



Mission Zero Update Paper

Agenda Item 12

National Park Authority Board Meeting

Date: 14th March 2022

Paper for information

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1. Purpose

- 1.1. To provide an update on the National Park Authority's Mission Zero activity, as part of our work towards reaching Net Zero by 2030.
- 1.2. To share progress on our emissions reductions, from the 2018/19 baseline figures.
- 1.3. To outline the priorities for climate-related action in the coming year.

2. Contribution to National Park Partnership Plan and/or Our 5-year Plan

- 2.1. The particular outcomes that this strategy will help to deliver from the National Park Partnership Plan are:
 - 2.2.1 Outcome 3: Climate Change, Priority 3.1: Climate Change;
 - 2.2.2 Outcome 11: Sustainable Growth, Rural Development Priority 11.1 Low Carbon Economy Rural Diversification.
- 2.2. Within Our 5-year Plan the draft Mission Zero Route Map helps to deliver Priority 3: Sustainable Organisation

'We will exemplify great practice as a sustainable, low carbon organisation, including targeting being plastic free, renewably-powered, and maximising use of electric vehicles. We will collectively consider, reduce and mitigate our impacts on climate change in everything we do and lead the way for others to do the same.'

3. Background

- 3.1. In December 2020, the Board approved our [Mission Zero Route Map](#). Since this time, we have been operating under significant restrictions due to the ongoing Covid-19 pandemic. This has affected not only what we can deliver as an organisation but has also affected how we do things. As a result there have been impacts on our emissions generating activity, which in general has resulted a drop in emissions.
- 3.2. Despite these restrictions, there have been key areas of work across the National Park which have linked directly into our wider commitment to tackling the climate crisis. For example, the National Park Authority role in activities in and around the COP26 climate summit in Glasgow in November 2021, and our work with other UK National Parks to develop a net zero baseline for the Park as a place.
- 3.3. This paper will provide an update on our key activities within this period, across our Mission Zero portfolio. This will include an update on progress towards reaching our emissions reduction targets and will outline our priorities for action moving forwards in the coming year and beyond.

4. Delivery Update

- 4.1. The Mission Zero Route Map is a complex programme of work which reaches out to every section of our organisation. Since the production of the Route Map, our Mission Zero portfolio of projects has been scoped, resources have been mapped where possible, and we are now entering into the delivery phase.
- 4.2. The Mission Zero portfolio has been framed under 4 key programmes. Table 1 below summaries these programmes and resulting work areas and describes key delivery achievements in each work area for the reporting period. All activity is overseen by the Mission Zero Steering Group, which includes the Climate Action Manager and several members of the Executive Team.

Table 1: Mission Zero Portfolio

| Within Boundary Programme Focuses on implementing changes across our Estate & Operations to reduce our within boundary emissions. | Engagement Programme Focuses on ensuring our staff, board and volunteers are aware of & engage with the Programme to support our Net Zero activity. | Delivery Support Programme Focuses on data collection, monitoring & evaluation. | Developing Work Programme Focuses on scoping & delivering work which will help reduce emissions that are beyond our organisational net zero boundary. |
|--|--|--|--|
| Key Areas of Progress March 2021-March 2022 | | | |
| <ul style="list-style-type: none"> - Appointment of technical specialist design consultants to advise on options for emissions reduction and renewable energy installation. - Estate Infrastructure improvements – scoping and initial programming. - Planning permission submitted for initial phases of work at Balmaha Visitor Centre and Duncan Mills Memorial Slipway - Engaged with Energy Savings Trust to prepare a vehicle fleet decarbonisation plan. - Sourcing and purchase of large electric vehicle people carrier to replace end of life minibus. - Ongoing engagement with HR Team to consider the pandemic-related emissions impacts on the working environment. - Further lighting upgrades across the estate to reduce energy use. | <ul style="list-style-type: none"> - Initial engagement across teams with Operational Managers to raise awareness of Mission Zero and scope priorities for action. - Confirmation and delivery of Climate Literacy training for 2 initial cohorts of staff. - Focussed working groups with key teams e.g. Ranger Service to review opportunities for emissions reduction across operations. - Development of internet and intranet pages for Mission Zero information. | <ul style="list-style-type: none"> - Submission of the 2020/21 Public Bodies Duty reporting on our annual emissions to Scottish Government. - Ongoing support across the organisation for improved efficiency of climate-related data gathering. - Developed an initial Climate Assessment Tool for high priority projects. - Work underway to review our procurement guidance and identify emissions reduction opportunities. | <ul style="list-style-type: none"> - Engagement with National Parks UK project with Small World Consulting to map a net zero baseline for each National Park. - Baseline data gathering for emissions associated with pre-pandemic staff commuting. - Participation in Zero Waste Scotland trial programme for office equipment emissions calculations. - Engagement with internal National Planning Framework (NPF)4 policy review. |
| Cross Organisational Work <ul style="list-style-type: none"> - Development and set up of internal working teams, reporting and governance arrangements. - Team input into COP26 presence as outlined in the December Board paper on COP26 activity (the appendix) | | | |

4.3. As indicated in table 1 above, a significant proportion of time has been spent on activity which falls under our **Within Boundary Programme**, primarily as this is where we will be able to quantify tangible reductions in our emissions at this point in our net zero journey. In order to progress this area of work it was identified at the start of the year that there was a need for external technical expertise to cover 2 main elements:

- 4.3.1 To help us make technical assessments across our estate, of viable emissions reduction activity including improvements to insulation, site-based electrical upgrades and installation of photovoltaic panels and air source heat pumps on our buildings. And to use these assessments to draft an implementation schedule for internal discussion and approval.
- 4.3.2 To act as a specialist design consultant for the implementation phase of work, leading on the generation of technical specifications, planning applications and contract management, alongside our Estates team.

Due to staff capacity and procurement timescales associated with the larger activity, there was a delay in being able to appoint this Principle Design consultancy team until the end of Q2. This has had some knock-on impacts on our ability to deliver practical action within this financial year, but this will be carried over in coming years. The focus over the current financial year has been on preparing implementation plans based on our feasibility work, to enable us to efficiently move forwards when budgets and staff resource allow the scope for larger scale implementation. Through working with the consultants, we currently have all infrastructure based technical options for emissions reductions scoped out across our estate. These have been shared with our Mission Zero Steering Group and agreed in principle, based on available staff resource and budget to deliver.

- 4.4. Initial **Engagement Programme** work across the organisation has increased our collective understanding of our Mission Zero. Regular updates have also been provided at all staff 10.02s and Operational Managers meetings. The identification of our organisation's Mission Zero Champions, and delivery of the first 2 phases of Climate Literacy training by Keep Scotland Beautiful has developed a strong foundation from which we can further develop understanding.
- 4.5. Under our **Delivery Support Programme**, completion of our Public Bodies Duty reporting requirement was even more challenging this year due to remote working and the subsequent decrease in access to data sources, but the report was successfully submitted on time to Scottish Government. Staff time was allocated to ensuring that we were able to report accurately during this period to enable us to look closely at progress on emissions reduction as part of our net zero journey. Further detail on this is provided within section 5 below.

4.6. The **Developing Work Programme**, is allowing us to start to look more broadly at wider emissions reductions, as outlined in the Board approved proposal in December 2020. The project being undertaken with [Small World Consulting](#) was initiated through the UK National Park's partnership work. The aim is to gather emissions data from all consumption based activity within the National Park, and prepare a baseline which will enable us to start considering setting a net zero target for the whole National Park as a place. Once this report is finalised, it will form an important part of our emerging thinking around how we galvanize efforts to become a net zero National Park, not just a net zero organisation.

5. Progress towards emissions reduction targets

5.1. Our Mission Zero Route Map is data and evidence based and informed by an understanding of the emissions from each of our activities. The net zero target of 2030 for the National Park Authority, was set based upon a calculated approach to being able to measure and reduce our emissions over time.

5.2. Within our Mission Zero route map, the baseline year for the targets set was 2018/19. Figure 1 below shows the proportions and levels of emissions we recorded during this baseline year across all our within boundary emissions. These figures are measured in tonnes of carbon dioxide equivalent (Tc02e).

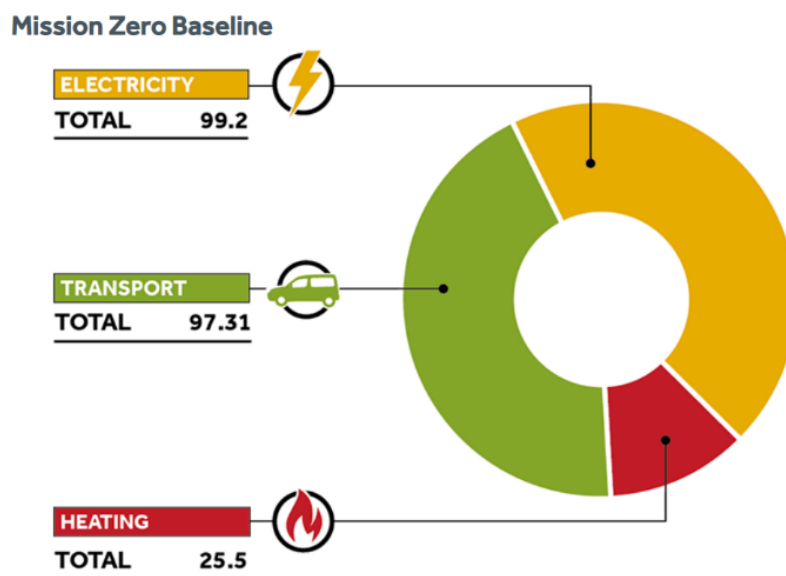


Figure 1. Baseline emissions 2018/19

5.3. As a result of our ongoing reporting requirements as part of the Public Bodies Reporting Duty, we are able to outline below (Figure 2) the progress on our emissions reduction, from our baseline, for both 19/20 and 20/21.

**Actual Emissions (tCO₂e)
2018 - 2021**

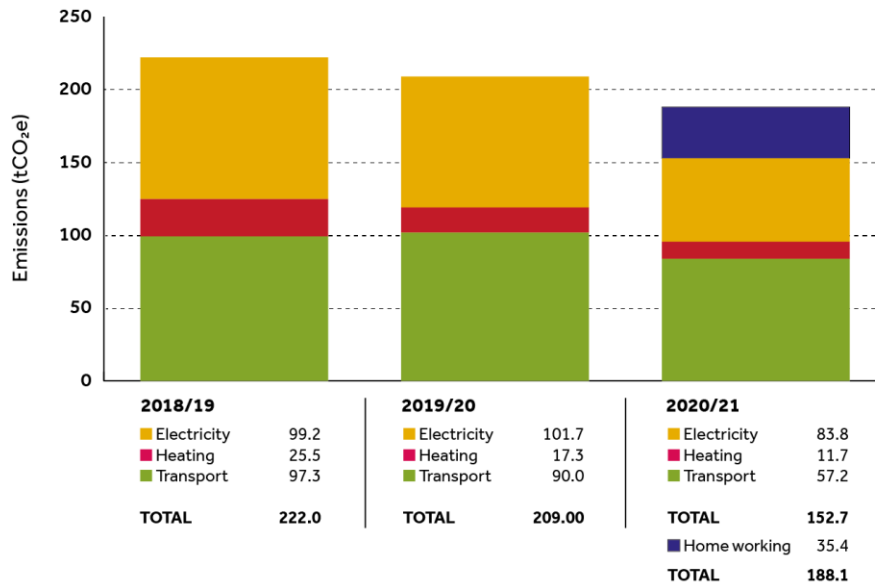


Figure 2

- 5.4. Most evident is the general downward trend of the emissions generated. This is largely due to the impact of the pandemic on the operation of our sites and functions. The analysis of data to date for the current 21/22 financial year is showing an increase back towards pre-pandemic emissions levels as activity picks up, and therefore energy use increases. We understand that we will need to find solutions to reducing carbon-based emissions and maintain essential activities for the organisation as we move forwards on our Mission Zero journey.
- 5.5. Our electricity use, whilst decreasing overall is higher than the target reduction contained within the Route Map. This is primarily due to an increase in the proportion of electric vehicles we have as part of the fleet. A further breakdown of night / day electricity use per site is needed to understand this more fully. As we move forwards with our transition to an increased proportion of electric vehicles within our fleet, it is anticipated that our electricity use will increase. However this will be balanced in part by an associated reduction in fossil fuel (diesel and petrol) vehicles and also offset in time by the installation of appropriate on site renewable energy generation technologies which will allow us to generate electricity.
- 5.6. Emissions associated with heating have again experienced an overall reduction (from natural gas, woodchip, LPG and gas oil¹). However what we can understand from the data is that there have been many different fluctuations in terms of use

¹ (Natural gas and woodchip are used at Carrochan, Duncan Mills Memorial Slipway, the Stores and Units. LPG is used at Balmaha Visitor Centre and gas oil is used at Duncan Mills and Loch Achray campsite).

across sites, primarily from changes in the use of our buildings during the pandemic.

- 5.7. Transport data again shows a continued reduction in emissions, which we believe to be directly related to the pandemic and the high proportion of our staff team who were home based and not using fleet vehicles to travel for work. As with our other Within Boundary emissions areas we would anticipate to see a rebound in these levels to some extent as many staff shift from being primarily home based. We anticipate though that with the priority being placed on post-pandemic flexible working, that a proportion of staff time will see continued working from home and virtual meetings. This will support our ongoing emissions reduction in this area. In addition, as part of our scoping work for future activity we will consider other ways in which we can support our staff to reduce their emissions from work related travel, such as support for car sharing, and use of public transport to reduce the emissions associated with our commuting activity. Whilst not within our emissions boundary this will make a contribution to reducing wider emissions.
- 5.8. We have also plotted one additional emissions category within the 2020/21 reporting year, which placed an emissions value on those working from home. The methodology used was based on the number of full time equivalent roles that were home based, and was a new requirement as part of our Public Bodies Duty reporting to Scottish Government. This methodology was therefore standardised across all Public Bodies during the pandemic. Using this methodology the contribution to our total emissions, from home based working, was 35.4 tcO₂e, 19% of our total emissions for that year. As figure 2 shows, whilst not the most significant contributor to our emissions for the 20/21 year, it is important to consider as part of our analysis.
- 5.9. The graph in Figure 2 demonstrates the overall trend in our emissions reduction. As outlined, we anticipate that emissions will rise further within this reporting year, as the organisation emerges from the pandemic and activity levels increase.

6. Priorities for action

- 6.1. The draft implementation plan for the 2022/23 reporting year includes the following as key priority activities:
 - 6.1.1. Delivery of infrastructure improvements across the National Park Authority estate, including fabric upgrades such as increased insulation; air source heat pumps and photovoltaic panels for Duncan Mills and Balmaha Visitor Centre.
 - 6.1.2. Increasing the proportion of electric vehicles within our fleet and our capacity to charge these on site.
 - 6.1.3. Continued staff, volunteer and Board engagement. Priorities will be placed on supporting teams from across the organisation to understand what action we can each take to reduce our emissions and ensuring our staff and volunteers are informed advocates when engaging with the public.

- 6.2. Consideration of the approach for setting a net zero target for the National Park as a place. This will be based on the findings from the Small World Consultancy work, and is likely to involve working closely with other National Parks from across the UK to share our different approaches. This will be further scoped and developed through collaboration with our Scottish public sector partners and through relationships with groups such as the [Sustainable Scotland Network \(SSN\)](#).
- 6.3. Continued improvement of our data gathering and monitoring frameworks to enable more effective reporting against net zero targets.
- 6.4. Development of links with the new Future Nature Manager and delivery of priorities focused on Nature-Based Solutions activity, such as peatland restoration and woodland expansion.
- 6.5. Engage with Scottish Government Sponsor Team to discuss the resourcing requirements of delivering net zero status by 2030

7. Risks to delivery

- 7.1. The scale and pace of the above priorities for action are dependent on availability of budget and staff resource. The overall programme of infrastructure changes proposed to enable us to reach net zero is scoped out to have a cost in the region of £6 million. As a result, securing additional funding will also need to take a priority if we are to achieve our net zero target of 2030.
- 7.2. Taking action sooner rather than later within our net zero journey will minimise the risk associated with the increased market demand for equipment (such as renewable energy systems; solar panels, heat pumps) and skilled contractors as more and more organisations prioritise their net zero activity.

8. Conclusion

- 8.1. The National Park Authority has seen reductions in its emissions over the past year, but these have been primarily due to consequences of limited operations during the pandemic. During this reporting period significant work has been undertaken to scope and plan for future delivery across the Mission Zero portfolio. We now therefore better understand the actions required to help us achieve our net zero target date, and are beginning to understand where effort will need to be focused to achieve a wider net zero National Park. This is complex, inter-dependent technical work and along with securing good quality advice on the delivery of this programme in a competitive market, we will also need to secure additional budget to enable this activity. Further investment, development and training, and cultural shift is required from us all to ensure that we do not return to pre-pandemic levels of energy consumption and the behaviours that drove this.

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