

Climate Change Programme

Sector to Net Zero Consultation Report

Dan Miles



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Print: ISSN 2398-3841 Online: ISSN 2059-4453

Front cover image: Two men driving horses and carts along a flooded residential road in Maidenhead about 1900-1920 (Coloured extract).[RBO01/03/OP11459, © Historic England Archive]

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Summary

Climate Change poses a significant challenge to everyone. It is essential to invest in the transition to Net Zero, as mandated by the Climate Change Act 2008. The Department of Culture Media and Sport (DCMS) has assigned Historic England the responsibility of guiding and assisting heritage organisations with their preparations to achieve Net Zero by 2050. Historic England has launched the "Sector to Net Zero" project to deliver this support.

The first phase of this project was to undertake a sector-wide consultation between September 2022 and March 2023. The aim was to understand better the current situation of where heritage organisations are on their journeys to Net Zero, and identify the support required so that they are able to understand their carbon emissions and be confident in taking the next steps to implement changes to reduce these. This report outlines the process, results and analysis of the consultation.

The consultation found that the large majority of heritage micro, small and medium sized enterprises (SMEs) are at the beginning of the journey to reduce their carbon emissions. Of a sample of 202 organisations, only 17% have calculated their carbon footprint and 14% have developed carbon reduction action plans.

These are significant results as an organisation's journey to Net Zero begins with understanding its current emissions, establishing its carbon footprint or baseline and developing an action plan setting out how it will reduce its emissions. An organisation needs to undertake these initial steps before it can begin to introduce changes to reduce emissions, for example through changing to sources of green energy (heat pumps, solar panels etc). Otherwise, it cannot measure how effective any actions or changes being made are in reducing emissions and moving towards achieving Net Zero.

The consultation has shown that there are a number of barriers that are having a negative impact on heritage organisations moving towards Net Zero. These include a lack of:

- Time and resources staff, volunteers
- Financial support
- Understanding how to begin measuring carbon emissions
- Clear pathways to find information or support
- Trust about whether this support is appropriate for their type of organisation

This absence of clarity and trust leads to a lack of confidence within heritage organisations when making decisions and investing time and financial commitments to major changes that will reduce their main carbon emissions. This results in a state of inertia.

The results of the consultation show a clear need to support organisations in how to calculate and manage their carbon emissions and how to develop carbon reduction action plans. This will also help organisations to understand better the financial commitment required to undertake major works to reduce their emissions, for example through making changes to their buildings, replacing their fossil fuel heating systems or replacing their vehicle fleet etc.

The way that this support could be delivered was also highlighted and includes:

- Better signposting of resources
- Better peer-to-peer support to share good resources and advice
- Training on carbon accounting
- Underpinning of carbon literacy across the sector

These steps will help increase organisations' confidence to take the next steps and invest time, resources, and money into actions that will make significant reductions in their carbon emissions and move them towards achieving Net Zero.

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Introduction

This report presents the findings of the Sector to Net Zero consultation undertaken from September 2022 to March 2023. The consultation was the first part of a three year project to support heritage organisations prepare for Net Zero.

Responding to the climate change crisis is a priority for Historic England (HE) as set out in our Corporate Plan 2023 – 2026. Our Climate Change Strategy outlines our vision, aims, and actions to ensure a strategic and coordinated organisational response to the climate crisis. Our Climate Change Programme provides a framework to develop and deliver discrete and targeted projects to help us understand and respond to climate change and embed climate change action into our everyday work.

Supporting heritage organisations plan for Net Zero is one of our priority objectives set by the Department for Culture, Media and Sport (DCMS). Net Zero targets are embedded in legislation – The Climate Change Act 2008 establishes a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% in 2050 from 1990 levels. The Net Zero Strategy: Build Back Greener sets out policies and proposals for decarbonising all sectors of the UK economy to meet our net zero target by 2050.

As a public body we have been tasked with leading the support for micro, small and medium sized heritage organisations to plan and prepare for reaching Net Zero. The (heritage) Sector to Net Zero project was created to ensure that Historic England can successfully deliver on supporting and leading heritage organisations to Net Zero.

The first phase of the project has been to engage with and consult the heritage sector to understand better the current situation in terms of where heritage organisations are, on their journeys towards reaching carbon Net Zero, to understand what barriers they are encountering, and to identify their support needs, and the best ways to address these.

This consultation was undertaken to answer three key research questions:

- 1. The current situation.
- 2. Barriers and issues.
- 3. Support needed.

The results of the first phase of this project will inform the second phase to provide targeted sector support.

Defining the scope of the project

The target audience for the Sector to Net Zero project is micro, small and medium-sized heritage organisations. These were defined originally using the audience breakdown employed by the Heritage Sector Resilience Plan.

In scope were therefore those organisations that:

- 1. Provide heritage advice
- 2. Support heritage membership organisations
- 3. Are heritage professional/accreditation organisations
- 4. Support heritage networks
- 5. Own/manage a heritage asset (managed, interpreted, and open to the public)
- 6. Provide heritage service

For the survey, this was simplified into two main categories:

- Heritage organisations that own, manage, or operate heritage sites open to the public which are interpreted and managed (e.g. a castle, historic house, historic park, garden or landscape, industrial heritage monument; or open-air site, including mobile heritage, e.g. heritage railways)
- Heritage organisations that undertake or deliver heritage services (for example, professional advice, membership advice, surveys, excavations, fieldwork, and conservation).

Turnover or balance sheet total	Headcount	Business size
less than or equal to €50 million or €43 million	less than 250	Medium-sized
less than or equal to €10 million or €10 million	less than 50	Small
less than or equal to €2 million or €2 million	less than 10	Micro

Table 1: Definitions of Micro, small and medium sized enterprises (SMEs). in England.

This encompassed sole traders, individual consultants, small organisations with just a few employees or volunteers and completely volunteer-led organisations.

The vast majority of heritage sector organisations fall within the SME categorisation, with only a few, for example English Heritage, the National Trust being classified as Large organisations. According to FAME (the Federation of Archaeological Managers) all archaeological commercial companies fall into the SME categorisation.

This means that the consultation (and the whole Sector to Net Zero project) covers the vast majority of heritage organisations in England.

The following types of heritage organisation were initially defined as being out of scope:

- Those that are run by local authorities including heritage teams, managed heritage sites and museums (covered by their host organisation)
- Large construction/infrastructure organisations or consultancies that have heritage-related departments or teams
- Those that are run by academic institutions
- Non-heritage site-associated museums

However, as the consultation progressed, it became apparent that there were large grey areas and blurred boundaries between what was in and out of scope. For example:

- When is a heritage site not a museum? What is the difference between an industrial heritage site (with a collection) and a museum if they both have collections?
- Local authority-run heritage sites although covered by their local authority Net Zero plan, may still need more 'heritage' focused support.
- Charitable trusts or community ventures may run or occupy heritage sites, and although they don't have specific heritage purposes, they may still be dedicated to the heritage outcomes of their sites.

Often the distinction is made by the national sector supporting bodies in terms of defining their responsibilities rather than from the perspective of the organisations that are seeking support. The consultation, particularly the roundtables, were open to these grey areas to incorporate the views of a wider net of stakeholders.

The Consultation

The consultation was broken down into three main components to obtain as comprehensive an understanding as possible of the current situation associated with Net Zero and also to use the opportunity to raise awareness of the aims and timeframe of the Sector to Net Zero project. They were:

- 1. Discussions with sector partners national agencies, arm's-length bodies, heritage sector representative bodies including professional and membership bodies, support and advice bodies, networks, and other heritage and cultural heritage strategic partners
- 2. Survey of heritage SMEs and micros
- 3. Roundtable discussions and individual organisation interviews

These took place from September 2022 until March 2023.

Discussion with sector partners

Table 2: Organisations that were consulted as part of the consultation.

National agencies / Arm's length bodies

 Arts Council England (ACE)

 National Lottery Heritage Fund (Heritage Fund)

 Environment Agency

 Church of England

 English Heritage

 Historic Environment Scotland

Table 3: Professional and membership bodies and networks that took part in the sector consultation.

Professional and membership bodies and networks
Historic Environment Forum (HEF)
Heritage Trust Network
Chartered Institute for Archaeologists (CIfA)
Association of Local Government Archaeological Officers (ALGAO)
Institute of Historic Building Conservation (IHBC)
Institute of Conservation (ICON)
Federation of Archaeological Managers England (FAME)
Historic Houses Association
The Heritage Alliance
Heritage Railways Association
Architectural Heritage Fund
Association of Independent Museums (AIM)
Regional Museum Development – Roots and Branches project
Industrial Heritage Network
Military Aviation Heritage Network
Fit for the Future
Climate Heritage Network
Maritime Heritage Trust
Historic Buildings and Places
Council for British Archaeology (CBA)
Churches Conservation Trust

The discussions were useful in understanding the thoughts, activities and support already underway or being planned associated with Net Zero/environmental sustainability. They were also very useful to raise awareness of the project and to find out the best way to consult with the different membership groups.

Discussions with Historic Environment Scotland, ACE, and the Heritage Fund were also beneficial at a strategic level to determine the strategic initiatives and programmes being planned and how this project could link into their plans.

Survey

The survey was created using SmartSurvey and was launched at the end of October and was open until January 2023. It was built on the foundations of the Heritage Pulse 2 sector survey that was live from August to the end of September 2022.

UK Heritage Pulse

UK Heritage Pulse is a collaborative data and insight project for the UK's heritage sector informing policy, recovery and reinvention. It is managed by a consortium of partners and supporters convened by The National Lottery Heritage Fund and Historic England.

The second Heritage Pulse survey focused on organisational resilience, recruitment and staffing and environmental sustainability.

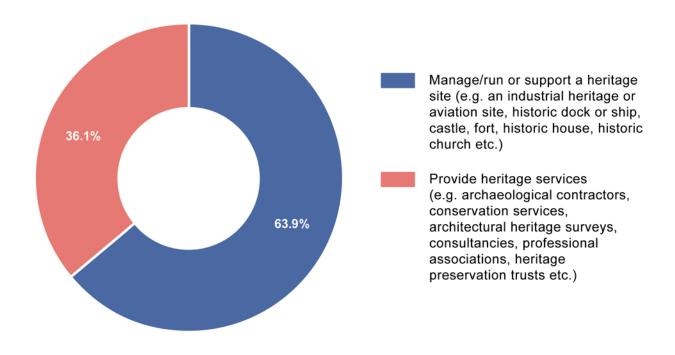
Discussion of the Heritage Pulse survey results are included in Appendix 1.

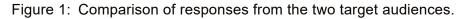
The sections on environmental sustainability in the Heritage Pulse survey were particularly relevant, and Historic England was able to input into the design of the survey questions. The Sector to Net Zero project was built on the Heritage Pulse survey, reusing and repurposing a number of the questions related to Net Zero data collection. This would, for a number of the questions, provide a much larger combined dataset from the two projects, providing a larger evidence base upon which decisions could be made. It differed by having extended questions on barriers, support needs, and delivery and was more targeted at SMEs.

The Sector to Net Zero survey was promoted through various Historic England channels – social media, LinkedIn, and other online networks. However, the main promotion was through the professional and membership organisations and the networks supporting the heritage sector. These covered both categories of target organisations – those that represent heritage site owners/managers and those that represent organisations that deliver heritage services.

The Sector to Net Zero survey received 202 complete and 28 incomplete responses. This built on the 2nd Heritage Pulse survey, which received 223 complete and 24 partial responses. There is only a 5% overlap (10) of respondents who filled in both surveys which shows that this survey successfully focused on and extended the audience to SMEs. It also means that the dataset of responses to the shared survey questions increases to over 400, providing a much larger associated evidence base.

The survey had a 64% (managed or run heritage sites) to 36% (providing heritage services) split among the number of respondents.





It was noted by several sector member organisations that the heritage sector may have been suffering from survey fatigue. The Heritage Pulse survey was quickly followed by the Department for Business, Energy and Industrial Strategy (BEIS) – now replaced by the Department for Energy Security & Net Zero – Energy Bill Relief Scheme survey, which focused on the cost-of-living crisis, and then immediately after the Sector to Net Zero survey was released. However, together with the results from the Heritage Pulse survey and the qualitative consultation with the roundtable discussions, the information gathered provides a strong evidence base to understand the current situation and can be used to inform decisions setting out the next phase of the project to deliver sector support.

Roundtable discussions and individual interviews

Roundtable discussions were organised from December 2022 to February 2023, working in partnership with the heritage sector professional and membership organisations (Table 4). Where it was not possible to schedule a roundtable, individual organisations from across the sector were interviewed to gather their insights on Net Zero. The aim of the roundtable discussions was to understand better the current situation, barriers, and any support required by the different sector areas. They sought to capture some of the particular issues or factors that may be impacting specific parts of the sector and their planning for Net Zero.

Table 4: Organisations undertaking the roundtable discussions

Roundtable discussions with the sector	Number of roundtables
Chartered Institute for Archaeology	3 (including marine archaeology)
National Highways (NH)	1 (workshop organised by NH)
The Institute of Conservation (ICON)	1
Association of Independent Museums	1
Heritage Trust Network	1
Industrial Heritage Network	2
Historic Houses	1

Over 150 people attended the discussions and there was a general enthusiasm for discussing the theme of Net Zero and environmental sustainability. Each discussion group brought up several interesting issues, some of which were generic across the different roundtables – for example funding, lack of skills and resources, whereas others were more specific to the area of the sector consulted. The roundtable activity itself has informed thinking on the methodologies of how to support the sector.

Results

The current situation

The first section of the survey focused on understanding where organisations are on their journeys to Net Zero. This included finding out how confident they were, what resources they had in place, and how far they had already gone in understanding their emissions. It also asked whether organisations had any carbon reduction policies or plans in place.

Confidence on reaching Net Zero

The first survey question focused on how confident heritage organisations felt about reaching Net Zero. Only 2.5% of heritage SMEs are extremely confident (ready) to reach Net Zero. This means that the vast majority, 91%, require some level of support – with 54% needing support and 37% needing at least a little support.

When breaking down the levels of confidence by category of heritage organisation, some variation is seen: 60% of organisations that manage heritage sites are not confident compared to 42% of heritage service providers.

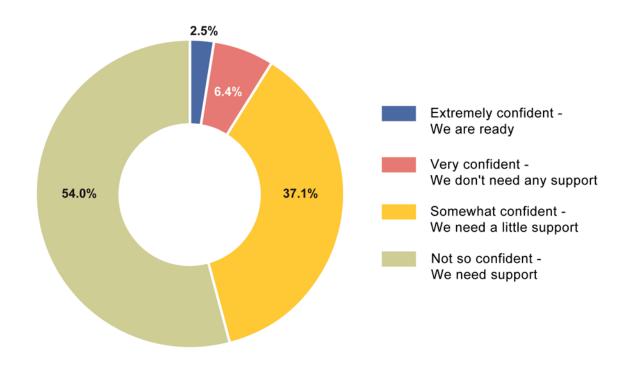


Figure 2: Confidence levels of heritage organisations.

Organisational confidence was also a theme that ran through the different roundtable discussions. Organisations spoke about their lack of confidence in knowing how to start measuring their carbon emissions, how to develop an action plan and where to find suitable resources or advice. This lack of confidence extended to include a lack of trust in the resources/advice (including contractors) they were finding, in particular, whether they were appropriate for their type of heritage organisation.

The lack of confidence and need for support is slightly greater (in the survey results) for those organisations that manage sites than those that provide services. This may be because some heritage service providers may have had to engage more with Net Zero and sustainability due to supply chain and contractual requirements.

Quote: No idea where to start. Utterly overwhelmed at the thought. I just do my best recycling, reusing, and saving energy wherever possible.

Staff resource

The question of whether organisations had staff dedicated to environmental sustainability returned an equal split between those organisations that do (46%) and those that don't (47%).

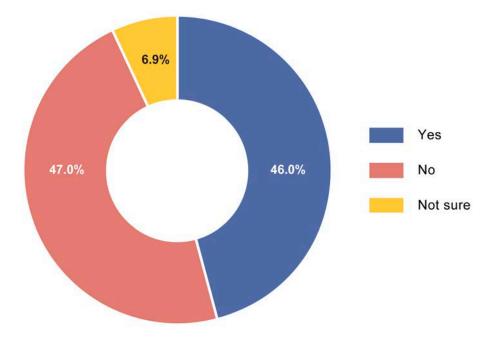


Figure 3: Percentage of organisations with staff members responsible for environmental sustainability or Net Zero.

Although there has been seen an increased number of roles with an environmental sustainability brief advertised over the past year, for example within the archaeological sector, the survey did not identify whether the staff with responsibility for sustainability had this as a dedicated role or whether it was a shared responsibility with other aspects of their substantive roles. The roundtable discussions suggested that the latter was often the case with staff covering environmental sustainability/Net Zero responsibilities as part of their roles, with some of these being related, for example, to estate, facilities or site management. Other examples provided showed that the environmental sustainability brief was taken on by an individual with a personal interest in climate change but with no tangible link to their main responsibilities. Smaller heritage sites mentioned that staff and volunteers took on various duties, often linked to interests rather than specifically targeted roles.

Policies, plans and initial preparations

Measuring carbon footprints

The survey results show that only 17% of heritage organisations had measured their carbon footprint.

Quote: Whilst we do lots of good things, not sure how to record and calculate to provide a result. Uncertainty is probably the best description.

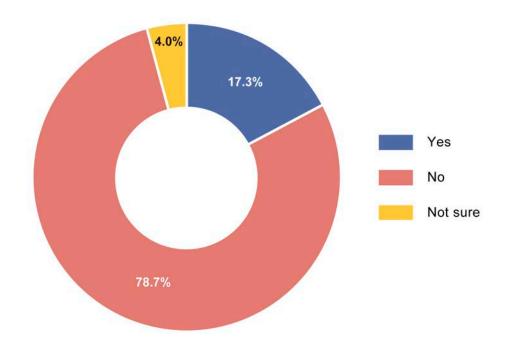
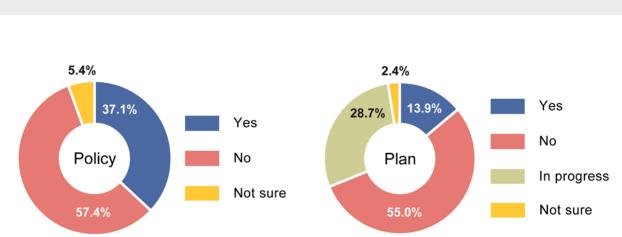


Figure 4: Percentage of organisations that have measured their carbon footprint.

Having this baseline data on an organisation's carbon emissions is essential for organisations to be able to plan and focus on key areas of their operations to reduce their emissions – and to set these out in a carbon reduction plan. Organisations need to understand their emissions before they can begin to plan to reduce them.

Policies and plans

The results of these two questions show that the majority of organisations do not have an environmental policy or carbon reduction plan. Only 37% of organisations have an environmental sustainability policy, whilst only 14% have a carbon reduction plan in place. Though nearly 29% have indicated that they are working towards a carbon reduction plan. Having these policies and plans in place are essential for planning how organisations are going to set out how they are going to reduce their emissions.



Quote: We are too small to have something formal, but we work towards reducing our working practice and daily life.

Figure 5: (left) Percentage of organisations with an environmental sustainability policy and (right) Percentage of organisations with a carbon reduction plan.

Net Zero targets

The last question in the section asked whether organisations had set carbon reduction targets for their organisations. Only 21% of organisations replied that they had set targets – 4% more than had measured their carbon footprint. This may indicate a slight discrepancy in understanding of target setting. Organisations may have set an aspirational target of Net Zero by a certain year, rather than setting percentage decreases based on their carbon footprint.

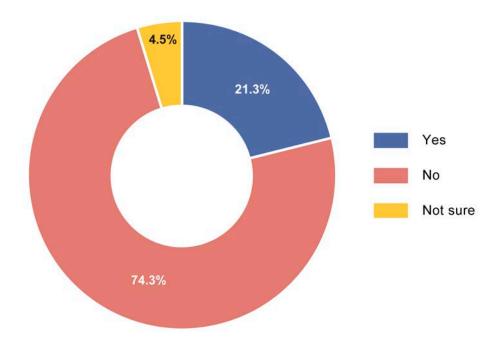


Figure 6: Percentage of organisations that have set carbon reduction targets.

The journey to Net Zero

The results of the survey are consistent with those from the Heritage Pulse survey and show that most heritage SMEs are still at the beginning of their journeys towards Net Zero.

The round table discussions provided interesting narratives to complement the data provided by the survey. There were a range of views from: 'haven't started – that is why we are here', 'starting to investigate things, but haven't got far', to others who have established their baselines and developed action plans and were now looking at the different options available to reduce their carbon footprint.

There were some discussions about the right approaches – do small organisations, particularly volunteer-led ones, need to measure their footprint and set targets? Some people had written an action plan without basing this on the organisation's carbon footprint, citing that they were first undertaking the simple energy efficiency options. However, the majority believed that the most important thing is to first understand your carbon footprint so that you can build on this evidence base to make incremental reductions. Others didn't have specific carbon reduction plans but were focused on a project-based approach, using rebuilding or repair programmes as a catalyst for reducing their emissions.

There was good awareness of the need to reduce carbon emissions, but several difficulties were identified, which will be covered in the next section.

Differences between categories of heritage organisations

The figures associated with the two categories of heritage organisations set out in the survey (organisations that run heritage sites and those that provide heritage services) were examined to see whether there were any significant differences between them in terms of their preparations for reaching carbon Net Zero.

Analysing the data, there is very little difference between the responses of the two categories of organisation. The only two slight differences (8%) are that more organisations that manage/run heritage sites have measured their carbon footprint and have set targets. But overall, both categories of heritage organisation are very closely aligned in terms of where they are on the journey to Net Zero. This makes the provision of support easier in terms of not having to develop two different support streams.

Organisations that	Deliver heritage services	Manage / run heritage sites
Have a member of staff responsible for environmental sustainability	48%	47%
Have an environmental sustainability policy	41%	35%
Have a carbon reduction plan	16%	12%
Have measured their carbon footprint	12%	20%
Have set targets	16%	24%

Table 5: Comparison of the two categories of heritage organisations.

Barriers and issues

The second section of the survey covered the barriers and issues organisations were finding on their journeys to Net Zero – from the initial stages of understanding their carbon emissions to implementing measures to reduce emissions. The survey and roundtable discussions brought out several issues, some of which can be addressed as part of the next phase of this project. However, others are far wider than this project and need greater levers for change which would require support from Historic England, the sector and the government.

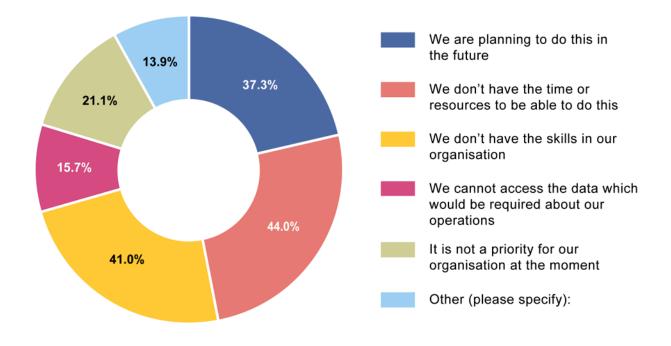
Barriers to understanding emissions

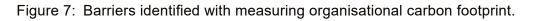
This part of the survey explored what were the barriers or issues facing organisations that had not measured their carbon footprint and had not developed a carbon reduction plan.

The two largest barriers faced by organisations when approaching the measuring of their carbon footprint are that they:

- Don't have the time or resources.
- Don't have the in-house skills.

However, despite these barriers, over a third of organisations did say that they intended to measure their footprint in the future.





One interesting area of the responses was that only 16% of organisations said that they cannot access the data needed to be able to calculate their footprints. However, accessing data was cited various times as an obstacle in the free text section of the survey and during the roundtable discussions. Difficulties in accessing data from shared rental premises that may not have separate meters and landlords that were not forthcoming with the information required were cited. Others mentioned that property, electricity and gas were managed centrally through contracts, making access difficult. Similar to the previous question on measuring carbon footprint, the two main barriers (with over 50% of responses) with writing a carbon reduction action plan were that they don't have the skills in their organisation and that they don't have the time or resources to do so. Again, similar to the previous question, just under 40% of organisations responded that they were planning to write a carbon reduction plan in the future.

Quote: Being a micro concern, we have perhaps not been able to devote sufficient time and effort to formulate specific policies in this direction. We are planning to do this in the future 15.5% 38.8% We don't have the time or 22.4% resources to be able to do this We don't have the skills in our 11.2% organisation We cannot access the data which would be required about our 50.0% operations It is not a priority for our 53.4% organisation at the moment Other (please specify):

Figure 8: Barriers identified with developing a carbon reduction action plan.

Barriers to implementing change

The next part of the survey focused on identifying the wider barriers associated with the different stages of reaching Net Zero, rather than just focusing on the initial preparatory stages of carbon accounting.

The top three barriers identified from this question were:

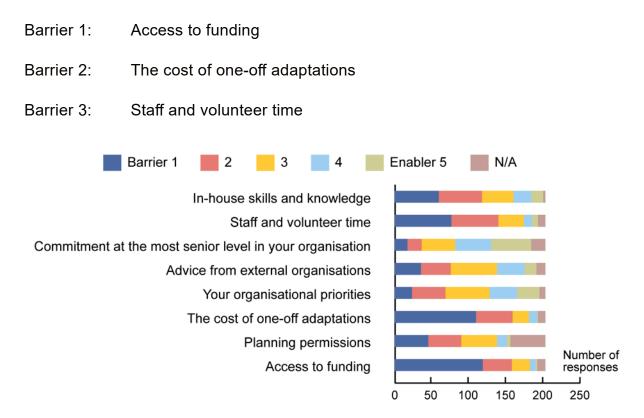


Figure 9: The different barriers (1-3, listed above) or enablers (4-5, listed below) associated with reducing carbon emissions.

The first two barriers are linked to financial concerns associated with implementing major changes – these could include retrofit, green energy installations, electric vehicles, amongst others. The third barrier repeated the earlier survey findings highlighting the lack of in-house staff and volunteer time required to move the organisation towards Net Zero.

This question also highlighted enablers that would help organisations reduce their emissions. The main two enablers identified were:

- Enabler 4: A commitment at the most senior level in an organisation.
- Enabler 5: Organisational priorities.

Quote: Our main barriers are financial and volunteer time since we are almost entirely run by volunteers, and we cannot afford to pay more, or more experienced or qualified staff who might have enough time or experience to deal with these issues. The understanding and will to make progress is all there!

Discussion of the Roundtable findings

The roundtable discussions brought to light more detail on some of the main issues being encountered by organisations across the heritage sector. They also provided the opportunity to explore some specific issues that were affecting different parts of the sector.

The main issues that were brought up consistently across the various roundtable discussions included:

- A lack of clarity about what organisations need to do.
- Uncertainty on where to find the 'right' information.
- Uncertainty on whether the information found is appropriate for their type of heritage organisation.
- A lack of confidence in terms of taking the next steps and making changes to their organisations, in particular if these changes require an investment in time and money.

Lack of clear information and advice

Discussants spoke about the 'noise' of a Google search looking for information to help them. This included looking for information on measuring their carbon emissions, writing an action plan, or looking for green tariffs or green energy installers. The huge and varied amount of information, advice and offers (for example on solar panels installations) on the internet are actually negatively impacting organisations moving forward towards Net Zero as they don't have a clear understanding or pathway of what they need to do to take the next steps.

Lack of trust

A lack of clarity, together with an abundance of other information/advice, has a negative impact in terms of organisations trusting the information they find:

- Is it appropriate for their specific heritage site or service?
- Can they trust the information or advice they find / receive?

This is relevant as it will lead to investment choices further down the line, when, for example, organisations replace fossil fuel heating or begin to undertake retrofitting works.

Discussants mentioned that this lack of trust and having too many unknowns result in organisations becoming risk averse, which is a barrier to making decisions and progressing onto the next stage on the journey to net zero.

Lack of Confidence

The discussants spoke about the lack of confidence in their decision making brought on by an inability to overcome the issues associated with the lack of clarity and trust in the information/advice they are getting. This means that they will not have the confidence to make important decisions that have a cost or resource impact. For example, invest time (volunteer and staff time has been flagged up throughout the consultation) to measuring their carbon footprint, writing a grant funding application or financial investment required to undertake large scale changes, for example to replace a fossil fuel heating system, retrofit a building or change over to a fleet of electric vehicles. The result is inertia for the organisation, which is replicated across other heritage organisations, and which leads to a lack of momentum for the whole sector reaching net zero.

These three main barriers have been brought together in a three-step model (Table 6) that sets out what organisations need to do to become confident in their decision-making in order to implement major changes to their organisations and reduce their carbon emissions.

Clarity >	Trust >	Confidence
How do I start?	How do I know these resources are good?	I am confident I am taking the right path towards net zero.
What do I need to know?		
	How do I know that this	I feel confident as an informed
What do I need to do?	information is relevant for my	client to commission work.
	type of organisation?	
Where can I find information?		I feel confident to invest
	Is there any quality assurance?	time and money to make the
Where can I find an expert to		changes required.
advise me?	Are any of my peers doing this?	
		I feel confident in sharing
What support is out there?	Does this green energy expert know about my type of historic building?	my knowledge / experience with others.

Table 6: The three step Clarity, Trust and Confidence model for organisations reaching Net Zero.

Funding and cost

A financial barrier was identified across the roundtable discussions, with the high costs of undertaking large-scale climate change mitigation measures. This was recognised across the different types of heritage organisations – for example, heritage sites that need funding for retrofit or to replace their old heating systems with green energy installations, and heritage service providers, for example to replace their traditional vehicle fleets with electric vehicles.

Organisations agreed with the urgent need to address the climate crisis, but current financial pressures due to the cost of living crisis have made any internal investment more difficult without access to funding, grant or loan schemes. Investing in Net Zero measures is much further down the list of corporate priority expenditure. However, several organisations did highlight the dual positive impact of undertaking work that will, in the short run, improve energy efficiency and reduce bills, but which will also help to support the longer term reduction of carbon emissions.

Planning permissions

Issues with planning permissions were brought up on a few occasions in the roundtable discussions. None of these highlighted any actual examples of consents not being granted, however the perception was voiced that often changes proposed, for example the installation of solar panels on listed buildings, would be turned down. There was a general lack of trust and confidence in the decision-making of those responsible for providing planning advice, and in particular, a concern that they are not up to date with current thinking on the climate emergency being faced. This negative perception needs to be addressed, as the risk of not getting planning permission was cited in these discussions as an important barrier for why organisations don't want to invest time or resources into putting together proposals and plans for undertaking retrofit or for installing green energy supplies.

Green sector skills expertise and capacity

The roundtable discussions addressed issues associated with the green energy workforce expertise and capacity/availability (including specialist advice and installers of green energy installations). There was concern over the expertise of the people providing advice on installing green energy systems, for example, heat pumps or solar panels, and whether they had the appropriate required knowledge and understanding of historic or traditional buildings. People did not know where to find 'trusted' specialists to provide advice and then undertake installations. Even when they did find the right people, the lack of capacity/availability of advisers and installers was also raised as an issue. Some discussants mentioned that they have had to wait long periods to get quotes and then even longer for the systems to be installed.

Lack of capacity of the national grid

The lack of capacity of the national grid, particularly in rural areas, was raised. This was in the context of issues associated with installing small solar panel farms to power historic houses and installing electric charging points for vehicles.

Rural versus urban heritage sites

In addition to the issue of the rural capacity of the grid, a major concern was raised about the ability of rural heritage sites to be able to reduce their emissions associated visitor (and staff) travel to rural sites. The lack of public transport is a major barrier for rural heritage organisations when considering alternative modes of transport and moving away from the reliance on private vehicles. It was felt that urban sites could promote public transport or different transport schemes, for example staff cycling schemes, but there was no alternative for many rural sites.

Lack of availability of electric vehicles, plant and machinery

Different participants in the roundtable discussions highlighted the lack of availability of electric vehicles and electric plant and machinery. This was particularly identified as a barrier by archaeological contractors in light of requirements being introduced for contractors to be Net Zero on large infrastructure projects. National Highways, for example, are bringing in requirements that need to be met to be able to work on their projects by 2030. Concerns were also raised about capacity of current electric plant to undertake some groundworks that are currently being undertaken by diesel plant.

Issues associated with the availability of alternative methods of transport were also flagged by maritime archaeologists, as there is very little availability of alternative low-carbon fuel to power ships and boats (much less than the car and van market) to undertake the work they need to do.

QUOTE: There is also the question of affordability and the limitations of what is currently available in helping to reduce our carbon footprint. An example would be replacing a diesel van with an electric vehicle with no alternative with the necessary capacity and range of distance it can travel before being recharged.

Measuring carbon footprints, reporting and target setting

Another barrier raised at several roundtables was the overcomplication of measuring and reporting of carbon emissions and target setting. Some voiced concerns that the micro and volunteer-led organisations shouldn't have to be concerned about over-focusing on measuring emissions and having to report on these but should be encouraged to undertake activities to reduce emissions in a positive and aspirational manner rather than through compliance. Enforcing compliance could have a negative impact on

how organisations perceive the journey to Net Zero. It was felt by the discussants that measuring, target setting and reporting should be thought through in terms of proportionality to the size and capacity of the organisation.

Only large companies are required to report their carbon emissions under the Streamlined Energy and Carbon Reporting regulations. Currently, very few heritage organisations meet the criteria for statutory reporting of their emissions. However, several commercial organisations delivering heritage services as part of a supply chain have said they are or will be required to report their emissions as part of a large project. This is particularly the case for archaeological companies working for Tier 1 or Tier 2 companies on large infrastructure projects.

Fossil fuels

A number of the industrial heritage sites (fixed steam power) and historic railways (mobile steam power) brought up the issues of using traditional fossil fuels for powering their steam engines. The cost of coal is already extremely high due to a supply crisis brought on by the war in Ukraine and the closure of coal mines in the UK. Concerns were raised about the cost of obtaining coal, whether they would still be allowed to use coal for their steam events, and uncertainty around the potential for alternative fuels.

Although there has been some experimentation using eco-fuels, for example, a trial being undertaken by the Crofton Pumping station, there is still concern over the use of traditional fossil fuels and how this will impact steam days at industrial heritage sites and the running of the heritage railways.

QUOTE: 'As a steam museum burning coal as an integral part of our operation - Net Zero will be a huge challenge. Alternative fuels would only reduce the carbon footprint. We have already reduced steaming days, but steaming is at the heart of our museum. However, we are considering a post-coal future as coal becomes more expensive and less available'.

Support needed

Both the survey and roundtable discussions provided very useful information and insights into the areas where heritage SMEs need the most support to help them understand and manage their emissions. They also provided good feedback on how this support could be delivered in terms of format and approaches.

Your main questions?

The first question in this section asked respondents what were the main areas of support they needed. The results show that organisations need support across all the different areas associated with understanding and measuring emissions, establishing baselines, creating action plans, targets and tracking progress – all the components of carbon accounting.

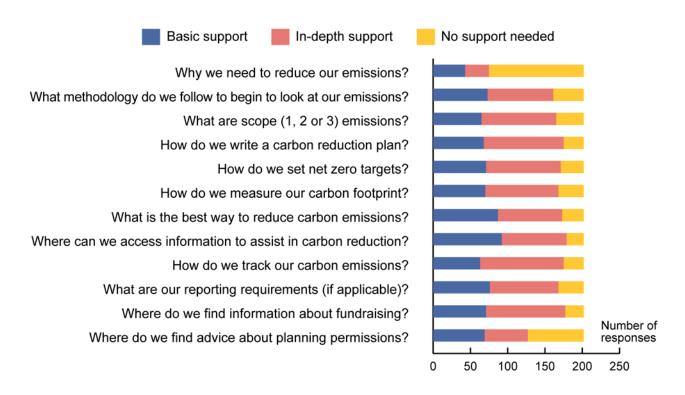


Figure 10: The areas where support is needed.

The roundtable discussions also highlighted the need to help organisations with the different areas of carbon accounting. Many discussants said that this whole area was confusing and that they needed help.

The survey also highlighted that support was needed to help organisations find information that will assist them with reducing their carbon emissions, and on fundraising to acquire the financial resources needed to undertake work. In contrast, the majority of organisations felt that they did not require support to understand why they need to reduce their emissions. This suggests that the sector is well aware of the context in which Net Zero sits.

Table 7: Most common areas of carbon accounting support required

Support	Needed
What methodology do we follow to begin to look at our emissions?	80%
What are scope (1, 2 or 3) emissions?	82%
How do we write a carbon reduction plan?	87%
How do we set Net Zero targets?	85%
How do we measure our carbon footprint?	84%
What is the best way to reduce carbon emissions?	86%
How do we track our carbon emissions?	86%
What are our reporting requirements (if applicable)?	84%

Table 8: Highlighting other areas of support needed

Support	Not needed	Needed
Why we need to reduce our emissions?	63%	
Where can we access helpful information to assist in carbon reduction?		89%
Where do we find information about fundraising?		87%

Formats of support

The final question of the survey asked respondents what formats of support they would likely engage with. Respondents were provided with a list of potential support packages that could assist them with Net Zero. They were allowed multiple choices and the three top categories of support chosen are:

- 1. Signposting
- 2. Resource packs
- 3. Training

In addition case studies, online forums and webinars also scored highly, with the least popular being workshops and drop-in surgeries.

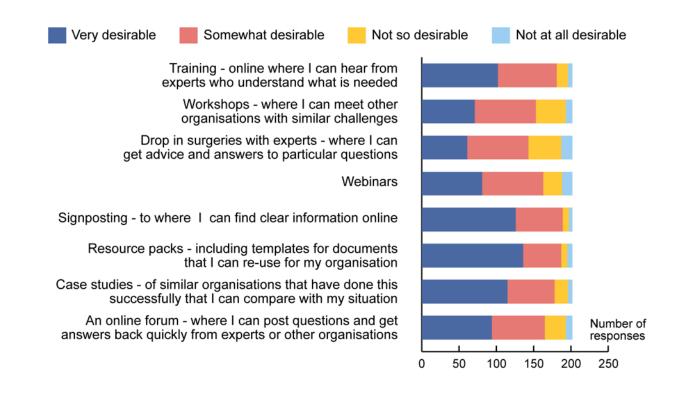


Figure 11: Bar chart showing the preferences for different formats of support

The roundtable discussions also covered the type and format of support needed, and these replicated the survey results, with most discussants highlighting the need for better signposting of information and having resources to help them.

These two areas of support coincide with one of the main barriers to knowing what resources are available and whether they are appropriate for organisational needs. Many discussed the need to create case studies and resources tailored to the heritage sector, as, although there are a huge amount of resources available associated with carbon emissions reduction, there is the perception that they are not suitable for the heritage sector – they are for other types of organisations, such as retailers. There are also many resources tailored for SMEs, however, many heritage organisations do not self-identify as SMEs, so these wouldn't seem relevant, or heritage organisations wouldn't even find them in the first place, as they would not be looking for them.

This raised a dichotomy as others on the roundtables said that several great resources were out there to help with carbon accounting. Carbon accounting as a methodology is generic across organisations, and there is no need to develop tools or resources specifically for heritage organisations.

With these two opposing pieces of evidence in mind, it seems that the issue is that small heritage organisations don't know what exists or whether it is relevant to them. Therefore, to overcome this, better signposting to resources that are acknowledged as

being appropriate for use by heritage organisations would be very useful. Case studies and examples of heritage organisations measuring their carbon footprint or creating action plans would be very useful to showcase to other organisations what can be achieved and which will reduce the uncertainty many organisations have.

Training was also flagged in the roundtables as an important way to support heritage organisations, and various examples were given. The most popular course highlighted in the roundtables was the carbon literacy course run by the Carbon Literacy Project, specifically the Museums Carbon Literacy Toolkit.

The regional museum development teams have been rolling out this toolkit and training course over the past year as part of the Roots and Branches Heritage Fund funded project, managed by the Museum Development North West team and Manchester Museum. This training provides a good foundation for carbon literacy and carbon accounting. It is focused on supporting staff to understand better the impacts of climate change and what they can do to reduce emissions in their individual roles, teams and organisations.

The Carbon Literacy Project

Carbon Literacy: An awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis.

Other organisations spoke about the need for a package of support - training linked with resources and a place/opportunity to share information about environmental sustainability and Net Zero. This blended support offer would allow organisations to receive training and continue to develop by sharing their learning with their peers in Zoom or lunch and learn meetings and an online space to share resources and ideas.

Some micro/self-employed contractors spoke about needing more time to go on training courses, and some thought that this area of learning might be the responsibility of companies asking for carbon emission information from their subcontractors as part of their Scope 3 calculations.

Although the idea of drop in surgeries and workshops were not very popular in the survey, the actual format of the roundtable discussions – a Zoom call with various participants discussing and sharing their own experiences on the journey to Net Zero – was a very popular format to promote discussion. This method of consultation was, in its own right, a great example of peer-to-peer support with people participating in a 'drop in event'. Participants used the chat to share resources, and different participants often

asked and answered questions. At the end of one of the roundtables, a participant asked when the next one would be, and another that the membership body (who was hosting the event) should organise another soon to carry on the conversations.

The use of an expert to drop into one of these peer-to-peer events was suggested, who could provide an expert voice, and then various themed sessions could be arranged, such as writing a carbon reduction plan and introducing green energy suppliers.

The idea of sharing information across specific parts of the heritage sector was raised, with the idea that an online space could be developed to hold resources and enable people to ask questions and create a peer-to-peer networking event. This would help link training to a post-training online space that can be used to continue sharing information.

Other suggestions for support

The roundtable discussions also highlighted other areas of support that would help organisations move towards Net Zero.

Funding and grants

Capital funding grants

When the question was asked at the roundtables about what type of support is required, a frequent answer was 'funding'. This was often associated with implementing changes, such as funding for retrofit or replacing existing heating systems with green energy systems. Discussants commented that the financial commitment required, to replace heating systems or retrofit their building, was beyond the normal budgets of most organisations. People agreed that there was a need for grants, either specifically for improving energy efficiency or through maintenance and repair grants, that could also be used to cover these costs.

The cost of these types of interventions was a barrier and a risk to most organisations, but they knew that this was, in reality, the main way to reduce their carbon emissions. What also came up was the close relationship between undertaking initiatives to reduce energy bills which will at the same time reduce carbon emissions. Initial outlay without a grant, however, would not reduce the costs in the short term, and there were concerns about whether these types of interventions if paid for at cost price, would save money in the long term.

Support grants

The need for support grants to enable small heritage organisations to access expert or specialist advice came up a lot in the roundtables.

A number of discussants thought that having grants available to pay for a consultant to come in and help with the organisation's carbon accounting, such as help to calculate the carbon footprint or create a carbon reduction plan, would be useful. Large and medium-sized companies with a budget have been taking this approach, working with their dedicated staff to establish the benchmarking and plan to reduce emissions. Having funding available to help SMEs start the process would help with their confidence and taking responsibility for carbon accounting and management.

Several discussants highlighted the need for grants to help fund the commissioning of experts to support heritage organisations that run or manage heritage sites to undertake building/retrofit assessments or surveys. These could be energy efficiency audits, building performance surveys or pre-retrofit / adaptation surveys, which would result in organisations having a better understanding of what they need to do to reduce their emissions – for example, retrofit their buildings and replace their fossil fuel heat supply with green energy systems. These enabling grants would provide the final piece of the preparatory work puzzle. Organisations can establish their carbon footprint, understand their current emissions, and then identify the main ways to become more energy efficient and reduce their emissions.

Register of expert advisers/contractors

Linked to the barrier of a lack of trust, various people on the roundtable discussions suggested that there could be a register of competent or accredited experts who undertake surveys, such as energy efficiency, condition or pre-retrofit surveys; retrofit work, and green energy installations (including heat pumps and solar panels) on traditional buildings. Having confidence in knowing that the experts they contract are competent in understanding historic buildings would help reduce the risk of installations that did not meet expectations – i.e. which were not suitable for the individual conditions of their traditional building and which wouldn't effectively reduce carbon emissions and improve energy efficiency. Having a register of competent experts would help build confidence in the advice that was being received resulting in the increase in subsequent changes being implemented.

Conclusion

This consultation has provided a clear understanding of where heritage organisations are, on their journey to Net Zero. It has shown clearly that majority of small and medium sized organisations are at the beginning of their journeys and that they need a lot of support to help them with the first phase of the Net Zero journey.

This first phase includes understanding what carbon emissions are; how to measure them and establish a baseline from which to monitor and report on; and how to develop a carbon reduction action plan. This will equip organisations with the understanding, skills and confidence to start implementing measures to reduce emissions through behaviour and systems change.

The consultation has also identified a number of barriers to organisations becoming Net Zero. These can be classified as a lack of clarity in knowing what to do, where to find advice; a lack of trust in that information or in their own actions being right for their type of heritage organisation; which all leads to a general lack of confidence in making decisions to implement carbon reduction changes. This lack of sector confidence will, unless addressed, lead to a lack of commitment of organisations and inertia in terms of moving forwards towards Net Zero. This is expressed in the main text as the Clarity, Trust and Confidence model that will help organisations move through the different stages of the journey to Net Zero.

The round table discussions in particular showed that some heritage organisations are at different stages in their journeys. As noted above, the majority are at the beginning, but a number have started to look at their emissions and need support in accessing the right advice to meet their specific situations and needs, to implement the larger changes required. This could be thinking about the decarbonisation of their buildings or introducing a fleet of electric vehicles. This support will help organisations become 'informed clients', able to make decisions that will have a higher risk in terms of resource requirement (funding and staff time).

What is also clear is that, and what is often the case of all sector surveys, only those organisations that are actively thinking about their carbon footprint or environmental sustainability, engaged with the consultation. There are a very large number of organisations which are just not even ready to think about their carbon emissions, as their immediate needs are driven by other pressing matters, such as financial concerns associated with the cost of living crisis and the legacy of the recent pandemic.

Recommendations

The consultation has given Historic England a clear steer in terms of how it approaches supporting heritage organisations on their journey to Net Zero.

- 1. There is a real need to support heritage organisations (in particular SMEs) develop the knowledge and skills needed to understand their carbon emissions, develop carbon reduction plans and embed change into their organisation behaviours and systems.
- 2. This support needs to be multi-layered and blended to support organisations with carbon literacy and carbon accounting. This could be delivered through active training, the creation of resources/case studies, networks and better signposting to help navigate through the vast amount of carbon reduction information available.
- 3. Historic England is in a key position to support heritage organisations. But this support can only be achieved through collaboration and partnership – whether this is strategic working with other cultural heritage arm's length and funding bodies, or tactically working closely with heritage sector support bodies and professional organisations.
- 4. A key way to embed change and drive Net Zero is through integrating environmental sustainability into organisational governance. Carbon considerations need to become part of the decision making processes of all organisations.
- 5. There is a need for grants and funding to support help heritage organisations move forwards with decarbonisation. This can be to help inform what they need to do and to implement large scale changes.
- 6. As Net Zero is not at the top of the agenda for many heritage organisations, in particular small and micro organisations which face more immediate financial concerns, any support needs to be rolled out through a positive and supportive approach, that breaks down the challenge into manageable steps.

Appendix

Comparison of the surveys

This appendix sets out a short analysis and comparison of some of the results of the Historic England Sector to Net Zero survey and the environmental sustainability sections of the 2nd Heritage Pulse survey of organisational resilience, recruitment and staffing and environmental sustainability, undertaken between August and September 2022.

Prior to the launch of the 2nd Heritage Pulse survey, Historic England was invited to input to the survey questions. This enabled the subsequent Historic England Sector to Net Zero survey to build on the Heritage Pulse questions to build up a bigger data set and to enable analysis and comparison of the results.

Staff resource

The Heritage Pulse survey showed that a higher percentage – 55% – of organisations have someone responsible for environmental sustainability, compared to 46% of those organisations in the Sector to Net Zero survey. In breaking down the Heritage Pulse data by organisation size, the survey results show that 85% of large organisations (with 50+ employees) had someone responsible for environmental sustainability whilst only 40% of smaller organisations (volunteer-led, sole traders and those with 2-9 employees) did. This is a similar figure to the results of the Sector to Net Zero project and clearly shows that the size of the organisation is an important factor in whether the organisation has someone in post with environmental responsibilities.

Table 9: Whether organisations have any staff that deal with issues of sustainability or net zero.

Do organisations have staff responsible for environmental sustainability or Net Zero?	Sector to Net Zero Survey	Heritage Pulse Survey
Yes	46%	55%
No	47%	41%
Don't know	7%	4%

Policies and plans

The Heritage Pulse survey results showed that a higher percentage of heritage organisations had an environmental sustainability policy (53%) compared to the Sector to Net Zero survey results (37%). This trend is also seen when comparing the data for the number of organisations with a carbon reduction plan – 35% compared to 14%.

However, when breaking down the Heritage Pulse results by size and type of organisation, it shows that 83% of larger organisations (with 50+ employees) have an environmental policy whereas 45% of small organisations (with 2-9 employees) and only 14% of volunteer led organisations have one in place. This trend is also reflected in the percentages of organisations with carbon reduction plans, with 62% of large organisations, 29% of small organisations and 17% of volunteer led having them in place. Combining some of the data in the Heritage Pulse survey results for smaller-sized organisations (volunteer-led, sole traders and those with 2-9 employees) showed that only 33% had an environmental policy, and 24% had a carbon reduction plan – data which aligns much more closely with the results from the Sector to Net Zero survey results.

The survey data again clearly shows that the smaller organisations and those that are volunteer led are more likely not to have an environmental sustainability or carbon reduction plan in place compared to larger heritage organisations.

Table 10: Whether organisations have an environmental or sustainability policy.

Do you have an environmental sustainability policy?	Sector to Net Zero Survey	Heritage Pulse Survey
Yes	37.1%	53%
No	57.4%	40%
Don't know	5.4%	7%

Table 11: Whether organisations have a carbon reduction plan.

Do you have a carbon reduction plan?	Sector to Net Zero Survey	Heritage Pulse Survey
Yes	13.9%	35%
No	55%	58%
Don't know	2.5%	7%
Working towards one	28.7%	-

Measuring carbon footprints

Regarding organisations that have measured their carbon footprint, the Heritage Pulse results recorded a higher percentage of organisations that have measured their carbon footprint (30%) compared to the Sector to Net Zero project (17%). However, again when the Heritage Pulse data is broken down by organisation size, there is a clearer correlation with the Sector to Net Zero survey data, with only 15% of smaller organisations (volunteer-led, sole traders and those with 2-9 employees) having measured their carbon footprint. Both surveys show that very few organisations have measured their carbon footprint which is essential for understanding organisational emissions and setting out plans to reduce them.

Table 12: Whether organisations have measured their carbon footprint.

Have you measured your carbon footprint?	Sector to Net Zero Survey	Heritage Pulse Survey
Yes	17.3%	30%
No	78.7%	63%
Don't know	7.4%	7%

Net Zero targets

The data from both surveys shows a similar trend that between only 21 and 24% of heritage organisations had set Net Zero targets.

When breaking down the Heritage Pulse survey data by size of organisation, even fewer smaller organisations (volunteer-led, sole traders and those with 2-9 employees) – 9%, have set carbon reduction targets compared to the Sector to Net Zero results (21%). Whilst again the Heritage Pulse data shows that a significantly higher percentage (57%) of larger organisations (with 50+ employees) have set targets.

Table 13: Whether organisations have a target for reaching Net Zero.

Has your organisation set a target for Net Zero?	Sector to Net Zero Survey	Heritage Pulse Survey
Yes	21.3%	24%
No	74.3%	65%
Don't know	4.5%	11%

Barriers

Both surveys identified the same top three barriers to reducing carbon emissions. These are:

- 1. Access to funding
- 2. The cost of one-off adaptations
- 3. Staff and volunteer time



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ISSN 2398-3841 (Print) ISSN 2059-4453 (Online) © Historic England