

REPORT 4: CLIMATE CHANGE ACTION PLAN

1. Purpose of Report

This report highlights the actions required to meet the Statement of Intent made by the Authority at its meeting on 25th September 2019 namely; to achieve a position of net-zero greenhouse gas emissions associated with its own activities by 2030.

2. Recommendations

The Authority is recommended to:

- a. **note the 2019/20 carbon footprint of the Authority;**
- b. **agree an outline invest to save programme. As set out in section 6 of this report;**
- c. **ratify the concept of carbon offsetting projects by, and on behalf of, the National Park Authority;**
- d. **note that further work is required to devise an action plan for the National Park area as and when data becomes available, and;**
- e. **note and approve the financial implications associated with taking this area of work forward.**

3. Implications

- a. **Financial:** An outline invest to save programme has been presented in this report at section 6. Over the 10 year period this is calculated to generate a net saving to the Authority of £24,700. The investment over the period will pay back within 8 years. The figures presented have detailed assumptions behind them, however, they are not finalised as yet. Before any of the projects are committed further detailed assessment will be undertaken to ensure it delivers the outcomes and returns required. In the current Medium Term Budget Plan £22,100 is required. This can be invested from reserves and will reduce the general reserve to £352,800 at the end of the 2022/23 financial year. Beyond this period the investment required will need to be built into the prioritised ongoing Medium Term Budget Plan.
- b. **Equalities:** There are no equality implications from this report.
- c. **Link to Business Plan:** The work on climate change contributes to Aim 2 'Contributing to a Distinctive Place', Aim 3 'Contributing to a Living Working Landscape', Aim 4 'Contributing to Thriving Communities', Aim 5 'Contributing to a Thriving Asset' and Aim 6 'Maintaining and Excellent Organisation that is Fit for the Future'.

4. Background

- 4.1 In September 2019 Members received a report entitled [Climate Change - Future Action](#)
At this meeting Members agreed four recommendations and this report provides Members with the details of the Authority's carbon footprint and an action plan to achieve a net-zero emissions target by 2030.
- 4.2 In November 2019 National Park Authority Chairs and Chief Executive Officers approved an updated National Parks England Climate Change Position Statement (See Appendix A). In this it was agreed that:-

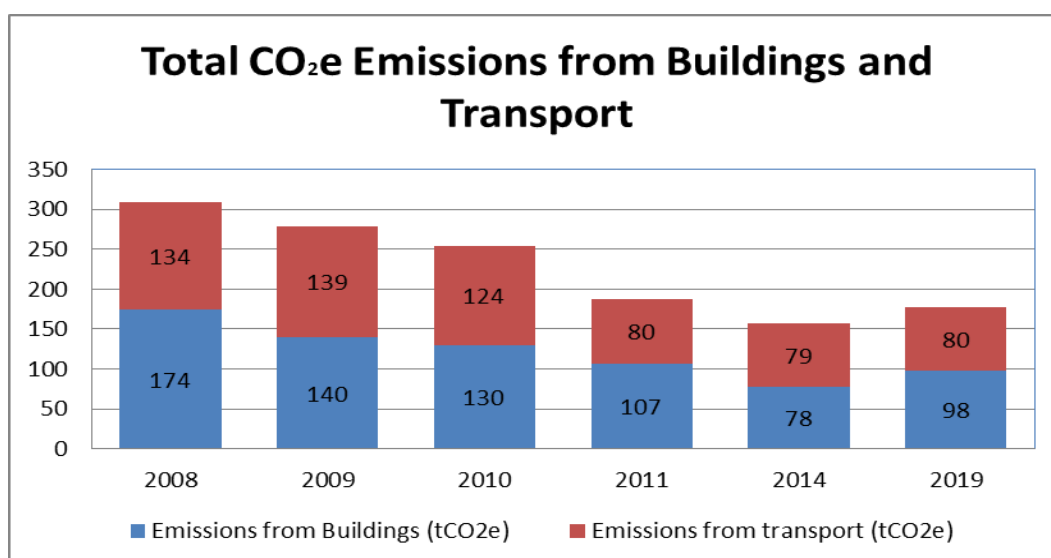
- National Park Authorities adopt an ambition to reach a net-zero emissions from their own activities target by 2030; and that,
- National Park Authorities gather support for a net-zero targets for their respective National Park areas by 2040.

4.3 Whilst the first target above is in line with the Authority's 'Statement of Intent' set out in Section 5 of [Report 8](#) of the September 25th 2019 Authority meeting, the second target relating to the Park brings forward the deadline by 10 years from 2050 to 2040. Officers believe this is realistic and achievable in relation to Northumberland National Park, it also aligns with other organisations ambitions such as the National Farmers Union who want to see agriculture in England and Wales reach net-zero by 2040. The National Parks Climate Change and Energy Working Group (National Parks England) is currently working on a robust methodology to monitor this and is awaiting information from the Department for Business, Energy & Industrial Strategy to assist in this process.

4.4 Previous work on climate change identified and actioned numerous projects, such as energy efficient IT, loft insulation, energy efficient lighting, new efficient gas combi boilers and solar panels. These actions saw a significant reduction of 49% in the Authority's carbon footprint from 2008 to 2014. Following a period when the Authority, on the back of austerity cuts, had to reprioritise its resources and did not monitor its carbon footprint, an updated figure has now been established for the financial year 2019/20, using the latest Government's guidance. From this it is possible to ascertain the level of action and likely resource will be needed in order to reach its net-zero ambition by 2030.

5. Northumberland National Park Authority Carbon Footprint

5.1 In order to determine how the Authority can reach net-zero by 2030, it is important to understand what the Authority's current carbon footprint associated with its own activities is. The methodology used to determine this aligns with the UK Government's Streamlined Energy and Carbon Reporting (SECR) policy which, came into effect on 1st April 2019. This methodology splits reporting into three sections - scope 1 (direct emissions from owned or controlled sources i.e. heating and vehicle fleet), scope 2 (indirect emissions from the generation of purchased energy i.e. electricity, and scope 3 (all other indirect emissions that occur in a company's value chain i.e. business travel, investments, leased asset emissions). Scope 1 and 2 emissions have to be reported against, whereas scope 3 is voluntary. The 2019/20 carbon footprint can be seen in appendix 1 to this report. The information obtained is comparable to the previous Authority carbon footprint calculations determined under the National Performance Indicator [NI185](#). Graph 1 below shows the comparison where data is available;



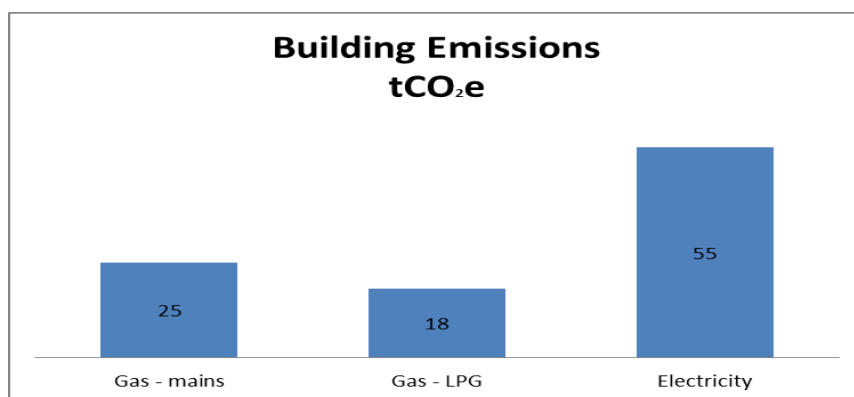
Graph 1

5.2 The data shows that the total carbon footprint is 178 tonnes of CO₂e (equivalent), with 98 tonnes being from buildings (only those areas in occupied by NNPA staff, i.e. not tenanted areas) and 80 tonnes from transport (including business travel by staff, members and volunteers. It should be noted that, this data does not need to be reported through Government reporting (please see full footprint report in appendices for further detail).

The UK Government's Streamlined Energy and Carbon Reporting (SECR) policy came into effect on 1st April 2019. In this businesses need to account for their direct emissions from owned or controlled sources e.g. heating and vehicle fleet (Scope 1) and indirect emissions from the generation of purchased energy e.g. electricity (Scope 2). All other indirect emissions that occur in a company's value chain such as business travel, investments, leased asset emissions, procurement of goods etc. do not have to be reported but are optional for organisations to choose to monitor and are referred to as Scope 3 emissions.

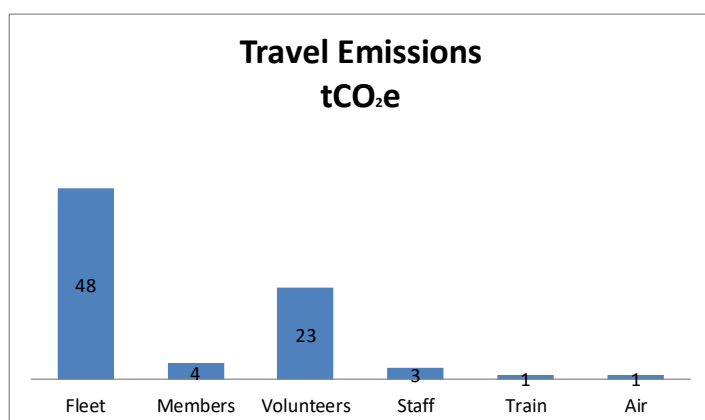
It should be noted that operating from The Sill National Landscape Discovery Centre, (which opened in 2017) largely accounts for the increase in building emissions seen since 2014 but still the majority of the Authority's emissions are directly linked to buildings and transport and therefore this is where actions need to be focus going forward.

5.3 The building emission breakdown is shown in graph 2 below. It is anticipated that a range of invest to save actions will see a reduction of 35 tCO₂e with a further reduction of approximately 20 tCO₂e due to national policy such as decarbonisation of the energy distributed via the National Grid.



Graph 2

5.4 The 2019/20 travel emissions break down is shown in graph 3 below; in comparison to past data there has been significant reduction in this area due to investment in efficient fleet vehicles. On 20th May 2020 the Centre for Research into Energy Demand Solutions released research that states that changing habits around transport has the biggest impact for change in carbon footprints, suggesting that further emission savings could be made here, as suggested in the invest to save table. It is anticipated that a range of invest to save actions will see a reduction of up to 43 tCO₂e over the medium to long term.



Graph 3

5.5 As an organisation that leads on the green economy, it is important that the Scope 3 emissions are considered when calculating carbon footprints going forward, i.e. the voluntary emissions such as staff commuting and increased electricity usage when working at home.

6. Invest to save

6.1 Members are asked to agree an outline 'invest to save' programme. Upfront investment will see a reduction in CO₂e emissions and return on investment within the medium term.

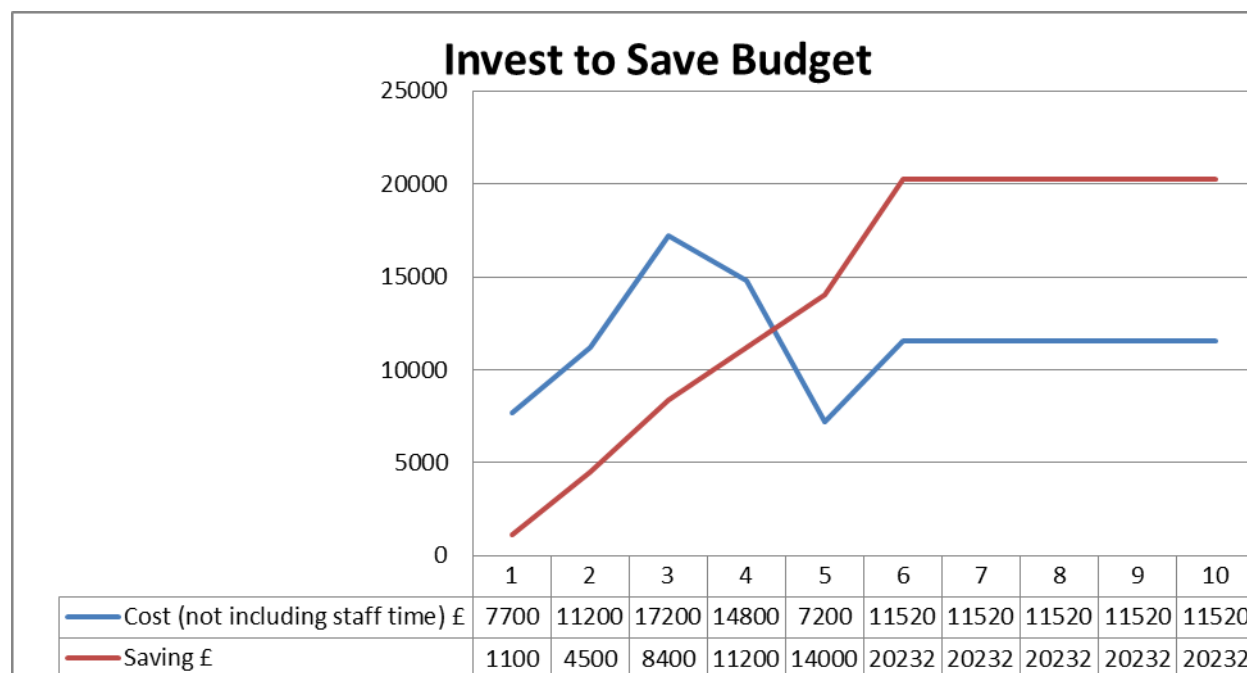
6.2 The table below shows that although financial investment is required to work towards net-zero aspirations, the return on this investment will be seen in the medium term, with further savings being made annually. There are a series of detailed assumptions behind these calculations and each project will be looked at on a case by case basis before any investment is made.

Climate Change Action Plan 2020 – Invest to Save Table 1

No.	Key area	Detail	Est. tCO ₂ e saved	Indicative cost (£)	Indicative saving (£)		Year of delivery
					Yr 1-5	Yr 6-10	
1	Ensure energy efficiency across sites	Ensure thermostats are correctly set and placed, ensure lighting is set correctly, raise awareness on carbon footprint associated with everyday activities such as emails, sign up to renewable energy tariffs, undertake renewable energy audits across main sites, energy efficiency and renewable energy audits. A small investment may be required on items to ensure staff comfort such as room thermometers.	10	(2,000)	5,500	5,500	1-2
2	Voltage optimisation - Eastburn, Sill	Voltage Optimisation is an energy saving technology that is used to regulate, clean and condition the incoming power supply in order to reduce the voltage supplied to the optimum level for the on-site electrical equipment and appliances. Sites with conventional equipment to see energy savings of between 5-10%.	10	(5,500)	8,000	10,000	1
3	The Sill net-zero heat project (investment only required if funding bid successful)	Newcastle University are heading a bid to the Strength in Places Fund to lead the way in net-zero heat installations in the North East, The Sill has been identified as a demonstration site to showcase what can be achieved in buildings not connected to mains gas. The project team are currently waiting to hear back from their Expression of Interest, if successful a full project bid will then be developed and submitted by December 2020 (this will include a feasibility study).	18	(15,000)* only if net-zero heat project successful and would see a grant income of approx £50,000	7,500* 2,500 per annum plus possible grant	10,000	3
4	Energy efficient fleet	Phase 1 - In the first 5 years 40% of the fleet to be changed to electric, when current leases allow. Alongside this investment charge points will have to be upgraded. Currently there is grant available to help with charge point installation at places of business.	18	(35,600) Yr1-5 (28,800) Yr 6-10	18,200* Including grant for charge points	42,000	1 to 5

No.	Key area	Detail	Est. tCO ₂ e saved	Indicative cost (£)	Indicative saving (£)		Year of delivery
					Yr 1-5	Yr 6-10	
		Phase 2 - with a further 40% of fleet vehicles electric from years 6-10 (calculations have been made with current information and the requirement for 4x4 vehicles within the ranger fleet). Further considerations to be given to the wider EV charging infrastructure required in the medium to long term for our communities and visitors, including the ability to charge accordingly.	18	(28,800)	-	33,660	6 to 10
5	Addition of carbon considerations in policy such as Authority papers, Projects, Procurement, mileage recording/carbon apportioning, volunteers using electric cars etc.	In an effort to ensure carbon accounting is embedded in all work areas it is important to amend some policies and paperwork to ensure this happens. For example, when project planning carbon foot printing should form part of the considerations from the outset. It is therefore proposed that this is reported as part of our project planning and reporting and decision making.	10	-	-	-	1
6	Carbon Champion	Appoint a Carbon Champion to represent members and volunteers and continue to support the officer green team	2	Funded from current training budget	-	-	1 - 10
7	Establish work programmes to create a baseline and net-zero action plan for the Park the place	Work with National Parks England to establish a methodology and work with communities to develop net-zero projects across the National Park.		-	-	-	Baseline work year 1, ongoing monitoring required
8	Upskill staff and establish a position on carbon offsetting within Northumberland National Park	The carbon offsetting sector is in its infancy in the UK and there are opportunities for NNPA to get involved in the coming years, to not only offset current carbon footprint but also to work with land managers to realise the potential of their land.	70	-	-	-	1
9	Further inclusion of voluntary carbon emissions data in NNPA footprint i.e. staff commute and electricity	As a leading organisation in the green economy NNPA should lead by example and fully consider all CO ₂ e emissions when working out the carbon footprint. Voluntary data (see scope 3 definition in the Carbon Footprint appendices and above) includes business travel, staff commute, outsourced services,	An additional 20+ tCO ₂ e	-	-	-	3

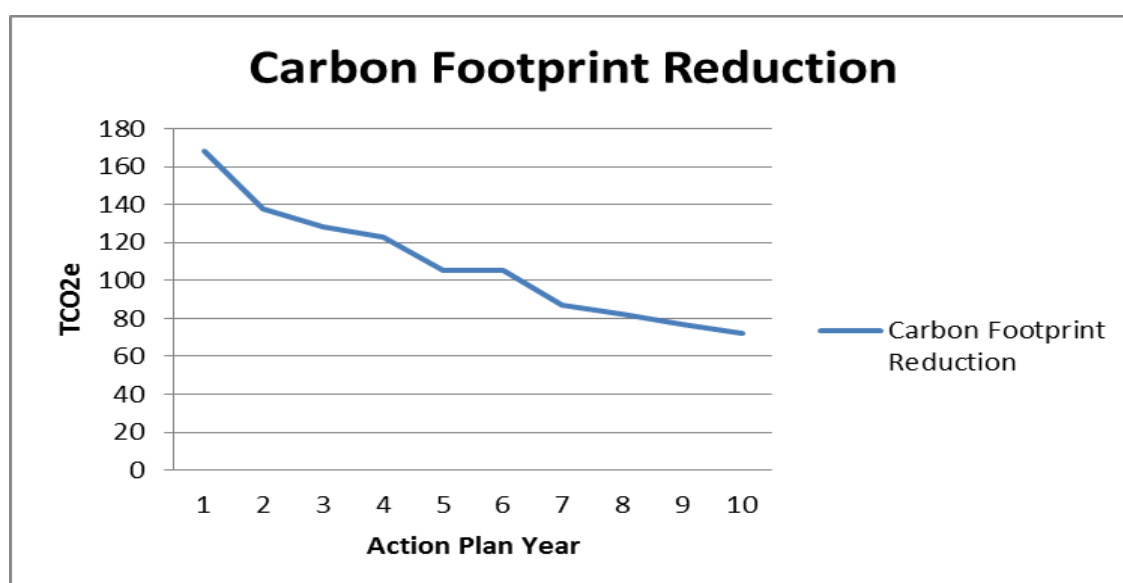
No.	Key area	Detail	Est. tCO _e e saved	Indicative cost (£)	Indicative saving (£)		Year of delivery
					Yr 1-5	Yr 6-10	
	usage when working from home	procurement. This could lead to an increase in the short term but it would enable the organisation to truly become net-zero in the medium to long term. Additional data will be required from staff about their commute and carbon implications of working from home					
TOTAL Year 1 – 5				58,100	39,200		
TOTAL Year 6 – 10				57,600		101,160	
OVERALL TOTAL				115,700		140,360	



Graph 4

6.3 Graph 4 shows that according to current calculations (which have detailed assumptions behind them) it is estimated that after year 5 there will be a net cost of £18,900 however, it is projected that these actions could see an ongoing annual savings of £20,000 compared to current spend. Officers will work closely with the finance team before any investment is made, with each project looked at on a case by case basis. Please note that if the Net Zero Heat project is successful a grant of approximately £50,000 will be awarded for works, in addition to ongoing savings for heating bills. Alternative funding will be sought if this grant is not successful.

6.4 The actions identified in the invest to save table 1 will see an annual saving and the following reduction in the Authority's carbon footprint; this table includes the anticipated reduction due to decarbonisation of the National Grid. This data is based on current calculations (further detail available if required).



Graph 5

6.5 Graph 5 above shows that the outlined actions will reduce the carbon footprint of Northumberland National Park Authority to approximately 70 tCO₂e per annum by year 10. In order to function and meet the statutory aims of the Authority, it is anticipated that members, officers and volunteers will generate some greenhouse gas emissions and therefore contribute to the carbon footprint.

7. Carbon Offsetting

7.1 It is acknowledged that the Authority will not be able to eliminate all the greenhouse gas emissions derived from the sum of its activity. Therefore, an element of carbon offsetting will be required to enable the net-zero targets to be realised. National Carbon offsetting strategies are in their infancy at the moment. Future adoption of these schemes would need to be rigorously validated by the Authority to ensure the generation of certified carbon credits.

7.2 The process of verified carbon offsetting is complicated and can be time consuming, and is required before the start of a woodland or peatland project in order to start the verification process (carbon credits can only be used to offset emissions once they are fully verified). This can mean that the already lengthy project planning stage can be extended and can make it difficult to have "shovel ready" projects. In order to reach net-

zero aspirations it is imperative that carbon offsetting is considered when drawing up projects and sufficient resource is invested to do so.

7.3 Although complex, carbon offsetting has a great potential for NNPA – both in terms of net-zero ambitions and further opportunities for habitat creation and restoration with our land owners and managers.

7.4 **Members are asked to ratify the concept of carbon offsetting projects by, and on behalf of, Northumberland National Park Authority.**

8. Conclusions

8.1 Northumberland National Park Authority, through the existing knowledge and passion of its Members, staff and volunteers, and effective use of the assets available to hand such as The Sill National Landscape Discovery Centre, is well placed to become a regional and national lead in the efforts to combat the climate emergency. This paper sets out the immediate actions to be taken in order to get to net-zero by 2030 and acknowledges that some additional investment and staff resource is required to do so.

8.2 The national and international priorities of climate action and nature recovery is core to the work of National Park Authorities across the UK. This piece of work has identified opportunities to expand on the climate change work stream of NNPA; both in relation to, and in addition to, net-zero aspirations.

8.3 An opportunity has been identified at The Sill National Landscape Discovery Centre to become a showcase net-zero heat project in association with a Newcastle University bid to the Strength in Places Fund. If successful this project would see a significant reduction in the carbon footprint of the building as well as the ability to showcase the net-zero work of the Authority and partner organisations.

8.4 Now is the time to embed climate change into our culture and values again, ensuring that it is a core part of our work programme and governance, enabling NNPA to be a leading Carbon Champion.

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Background papers:

2019/20 carbon footprint – see appendices

Report 5 climate change Authority paper 18/03/2020