and places suffer the least possible consequences and recover as quickly as possible.

Protected Landscapes have together produced the High Level Report for Adaptation Reporting Round 4 - Protected Landscapes High Level Report for Adaptation Reporting Round 4 (ARP4) — National Parks England.

Based on this report, we have identified the following headline Resilience priorities for our landscapes.

- Example 1-Build ecological resilience to the impacts of climate change through the adoption of adaptive management practices for ecosystem function, habitats and species.

- Example 2 – Build adaptive capacity at a landscape scale, prepare for and accommodate land-use change that supports and enhances landscape character and related special qualities.

- Example 3 – Support farming and the land-based sector to adapt and become more resilient.

- Example 4 – Use our planning function to help support and develop resilience within the built environment and heritage assets.

- Example 5 – Support innovation and demonstrate how we can shift to a more resilient and low-carbon future.

- Example 6 – Support our local communities to adapt to the impacts of climate change and become more resilient.

3.3 Transformational shifts

Nine transformational shifts have been identified as needed to reach net zero and climate resilience.

The aim of identifying these shifts is to give a tangible sense of direction to a wide range of organisations and people in the National Park and beyond.
The shifts are based on:

- Evidence and analysis developed for this Action Plan
- UK and devolved Government strategies
- Global good practice
- Feedback from stakeholders engaged in this Action Plan development

Work is already underway towards achieving each shift so the descriptions are intended to highlight contrast rather than imply no progress.

Shift	Description
1: CLIMATE SAFETY	From vulnerability to resilience and preparedness.
2: ENERGY SAVING & RENEWABLE ENERGY	From fossil fuel reliance to energy efficient clean energy.
3: SUSTAINABLE TRAVEL	From petrol and diesel car-dependence to active, public, shared, and electric transport
4: RESTORED NATURE	From depleted ecosystems to thriving, biodiverse landscapes.
5: AFFORDABLE SUSTAINABLE FOOD	From unhealthy, extractive food systems to nutritious, local, low-impact food for all
6: WELL-BEING ECONOMY & SUSTAINABLE RESOURCE USE	From GDP-driven extraction to circular, community-focused prosperity

7: SUSTAINABLE PLACES	From disconnected services to vibrant, accessible and connected local hubs
8: ACTIVE CITIZENS	From passive engagement to empowered, informed local action
9: JOINED UP PUBLIC SECTOR	From siloed efforts to coordinated, community-responsive leadership.

Part four: theory of change and strategic approach

Our National Parks are unique and special landscapes. Things are, and should be, done differently here to maximise the benefits that can be provided for nature, climate and people. Globally, we are facing twin crises of the climate emergency and nature loss. Both crises are happening here and now in the National Park, in fact many of the impacts are being felt even more deeply and obviously here, so it is not enough to simply do what we have always done.

The National Park Authorities are making a step change in how they responds to these crises but cannot do it alone. There are many people and organisations who have a role in securing a positive future for the National Park. Some who have been here for generations, some who are the stewards of the land, and those from within and outside the Park who will play a part over the coming years. Tackling the nature and climate crises is not separate to supporting the rural economy and our communities. In fact, working together to address these will provide a range of wider benefits for the National Park and its people, including more investment, business and employment opportunities.

To help accelerate meaningful progress towards halving global emissions by 2030 and to ensure the integrity of the campaign, Race to Zero both sets a minimum floor for robust net zero commitments and also lays out bold leadership practices for members to strive for. An independent Expert Peer Review Group reviews all Race to Zero partners against these criteria, and partners are in turn responsible for ensuring their members meet the criteria. Race to Zero is, in parallel, developing an accountability mechanism to ensure that members who persistently fail to comply with these criteria will be removed from the Race.

Underpinning the Race to Zero campaign are the five ‘starting line’ criteria, known as the ‘Five P’s’, requiring members to Pledge, Plan, Proceed, Publish and Persuade.

- **Pledge** at the head-of-organisation level to reach (net) zero GHGs as soon as possible, and by 2050 at the latest, in line with the scientific consensus on the global effort needed to limit warming to 1.5C with no or limited overshoot, recognising that this requires phasing down and out all unabated fossil fuels as part of a global, just transition. Set an interim target to achieve in the next decade, which reflects maximum effort toward or beyond a fair share of the 50% global reduction in CO2 by 2030. Targets must cover all greenhouse gas emissions: Including scopes 1, 2 and 3 for businesses and other organisations; 2. Including all territorial emissions for cities and regions

- Within 12 months of joining, publicly disclose a Transition Plan, City/Region **Plan**, or equivalent which outlines how all other Race to Zero criteria will be met, including what actions will be taken within the next 12 months, within 2-3 years, and by 2030
- **Proceed:** take immediate action through all available pathways toward achieving (net) zero, consistent with delivering your interim targets. Where relevant, contribute to sectoral breakthroughs.
- **Publish:** Report publicly progress against both interim and longer-term targets, as well as the actions being taken, at least annually. Report in a standardised, open format, and via platforms that feed into the UNFCCC Global Climate Action Portal.
- **Persuade:** Within 12 months of joining, align external policy and engagement, including membership in associations, to the goal of halving emissions by 2030 and reaching global (net) zero by 2050.

By working as a community of practice under the shared Race to Zero commitment, the UK National Parks can exchange expertise, provide peer-to-peer support, and collectively work on the campaign's core criteria. This collaborative approach enables the National Parks to accelerate towards achieving the 'Five P's' as well as forging a collective voice to demonstrate the leadership principles promoted by the Race to Zero campaign.

Part five: climate action plan

Adaptation

Support farming and the land-based sector to adapt and become more resilient.			
Ongoing Programmes/Proposed Projects/Actions	Lead organisation and Partners	Outcomes	Delivery Date
Ongoing Programme: Continue to deliver the Farming in Protected Landscapes Programme	Broads Authority, FIPL Board	Farmers can use funds from FIPL for a range of projects, including developing climate resilience. The programme to date has delivered 22 projects with some link to climate resilience.	Funding is currently confirmed until March 2029.
Progress the Peat Partnership to deliver new sites for peatland restoration bids. The Peat Partnership follows up the Nature for Climate Grant Schemes, and is preparing sites for the next round of funding, which will include the Lowland Water Fund in 2026.	Broads Authority, Peat Partnership	Peatland sites ready for project delivery with the newly announced funding.	Aim to submit bids to the funds for peatland restoration outlined in the Environmental Improvement Plan in 2026.
Support Partners in the delivery of the Norfolk & Suffolk Local Nature Recovery Strategy and Deliver the Broads Biodiversity Strategy	Broads Authority, LNRS Partnership	Implementation of a spatially planned nature recovery strategy	LNRS is a long term programme.

Develop & implement appropriate planning policies for climate adaptation			
Proposed action/project	Lead organisation and Partners	Outcomes	Delivery Date

Planning applications are assessed using the climate checklist in the local plan	Broads Authority Planning Dept	Development is suitable for climate altered future	Ongoing work
Future Local Plan policies will develop policies that respond to the adaptation needs of the Broad. This will likely require a particular focus on water stress and flooding.	Broads Authority	The Local Plan Policies support sustainable development	Ongoing work dependent on the Local Plan Review schedule/

Work with partners on adaptation planning			
Proposed action/project	Lead organisation and Partners	Outcomes	Delivery Date
Broadland Futures Initiative	BFI Partnership	Flood Risk Management Approach for the Broads covering short, medium and long term (2130)	2028
Working with the National Parks Climate Group on Adaptation Reporting	National Parks, National Parks England	Common approach to delivering adaptation management plans by 2028, and preparing for future Adaptation Reporting Rounds.	2028
Support the Norfolk & Suffolk Climate Change groups and their successors post LGR with adaptation Planning – inc. LAEP and Integrated Water Strategy	Norfolk CC, Suffolk CC, District Councils, Broads Authority	Local Area Energy Plan (LAEP) and Integrated Water Strategy to be ready for the new Combined Authority. Partnerships allow for sharing of common issues, general awareness of upcoming projects that may impact on each other.	Ongoing Activity

Prepare the Broads Authority for climate change			
Proposed action/project	**Lead organisation and Partners**	**Outcomes**	**Delivery Date**
Implement the mooring heights review	Broads Authority	Mooring heights are adequate to prevent overtopping during usual weather conditions during the boating season	This will be an ongoing project.
Keep Extreme weather risk assessments under review	Broads Authority	Extreme weather risk assessments are suitable for the changing conditions we are likely to encounter	This will be an ongoing project
Ensure management plans take account of potential weather issues (for instance – increased winter flooding)	Broads Authority	Management Plans factor in future climate conditions, as far as is possible.	This will be an ongoing project.

Mitigation

Reduce Land Use emissions by 60% by 2050			
Proposed action/project	**Lead organisation and Partners**	**Outcomes**	**Delivery Date**
Continue supporting the Peat Partnership to develop and deliver Projects	Broads Authority, Peat Partnership	Projects are brought forward to the next round of lowland peatland farming.	2027
Work with partners to deliver the Broads Biodiversity Strategy and the Local Nature Recovery Strategy	Broads Authority, LNRS partnership		This will be an ongoing programme

Identify & Reduce Transport Emissions within the Broads Authority's influence			
Proposed action/project	**Lead organisation and Partners**	**Outcomes**	**Delivery Date**
Expand the CyclePods network – following on from the Connecting Places Catapult installation of 3 locations for ebike chargers across the Broads, we will expand the offering to further sites and promote the facilities through our communication channels.	Broads Authority, site hosts	An expanded offering, aiming to cover at least 10 locations within this plan window.	2028.
Continue to work with the Norfolk EV Group, and the upcoming LGR successor, on delivering Local Electric Vehicle Infrastructure funds to support provision of electric car charging for visitors.	Broads Authority, Norfolk EV Working Group	Increase in the availability of charging infrastructure for visitors.	This will be an ongoing programme

Reduce Tourism Impact			
Proposed action/project	**Lead organisation and Partners**	**Outcomes**	**Delivery Date**
Implement the Broads Sustainable Tourism Strategy	Broads Authority	Delivery of the actions set out in Part 4 of the Strategy	2029
Continue to work on Electric Infrastructure for boats, and see funding for wider electrification, building on the previously funded Clean Maritime Demonstration Competition project.	Broads Authority, other navigation authorities, private business partners	Increase the use of electric and alternative zero emission fuelled boats in the Broads.	2030

Communication and Engagement

Communication and Engagement			
Proposed action/project	**Lead organisation and Partners**	**Outcomes**	**Delivery Date**
Include Climate Messaging and information about the actions we are taking in the Broads Social Media output	Broads Authority	Public are aware of the action we are taking, and how they	Ongoing activity

		can make environmentally conscious visits to the Broads	
Include climate themed stands within the Norfolk Show and other events	Broads Authority	Public are aware of the action we are taking, and how they can make environmentally conscious visits to the Broads	Ongoing activity
Engage with civil society through events and direct conversations with the relevant people in the organisations.	Broads Authority	We are able to take wider public views into account when preparing the next plans.	2028

Appendix 2 - Progress against the previous action plan

Overall Progress in reducing emissions (by numbers)

Authority

Scope 1

Between FY 2019/20 and 24/25 this fell from 289 tonnes to 93 tonnes, a drop of 68%

Scope 2

Between FY 2019/20 and 24/25 this fell from 90 tonnes to 31 tonnes – a drop of 64%

Scope 3

Between FY 2021/22 and 24/25 this fell from 617 to 499 tonnes – a drop of 20%

Executive Area

We only have data for 2022 and 2023 due to the delays in generating some of the data. Therefore this is single year progress (in effect).

DESNZ Cuts

Emissions fell from 418,486 tonnes to 382,431 tonnes – a fall of 8%. This would be enough to be on track for a 1.7 degree reduction in emissions. The largest falls came in commercial and industrial emissions. Part of this may be down to the significant drop that Cantley Sugar Factory reported. Whilst British Sugar has made very significant progress in their point source emissions (from a high of over 40 thousand tonnes down to under 20 thousand tonnes) this will become a diminishing return.

Consumption basis

Emissions fell from 734535 to 725059 – a fall of 2%. This is behind the targeted fall of the 1.7 degree curve, which would have needed an extra 4,000 tonnes of emissions fall. The difference between the two levels is down to the not including the Cantley figures in a consumption basis.

Progress on Actions

Executive Area

Action	Description of Progress	Comment
Action 1: Complete the Baseline and develop trends to zero carbon with Smallword Consulting	Completed, with the baseline data used as a basis for the National Parks to collectively joint the Race to Zero. The tools will also be used to enable reporting against the baseline going forward.	
Action 2: Promote green electricity to Broads residents	The Broads Authority has worked with local partners to promote the solar together scheme. General targeted advertisement to residents to change behaviour has not taken place/	
Action 3: Peat mapping	The QMUL peat mapping project yielded valuable insight into the condition of Broads peatlands and the opportunities for rewetting. This fed into the Broads Peat Partnership work under the DEFRA Nature for Climate Programme, and informed the Broads Biodiversity Plan targets and the response to the PLOTF targets.	
Action 4: Public engagement	Public engagement with various Broads Authority activities has been done through exhibitions at the Royal Norfolk Show, the various CANAPE activities, the LCWIP development, education programmes	

	including Generation Green. We have also promoted public transport access to the Broads by highlighting the Bus Fare Cap.	
Action 5: Car free promotions	Various sites in the Broads Area are signed up to the “Good Journey” scheme, promoted by Norfolk County council and listed on the Travel Norfolk Map, which is promoted by the BA/Visit the Broads Website. The CyclePods project is explicitly aimed at allowing further car free access to the Broads.	
Action 6: Remote location electricity	This projected became the Electrifying the Broads Project, a feasibility exploring the most effective way to provide zero emission cruising on the Broads. The feasibility study suggested that remote power generation would be unlikely to be a significant part of future projects. Unfortunately, further funding has not been available from the CMDC/UK SHORE programme, and further funding is not anticipated until the completion of the 5 year spending review. Other nationwide policies that this would depend upon, such as the Clean Maritime Plan and the Net-Zero Ready vessel mandate is still yet to be forthcoming.	

Action 7: Hydrogen technology	Hydrogen technology is still seen as a key plank for decarbonisation of the Broads Authority activities, and potentially for marine decarbonisation. However the technology has not yet matured to the point where it is viably ready for a trial on the Broads, both in terms of the Fuel Cell/Hydrogen ICE/eFuel systems, and in terms of the supply. In the medium term, Hydrogen powered excavators are expected to be available soon, although these will operate on ICE and the challenge will be the cost of hydrogen. Local hydrogen sources include the Lowestoft Power Park and the Bacton Hydrogen project, with longer term sources potentially including Sizewell C.	
Action 8: Offsetting strategy	Development of an offsetting strategy has been somewhat slow. Most offsetting strategies in the Broads are based on peat, and the peatland market has been slower to develop than the woodland market. The Peatland Code for lowlands has now been announced, which will potentially allow for offsetting in the future. It is not yet clear	

	if the economics of this will be attractive to significant numbers of Broads Landowners. We have had discussions with companies interested in investing in such schemes, and there are some lowland offsetting schemes in the Fens that we can learn from. Net-Zero with nature and other "soft" offsetting schemes are also available, and have been developed with the National Parks Partnerships/Revere Consultancy.	
Other Programmes		

Broads Authority

Action	Description of Progress	Comment
Use Biofuel for CME Work	The entire CME equipment fleet has been switched over to HVO fuel. This is certified through the Renewable Fuels Assurance Scheme.	Longer term the supply for HVO is not necessarily guaranteed, especially as internal comments from DfT officials seems to be that the government preference is to "reserve" HVO feedstocks for Sustainable Aviation Fuel (SAF)
Switch yare House to Green Tariff	Following a request to the landlord, Yare House uses 100% renewable electricity	DEFRA group methodology does not use this accounting method, and still uses the average grid emissions. Whilst there are benefits to a green tariff, it is not necessarily a substitute for reducing energy

		use/purchasing own generation through solar.
Re-Engine Spirit of Breydon	SOB has been re-engined, however this has been offset by navigation safety requirements for ranger launches to spend more time on the water.	Next step proposed step is to install a HVO tank at Goodchild Marine to enable SOB to be fuelled from Biofuel. SOB is currently the majority of ranger vessel emissions.
Salary sacrifice for EVs	No Progress to report	
Increase homeworking	Significant increase in homeworking coupled with a reduction in office space should yield a significant emissions reduction.	Figures for energy savings in the office will be calculated at the end of the Financial Year 24/25
Review Procurement Strategy	Through the process of calculating the Broads Carbon Footprint, we have significantly increased the scope of data we are capturing. However we have not made much progress in shifting to greener procurement or improving the quality of data. An analysis of firms the Broads Authority spends over £25kpa on shows that around half of them have Net-Zero plans in place.	Next step is to carry out surveys of suppliers, and depending on the outcome, build net-zero requirements into tenders.
Dredging practice	UEA Interns researched the likely impact of different sediment disposal impacts. There is no particular literature that could be found on how the carbon dynamics of disposing of sediment is affected by the method of disposal.	

	It is probable that in-filled lagoons remain the best option, along with the use of sediment in restoration projects such as the SWT Peto's Marsh project. The dredging strategy has not so far looked at cutting the amount of dredging or altering the overall dredging specification, which would be the simplest way to reduce footprints.	
Electric Launch	Various options have been explored for electric launches to meet the requirement for 24 hour availability whilst being operational largely on electricity. We have not been able to progress due to staff time constraints.	
Electric/Hydrogen Wherry	After some initial explorations, there has not been much progress made. Initial explorations showed that the cost of converting a wherry to hydrogen would be prohibitive, and conversion to Battery Electric would not be viable given the requirements of the vessel.	
Purchase small scale Electric excavator	It was proposed to purchase a battery powered 1 tonne mini-excavator to gain experience with operating electrical machines. This could replace one of the Broads Authority's existing machines.	

	The challenges would have been the need to return to base for charging, or purchasing an additional battery pack that could be returned to base for charging. The proposal has not progressed due to the financial pressures the authority has been under, which make it hard to justify the additional £20,000 capital cost required for such an excavator.	
Plan replacement of CME equipment	Currently we have not been able to develop a solid pipeline for replacement of equipment. When this action was set in the original action plan, it was envisioned that by around 2025 there would be products available to allow a transition away from ICE powered equipment. Currently the state of play is that Hydrogen Fuel cells are not ready to be used in construction work, so the development seems to be moving towards hydrogen ICE engines as a stop gap. Whilst this would likely be viable for working on the Broads, the other part of the supply chain, the provision of Hydrogen, is not yet available.	

	Potential supplies could include the Conrad energy 70MW installation planned for the Lowestoft Power Park and funded via the government's Net-Zero Hydrogen Fund. However the initial phase will be only 2MW, and we do not have a clear idea of price and demand in the local area - we would need certainty of supply before investing in new equipment.	
Island Cottage Heating Replacement	Island Cottage is the last part of the Broads Authority Estate that operates with fossil fuel powered heating, using an oil heating system. An alternative would be a heatpump or an electric resistive heating system. The current system however is rarely used, burning a very small amount of oil, and making only a marginal contribution to the Broads Authority footprint. The Broads Authority lease for the site is also not guaranteed long term, making investment difficult to justify. It may be worth exploring alternative fuels that can be burned in the oil boiler at the site.	
Dockyard Solar	**Not in the original decarbonisation plan** The Dockyard has a good potential for the installation of solar panels. However this has been somewhat held up by discussions with	

	engineers over the strength of the roof, and the potential need for reinforcing.	

Activities planned for internal decarbonisation 2025 onwards

Action	Year Scheduled	Assessment
Continued replacement of Fossil Vehicles with Electric Vehicles	Ongoing through to 2030	Suitable electric alternatives have been selected for most of the pool fleet and vans. There is a technical feasibility issue for the vehicles with towing capacity, that currently do not have alternatives on the market. A major review was done as part of the 2027 mandate proposed by DEFRA – still unclear at the moment where we sit with regard to this mandate due to our status as an arm's length body (ALB) that is outside of the Greening Government Commitment.
Heavy Plant Replacement	Starting 2026	There is still no launch date for heavy duty equipment of the type used for dredging. There are some options for vehicles such as telehandlers. However these are expensive pieces of equipment, and do not have particularly heavy duty cycles in the Broads Authority. Therefore the cost of replacement with the low carbon version does not seem justified at this point in time.