



Exmoor National Park Authority

Climate Emergency Action Plan



August 2021

1. CONTEXT

- 1.1. In May 2019 the UK government declared a climate emergency, the first government in the world to do this. The announcement highlights the latest evidence from the Intergovernmental Panel on Climate Change (IPCC) which advises that carbon emissions must reduce globally by at least 45% by 2030 from 2010 levels and reach net-zero by 2050, if we are to avoid the worst effects of climate change by keeping warming below 1.5C. The UK Government has signed up to the 2050 target.
- 1.2. A further announcement by the Government in December 2020 committed the UK to reducing carbon emissions by 68% by 2030 when compared to 1990 levels. This target will bring the UK more than three-quarters of the way to net zero by 2050. Also in December 2020 the Government's advisory Committee on Climate Change (CCC) published updated advice to Ministers which describes the 2020s as "the decisive decade of progress and action". Their report makes it clear that the UK will not achieve net zero by 2050 unless much stronger action is taken across a range of policy areas including transport, industry, buildings and agriculture, as well as energy. It also highlights the importance of the UK demonstrating global leadership in 2021 given its role as host of both the G7 Summit in June and the UN Climate Change talks (COP26) in November.
- 1.3. The UK's Protected Landscapes are a national asset in the fight against climate change. This was recognised in the Landscapes Review by Julian Glover¹, which stated that Protected Landscapes should "be at the forefront of our national response to climate change".
- 1.4. The role that National Park Authorities can play is set out in a Delivery Plan for Climate² which includes commitments for National Parks to lead the response to the climate emergency.
- 1.5. The national ambitions for responding to the climate and ecological emergencies, as well as for a green recovery following the Covid pandemic, provide a new stimulus and sense of urgency for renewed collaboration and action by the National Park Authority, and more widely within the National Park.

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FRONT COVER:

Artist's impression of Bye Wood by Leo Davey, Minehead

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¹ Landscapes review: National Parks and AONBs - GOV.UK (www.gov.uk)

² Delivery-Plan-for-Climate-Leadership-FINAL.pdf (nationalparksengland.org.uk)

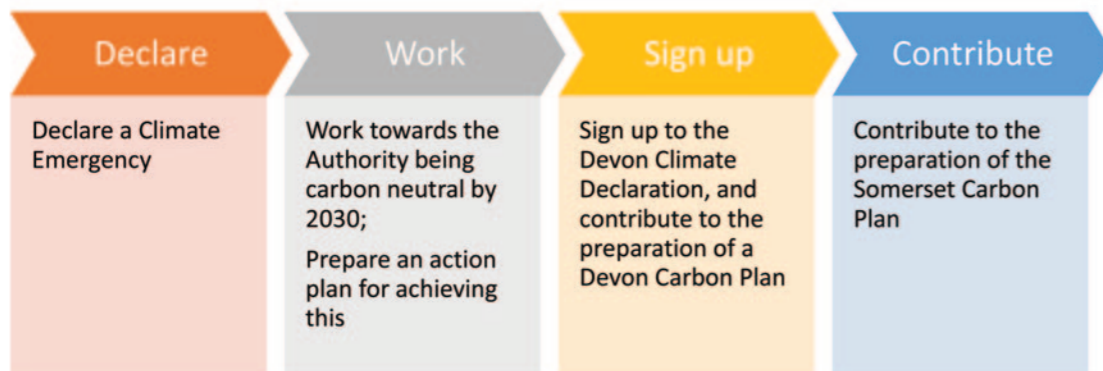
2. WHY URGENT ACTION IS NEEDED

2.1. The latest climate science highlights why action is needed:

- The concentration of carbon dioxide (CO₂) in our atmosphere is the highest it has been in human history [416 parts per million, May 2020]
- The Intergovernmental Panel on Climate Change (IPCC) estimates that human activities have already caused approximately 1°C of global heating above pre-industrial levels
- 2019 was the second warmest on record; and the five warmest years in the 1880-2019 record have all occurred since 2015
- The IPCC identifies that: "Without increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will surpass 1.5°C in the following decades, leading to irreversible loss of the most fragile ecosystems, and crisis after crisis for the most vulnerable people and societies. Limiting global heating to 1.5°C implies reaching global carbon neutrality in around 2050."

3. ENPA CLIMATE EMERGENCY DECLARATION OCTOBER 2019

3.1. In 2019, ENPA declared a climate emergency, and agreed to work towards the Authority being carbon neutral by 2030. ENPA also signed up to the Devon Climate Declaration and committed to working with the county-wide partnerships to develop Carbon Plans for Devon and Somerset.



3.2. The response from ENPA is two-fold, firstly to reduce the National Park Authority's carbon footprint, aiming to be carbon neutral by 2030, and secondly to lead action to respond to the climate emergency within the National Park as a whole.

4. CLIMATE AND ECOLOGICAL EMERGENCIES

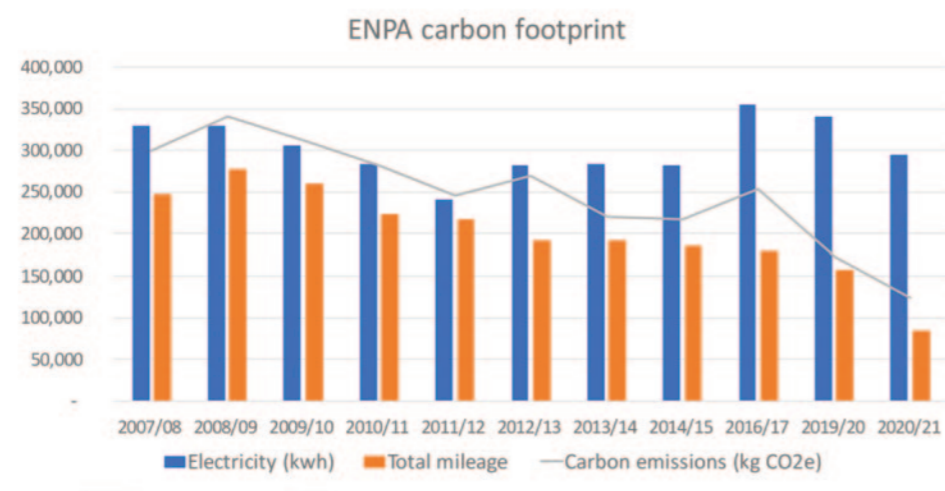
4.1. The consequences of climate change, and solutions to this, are closely connected to the ecological emergency. Exmoor's response to the climate emergency will be aligned with our work on nature recovery. In November 2020, Exmoor National Park Authority Members adopted a **Nature Recovery Vision** to work with landowners, partners and communities to help ensure that at least 75% of the National Park is in "nature rich condition" by 2050. The Vision sets out vital changes needed to bring about nature recovery, carbon capture and climate resilience within the National Park and its wider setting.



A Vision for a nature-rich Exmoor. Illustration: Richard Allen © Exmoor National Park Authority

5. ENPA CARBON FOOTPRINT

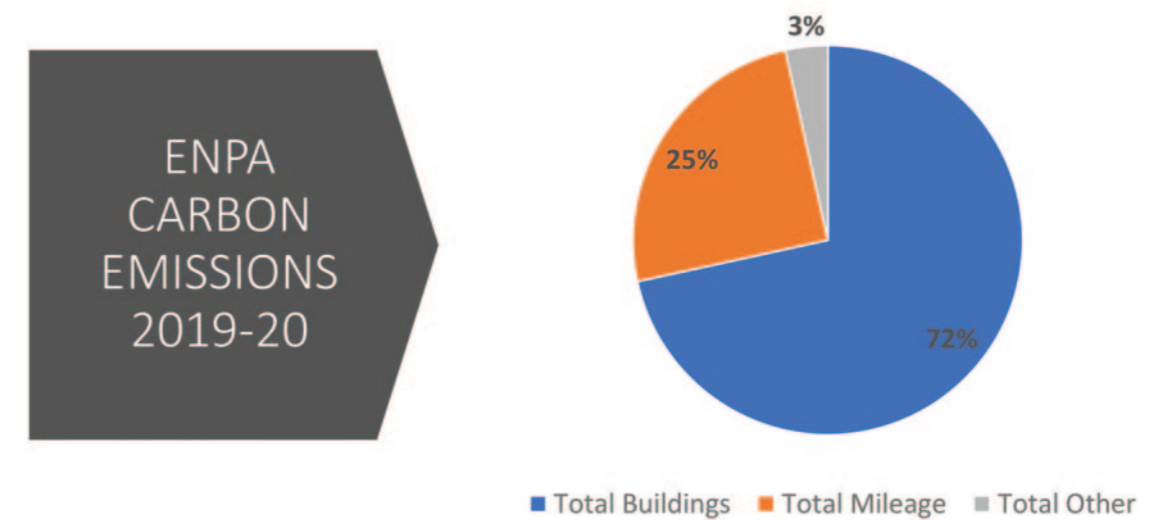
- 5.1. ENPA owns around 5,000ha of land including moorland, woodlands and farmland. We also own around 70 properties including our headquarters at Exmoor House, Pinkery Outdoor Education Centre, three National Park Centres in Dulverton, Dunster and Lynmouth, and the Field Services Depot at Exford.
- 5.2. ENPA measures organisational greenhouse gas (GHG) emissions as part of national reporting for National Park Authorities and has done so since 2007-8. The reporting follows the Government’s guidelines for environmental reporting and conversion factors to establish the carbon equivalent of the range of greenhouse gas emissions arising from energy demand and other activities³. These include emissions from our buildings, business travel, and other operations. Whilst figures for 2020-21 are available, for this report we are primarily focusing on the 2019-20 figures, as the Covid pandemic had a significant impact on our emissions particularly a reduction in carbon from travel, and we do not know yet whether these will be replicated in future years.
- 5.3. ENPA’s total annual carbon emissions are 174 tonnes of carbon, or 169 tonnes net if we take renewable energy generation into account (2019-20 figures). This is roughly a third reduction on the previous year, and since we started recording the figures, has dropped by about 40%.



³ Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements - GOV.UK (www.gov.uk); Greenhouse gas reporting: conversion factors 2021 - GOV.UK (www.gov.uk)

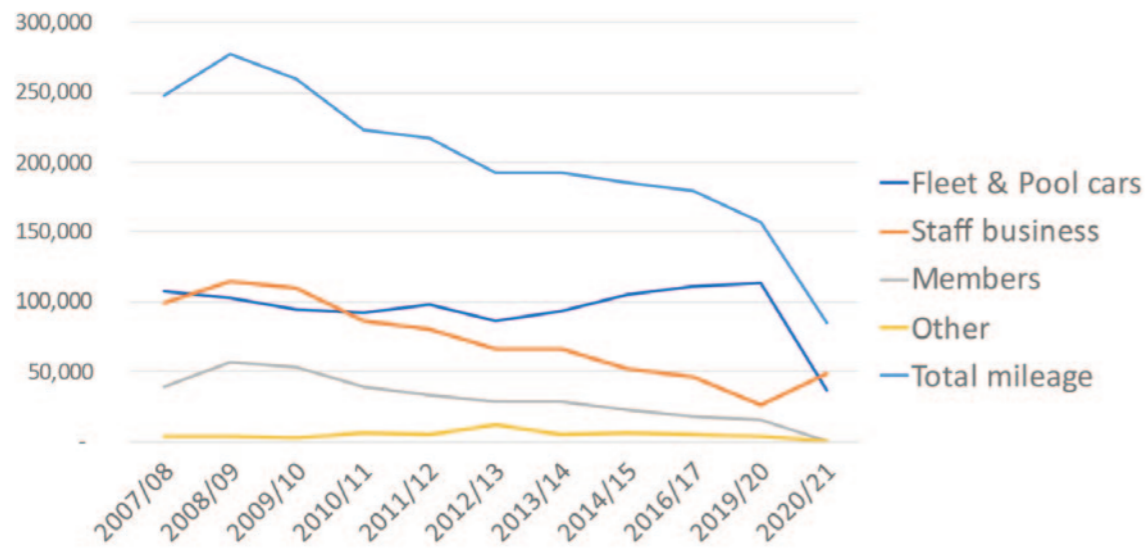
- 5.4. The 2019-20 figures show that the main contribution to GHG emissions are from:

- Buildings (electricity, oil and gas) 72%
- Travel (business mileage) 25%
- Other (including mobile plant (2%), public transport / flights (1%))



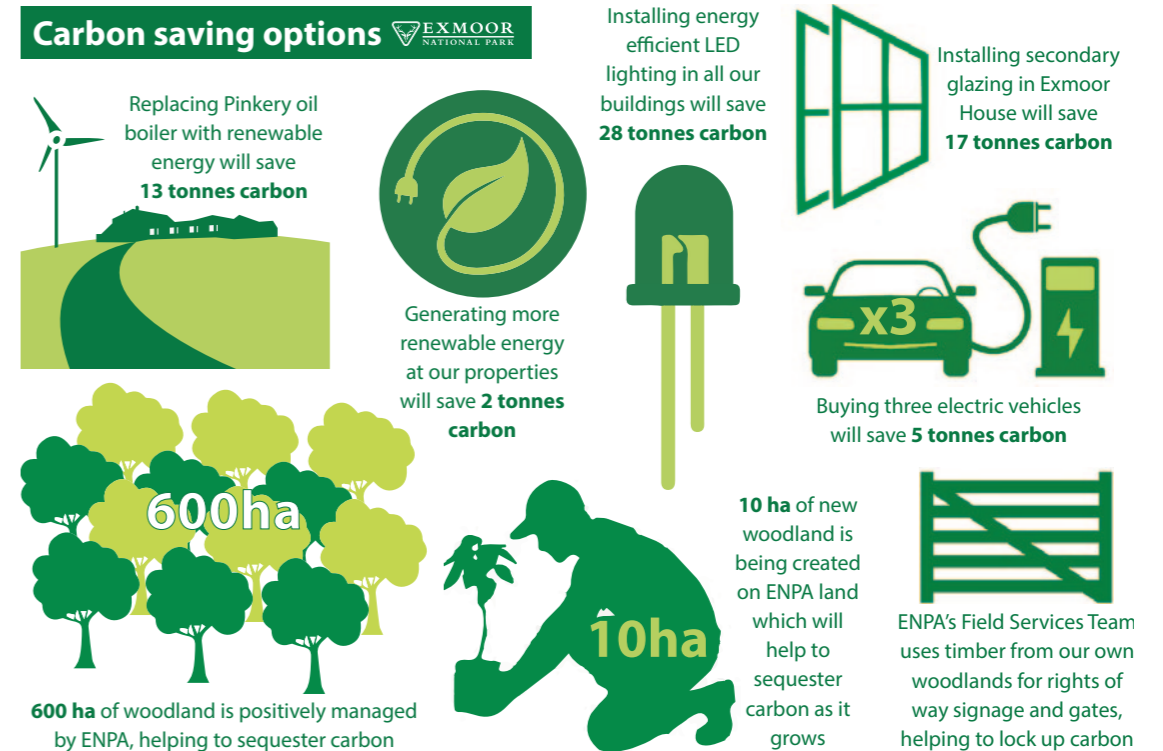
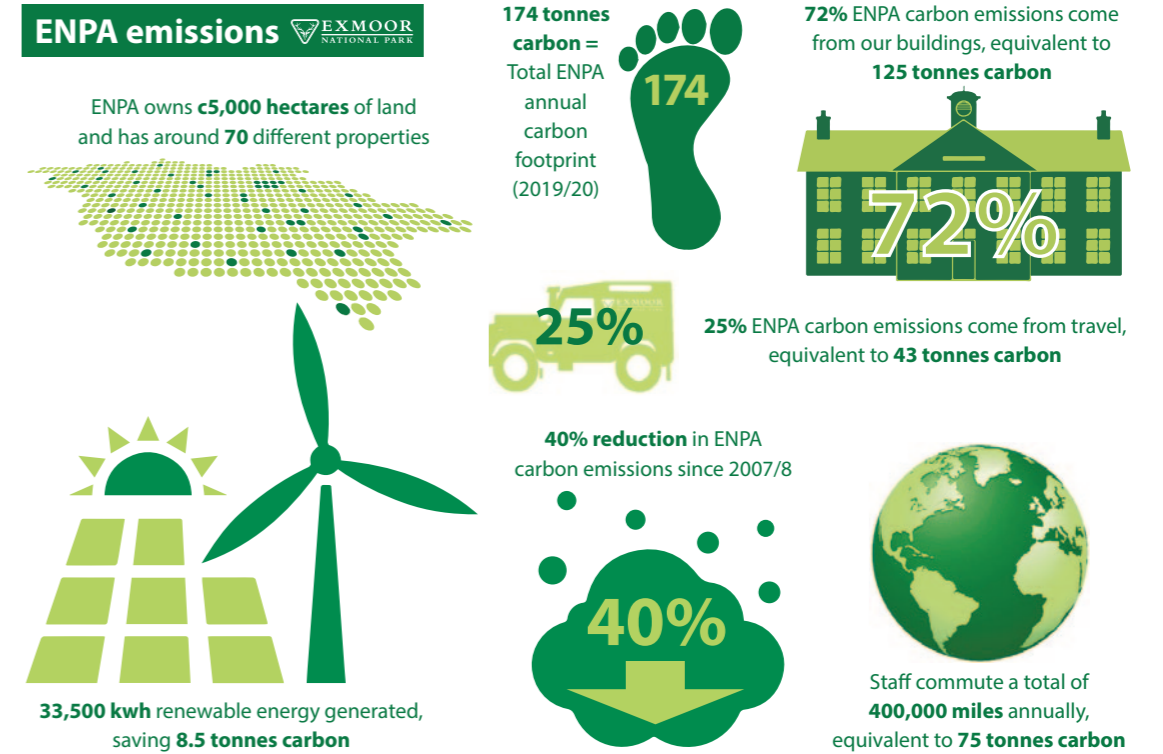
- 5.5. Other elements of ENPA’s carbon footprint that we do not currently include in GHG emissions reporting include paper usage, waste/recycling, and water supply and treatment or other purchasing decisions such as materials, equipment, clothing, for example. Further work is needed to include these in our reporting.
- 5.6. Analysis of ENPA GHG emissions since records were started show a steady decline in emissions. However, the fall in carbon emissions is partly due to a change in the conversion factors used to calculate the figures (which reflects the ongoing greening of the UK energy grid), rather than a reduction in energy demand.
- 5.7. The 2020-21 figures show a significant drop in emissions from travel, which halved during the year, primarily due to the impact of the Covid pandemic and staff working from home, with restrictions on the business travel staff and Members could undertake. The slight increase in staff business mileage in 2020-21 was due to staff using their own cars to travel rather than pool cars, due to Covid restrictions.

ENPA MILEAGE



Greening ENPA's fleet of vehicles is one of the actions identified to reduce our carbon footprint

5.8. In addition to the emissions from ENPA business travel, there are significant emissions from staff commuting to work, but these are not counted in the ENPA carbon footprint. A staff survey was carried out in late 2019 indicated that staff travelled approximately 400,000 miles, equivalent to 75 tonnes of carbon per year. Since the survey was carried out, the Covid-19 pandemic has led to staff primarily working from home. Whilst covid restrictions have now been lifted, it is expected that there will be a shift to more staff working from home more on a regular basis, which could help to reduce carbon emissions on an ongoing basis and we will investigate other options to encourage green travel for example including installing electric charge points in our car park at Exmoor House.



6. ENPA CARBON REDUCTIONS TO DATE

6.1. Emissions have reduced by around 40% since ENPA started recording its carbon footprint in 2007-8. This is partly due to a range of measures including:

- The installation of renewable energy at ENPA premises including the wind turbine and solar panel at Pinkery; Air Source Heat Pumps at Exmoor House; solar panels at Exford Depot, Blackpitts and Driver farm
- The installation of insulation and secondary glazing where possible and appropriate including Exmoor House committee room
- New, more energy efficient heating systems at key premises including a gas boiler at Dunster National Park Centre and biomass boiler at Exford Depot, using wood from our own woodlands
- Installing LEDs when replacement lighting is required
- Replacement of more efficient electric storage heaters in parts of Exmoor House
- New and more efficient ICT equipment including servers
- Purchasing a certified green energy tariff
- The reduction in the overall size of the organisation will also have had an effect on overall demand for energy

6.2. However it is important to note that whilst emissions have fallen, overall electricity demand has not, and some of the reductions in emissions are due to reductions in the conversion factors used, reflecting the greening of the grid. In order to properly respond to the climate emergency, ENPA needs to reduce energy demand and other emissions as far as possible.

7. THE ACTION PLAN

Vision

7.1. The need to respond to climate change is not new, and has been part of ENPA's vision and activities over the last 15 years. The key policy documents for the National Park – the Partnership Plan and Local Plan, both include the Vision:

'We are closer to achieving a carbon-neutral National Park to help mitigate climate change, and have introduced measures to adapt to changes in climate that are already happening'.

Our strategy

7.2. The climate emergency declaration committed ENPA to work towards the Authority being carbon neutral by 2030. Our primary goal will be to develop solutions to reduce carbon emissions wherever they can be directly mitigated (avoided or reduced). But this will not always be possible or viable and we will need to offset some of our emissions through increasing our own renewable energy generation, or enhancing carbon sequestration and storage on our Estate.

Carbon Neutrality means "achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset"⁴.

7.3. In making decisions for this action plan, we will follow the Greenhouse Gas Management Hierarchy⁵ of:

- Eliminate: avoiding or preventing GHG emissions
- Reduce: reductions in carbon and energy demands; improved efficiency in operations and processes
- Substitute: adopting renewable and low carbon technologies; reduce carbon intensity of energy used and purchased; purchase inputs and services with lower emissions
- Compensate: avoidable emissions through offsets; use land management to sequester and store carbon; support climate action

⁴ UN Environment (2018) Business unusual: the shift to "carbon neutral" available at <https://www.unenvironment.org/news-and-stories/story/business-unusual-shift-carbon-neutral> [accessed 06/08/2019]

⁵ IEMA - Pathways to Net Zero: Using the IEMA GHG Management Hierarchy November 2020

7.4. How we will use the hierarchy is illustrated below:

Eliminate	<ul style="list-style-type: none"> ● Ensure that the climate response is considered in decision-making ● Provide training for staff and members ● Include discussion of climate implications in Authority and Planning Committee reports ● Review our sustainable procurement policies and how these are implemented
Reduce	<ul style="list-style-type: none"> ● Target reduction in fossil fuel consumption (oil and gas heating, travel) ● Improve energy efficiency (e.g. installation of further insulation and secondary glazing where possible and appropriate) ● Reduce our energy demand through influencing behaviour (e.g. including turning off lights and equipment when not in use; reducing printing including for Member meetings)
Substitute	<ul style="list-style-type: none"> ● Increase renewable energy production where compatible with National Park purposes (e.g. at Pinkery, Exmoor House) ● Transition fleet to electric vehicles, promote green travel, reduce staff commuting ● Ensure electricity purchased is from an accredited green tariff ● Develop Pinkery Outdoor Education Centre as a centre of excellence for demonstrating and educating people about climate change including different renewable energy technologies and climate mitigation through nature recovery ● Aim for Pinkery to be self-sufficient in its energy demands being powered by renewable energy (space and water heating, cooking, and lighting) by 2030
Compensate	<ul style="list-style-type: none"> ● Pursue carbon offsetting through tree planting (e.g. Bye Wood) and peatland restoration ● Investigate carbon storage / sequestration and climate adaptation opportunities on ENPA land through the Land Visioning process

8 OPTIONS FOR ENPA ACHIEVING NET ZERO CARBON BY 2030

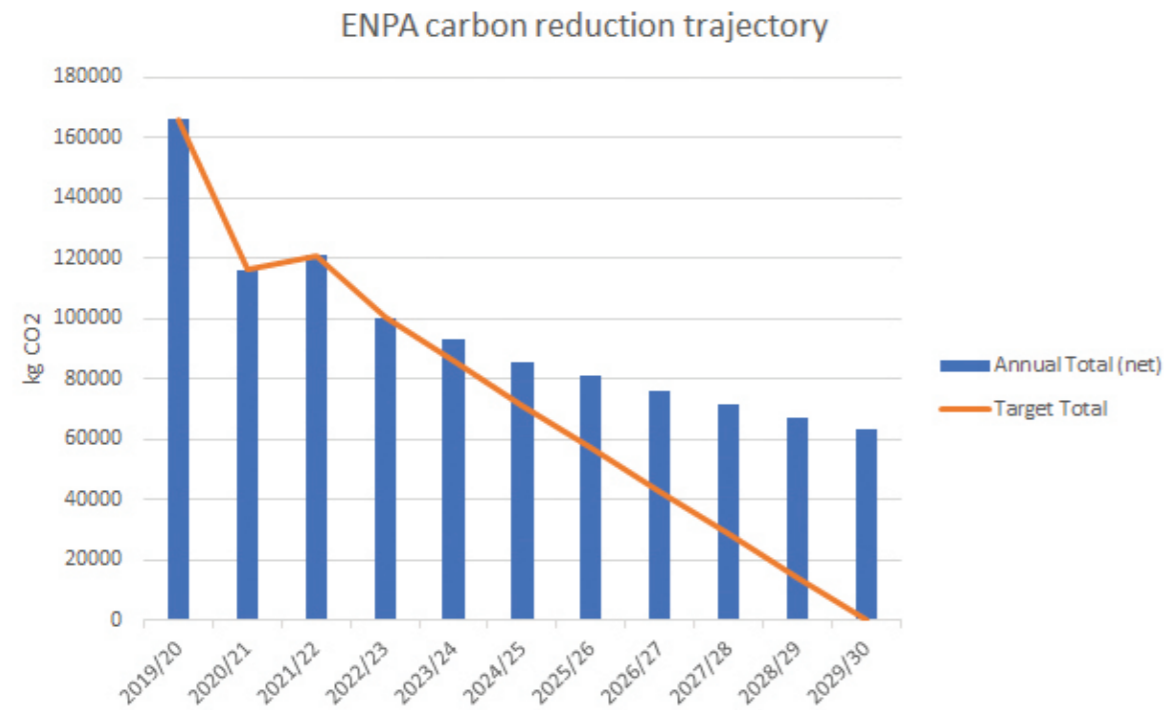
- 8.1. A number of options for reducing ENPA's carbon footprint have been investigated and costed. The focus is on reducing emissions in a cost-effective way. We have developed an options appraisal tool is used to assess the costs and impacts of potential projects.
- 8.2. This includes considering the estimated cost savings and carbon savings over the lifetime of the assets and the costs per tonne of carbon saved.

9 TRAJECTORY FOR ACHIEVING NET ZERO

- 9.1. A number of actions have already been identified which will help to reduce our carbon emissions. These include*
- Changing lighting to LEDs (saving 28 tonnes carbon, cost £15,000)
 - Replacing the oil boiler at Pinkery (saving 13 tonnes carbon, cost £25,000)
 - Installing secondary glazing at Exmoor House (saving 17 tonnes carbon, cost £55,000)
 - Replacing three vehicles with electric vehicles (saving 5 tonnes carbon, cost £96,000), and
 - Generate additional renewable energy at our properties (saving 2 tonnes carbon, cost £10,000)
- 9.2. The carbon savings from these projects will help to reduce emissions, as shown in the trajectory below. Budget has been allocated from the Environmental Resilience fund to deliver some of these actions in 2021-22, but further resources will need to be found as part of budgeting over the next few years. The current one-year funding allocation for ENPA makes it difficult to draw up longer term commitments.

* All costings and carbon savings are approximate

9.3. As the graph illustrates, we need to identify and resource additional carbon savings from 2022-23 onwards, if ENPA is to become carbon neutral by 2030. A number of additional projects are being developed to deliver this, assuming resources can be found. We are also seeking external funding for projects where possible.



10. CARBON OFFSETTING

- 10.1. Whilst we will do all we can to reduce our emissions, we will also need to off-set some emissions as indicated by the carbon trajectory chart above. We are fortunate in having plenty of opportunities through our Estate to generate renewable energy, and also potentially, to sequester and store carbon through woodland creation and peatland restoration to offset our carbon emissions. Current renewable energy generation is around 33,500 kwh (2020-21 figures) which equates to savings of 8.5tonnes carbon. Further work is needed to improve our data collection regarding renewable energy generation across the Estate.
- 10.2. ENPA’s woodland estate currently sequesters carbon, and this will be maintained through careful management, but this carbon cannot be included in our carbon accounts. There is potential however to claim carbon offsets from any woodland creation, and also in the future to generate income through selling carbon credits from some of this work, which could be used to fund future woodland/peatland work. Woodland creation at Bye Wood (10ha) has been accredited with the Woodland Carbon Code. As woodland takes many years to establish, it is not expected that the carbon benefits from this woodland creation will be achieved in time to support our 2030 net zero target.
- 10.3. The same is possible with ENPA’s moorland in relation to peatland restoration. The work carried out by the Mires Partnership has led to around 2,500 ha of restoration to date. However it takes many years for degraded peatland to be restored to a state when it is a net store of carbon rather than a net emitter. Further monitoring and investigation will be needed before any carbon benefits can be used in any accounts.
- 10.4. The Defra Tests and Trials work investigated the opportunities for carbon gains through environmental land management schemes, and the Farming in Protected Landscapes funding programme provides opportunities for further action.

11. MONITORING AND REPORTING

- 11.1. We will continue to report on ENPA GHG emissions as part of the National Park family indicators reporting to Defra, and also our own Corporate Plan reporting. The figures will be broken down further to provide additional indicators including:
- Emissions from ENPA buildings
 - Emissions from ENPA travel
 - Emissions from other ENPA activities
 - Renewable energy generation
 - Carbon reductions from actions
 - Carbon offsets
- 11.2. Progress with delivering the climate action plan will also be reported as part of our six monthly and annual reports on the Corporate Plan. This will include an updated carbon trajectory, and we will look to develop a dashboard for reporting delivery of actions.
- 11.3. The Climate Change Action Plan will be updated annually to enable us to analyse emissions reductions and identify further actions.



Restored peatland provides opportunities to lock up carbon