Public Sector Report on Compliance with Climate Change Duties 2022 Template
PART 1 - Profile of Reporting Body

1a **Name of reporting body**
Provide the name of the listed body (the "body") which prepared this report.

National Museums Scotland

1b **Type of body**
Select from the options below

Others

1c **Highest number of full-time equivalent staff in the body during the report year**

412 **THIS MUST BE COMPLETED**

1d **Metrics used by the body**
Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability

Metric	Units	Value	Comments
Floor area	m2	90999.00	Updated 2019

1e **Overall budget of the body**

Specify approximate £/annum for the report year.

Budget	Budget Comments
£27,985,000	Based on FY 2021-22

Climate Change Report
National Museums Scotland 2021-2022

1f **Report type**

Specify the report year type

Report type	Report year comments	
Financial	Reporting year 21/22	THIS MUST BE COMPLETED

1g **Context**

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

The organisation operates primarily/mostly as a National Museum with galleries open to the public, collections storage, conservation, workshop and laboratory facilities along with office accommodation for volunteers and staff. The estate extends to approximately 91,000m2 GIA located in five sites throughout Scotland and incorporates the following:
1. National Museum of Scotland, Chambers Street, Edinburgh.
2. National War Museum at Edinburgh Castle.
3. National Museums Collection Centre: storage, conservation and research laboratories at Granton Rd, Edinburgh.
4. National Museum of Rural Life at East Kilbride.
5. National Museum of Flight at East Fortune, East Lothian.

PART 2
Governance, Management and Strategy

Governance and management

2a **How is climate change governed in the body?**

Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements. Provide a diagram / chart to outline the governance structure within the body.

Climate change is governed through the Sustainable Development Group (SDG) which meets monthly. The SDG provide an Annual Action Plan and Annual Report to the Executive Team and the Board of Trustees. Sustainability is also a standing item for the Estates Committee and quarterly reports are prepared for this Trustees subcommittee. In addition, a summary report is provided outlining sustainability progress within the organisation's Annual Review. The SDG is chaired by the Director of Public Programmes and the current remit (which is reviewed frequently) is shown below. The Group reports to the Executive Team who in turn report to the Board of Trustees. Short-term working groups have been revised and augmented with a Carbon Reduction Group formed for topic-specific strategies or projects, reporting back to the SDG. The SDG support and advise the Executive Team on environment-related issues, enabling National Museums Scotland to proactively minimise the impact of its activities on the environment and integrate environmental management policies within the organisation.
SDG Remit:
*Establish an action plan that ensures legislative compliance with regards to carbon emission reductions and successfully addresses our strategic priorities
*Assess progress and propose new forward-facing actions, aligned with organisational annual planning cycles
*Ensure all public body reporting duties are met
*Build an organisational culture for sustainability based on a knowledgeable and confident workforce
*Bring together a holistic visitor offer that is engaging and motivating, underpinned by good practice and reducing target emissions
*Deliver an investment plan that balances the demands of future building standards, backlog maintenance, and carbon emission reductions for our current estate

<Insert Diagram Here or Attach File>

2b **How is climate change action managed and embedded in the body?**

Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, departmental heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body. Provide a diagram to show how responsibility is allocated to the body's senior staff, departmental heads etc.

Our work is being driven by a Sustainability Vision (published on our website: https://www.nms.ac.uk/about-us/our-work/sustainability/) and an Annual Action Plan, approved by the Executive Team. Our Vision outlines the following areas of focus:

* Our statutory responsibility

* Operating sustainably

* Proactively using our collections

*Involving our audiences

* Empowering our team

Decision-making is made within the governance structure described in 2a, with external technical support commissioned when required.

<Insert Diagram Here or Attach File>

Strategy

2c **Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?**
Provide a brief summary of objectives if they exist.

Wording of objective	Name of document	Document Link
The Strategic Plan 2020 - 2022 contains STRATEGIC PRIORITY 8: TAKING ACTION ON CLIMATE CHANGE AND ENVIRONMENTAL IMPACT	NMS Strategic Plan 2020-22	
Strategic Action 8.1: Reduce our climate change and environmental impact: 8.1.1 Develop and implement a strategy and action plan to progress towards net zero greenhouse gas emissions; 8.1.2 Develop and deliver an action plan to reduce our environmental impact; 8.1.3 Progress actions to enhance biodiversity around our sites; 8.1.4 Encourage and empower our people to work in ways that reduce our climate change impact.	NMS Strategic Plan 2020-22	
Strategic Action 8.2: Create inspiring and informative programmes related to climate change and environmental impact: 8.2.1 Develop and deliver content within our Public Programmes focussing on climate change and environmental impact; 8.2.2 Communicate our Natural Sciences research related to climate change and environmental impact to the public	NMS Strategic Plan 2020-22	

2d **Does the body have a climate change plan or strategy?**

If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.

A new organisation-wide Strategic Plan was developed in 2021 and launched in early 2022 placing sustainability at the heart of our organisational activity. In recognition of this, the previous Sustainability Development Strategy 2015 - 2020 has been extended, with the intention of developing a new Strategy, responding to the new organisational Strategic Plan, in 2023. Similiarly the Sustainable Procurement Policy 2016-2019 was initially extended, then under review in 2021, finalised in 2022. These Strategies together with our annual Action Plans become a rolling plan to progress to net zero by 2045 in accordance with the Scottish Government's requirements.

2e **Does the body have any plans or strategies covering the following areas that include climate change?**

Provide the name of any such document and the timeframe covered.

Topic area	Name of document	Link	Time period covered	Comments
Adaptation				
Business travel	Sustainable Development Strategy		2015 - 2020	New Procurement Policy to be developed in 2021, launched 2022
Staff Travel	Sustainable Development Strategy		2015 - 2020	New Procurement Policy to be developed in 2021, launched 2022
Energy efficiency	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Fleet transport	Sustainable Development Strategy		2015 - 2020	New Procurement Policy to be developed in 2021, launched 2022
ICT	Green ICT Policy		current to 2021	
Renewable energy	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Sustainable/renewable heat	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Waste management	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Water and sewerage	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Land Use	Sustainable Development Strategy		2015 - 2020	New Sustainable Development Strategy to be developed in 23/24
Other (please specify in comments)				

2f **What are the body's top 5 priorities for climate change governance, management and strategy for the year ahead?**

Provide a brief summary of the body's areas and activities of focus for the year ahead.

Our new organisation-wide Strategic Plan 2022-27 was launched in March 2022. Our top five Strategic Priorities includes sustainability.
The Strategic Aim is: We will be well advanced on the path to a carbon neutral footprint and a respected resource for understanding climate and biodiversity challenges.
This Aim will be developed through the following actions:

* Building an organisational culture for sustainability based on a knowledgeable and confident workforce

* Creating a 'sustainability thread' that runs through everything we do

* Setting robust targets, monitoring and creating a programme of investment to achieve the Scottish Government's milestone of a 75% reduction in our full organisational carbon footprint by 2030

* Delivering an investment plan that balances carbon reduction targets and offsetting opportunities with the competing requirements of all the heritage, estates and environments in our care

* Investing in our infrastructure to help protect the National Collection against the impact of the changing climate

* Demonstrating our values and expertise to the public and peers as a trusted museum authority

* Creating programmes for audiences that are engaging and motivating, to increase public understanding of the problems and help influence confident, proactive and solutions-based attitudes

* Attracting supporters and funders to help us achieve more, by evidencing that our work is based on solid sustainable principles and plans.

2g **Has the body used the Climate Change Assessment Tool (a) or equivalent tool to self-assess its capability / performance?**

If yes, please provide details of the key findings and resultant action taken.

(a) This refers to the tool developed by Resource Efficient Scotland for self-assessing an organisation's capability / performance in relation to climate change.

We have not used the CCA tool but have completed the Carbon Trust Energy Management Matrix and accompanying Energy Management Assessment tool

Further information

2h **Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

In addition to the central position of sustainability in our Strategic Plan - see 2c - we have also commissioned consultancy services to audit our carbon management structure and approach. The audit exercise reviewed the full financial year 2021/22 for scopes 1 and 2; six months of data (Sept 21- Mar 22) for scope 3, and two months of data for waste production and concluded that “Overall, the process is considered to be advanced and captures the majority of NMS activities across all sites”. Their input has been useful and will help to make our carbon counting as effective and comprehensive as possible in the following financial year. Considering our data is partial in FY 21/22, we are not able to provide a full breakdown in the 'Emissions and Projects' worksheet which will be available in the following year.

PART 3 Corporate Emissions, Targets and Project Data

Emissions

3a Emissions from the start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint / management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1 & 2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b). If data is not available for any year from the start of the baseline year to the end of the report year, provide an explanation in the comments column.

(a) No information is required on the effect of the body on emissions which are not from its estate and operations.

(b) This refers to "The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition)", World Business Council for Sustainable Development, Geneva, Switzerland / World Resources Institute, Washington DC, USA (2004), ISBN: 1-56973-568-9.

ENSURE QUESTION 1f IS COMPLETED BEFORE STARTING THIS SECTION, THEN SELECT APPROPRIATE BASELINE YEAR

Reference year	Year	Year type	Scope 1	Scope 2	Scope 3	Total	Units	Comments
Baseline Year	2012/13	Financial	11406	-	-	11,406	tCO_2e	
Year 1 carbon footprint	2013/14	Financial	9,313	-	-	9,313	tCO_2e	
Year 2 carbon footprint	2014/15	Financial	9,046	-	-	9,046	tCO_2e	
Year 3 carbon footprint	2015/16	Financial	6,880	-	-	6,880	tCO_2e	
Year 4 carbon footprint	2016/17	Financial	5,811	-	-	5,811	tCO_2e	
Year 5 carbon footprint	2017/18	Financial	5,889	-	-	5,889	tCO_2e	

Year 6 carbon footprint	2018/19	Financial	4,606	-	-	4,606	tCO_2e	
Year 7 carbon footprint	2019/20	Financial	4,068	-	-	4,068	tCO_2e	
Year 8 carbon footprint	2020/21	Financial	1,761	1,372	118	3,251	tCO_2e	
Year 9 carbon footprint	2021/22	Financial	1,615		253	1,867	tCO_2e	
Year 10 carbon footprint	0	Financial				-	tCO_2e	
Year 11 carbon footprint	0	Financial				-	tCO_2e	
Year 12 carbon footprint	0	Financial				-	tCO_2e	
Year 13 carbon footprint	0	Financial				-	tCO_2e	
Year 14 carbon footprint	0	Financial				-	tCO_2e	
Year 15 carbon footprint	0	Financial				-	tCO_2e	

3b **Breakdown of emissions sources**

Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If there is no data consumption available for an emission source enter the emissions in kgCO2e in the 'Consumption' column of one of the "Other" rows and assign the scope and an emission factor of 1.

(a) Emissions factors are published annually by the UK Department for Business, Energy & Industrial Strategy

Emission Factor Year: 2021

The emission factor year is auto assigned based on your answer to Q1f, if it is incorrect please contact SSN.

You can now filter emission sources by "type" in column C to enable quicker selection of emission source in column D.

User defined emission sources can be entered below remote/homeworking emissions - rows 101 to 129. If you require extra rows in the table please send the template to ccreporting@ed.ac.uk.

Emission	Emission source	Scope	Consumption data	Units	Emission factor	Units	ons (tCO_2e)	Comments
Renewables	Renewable Elec Purchase Direct Supply	Scope 2	6,857,900	kWh	0.00000	kg CO2e/kWh	-	
Electricity	Grid Electricity (transmission & distribution losses)	Scope 3	6,857,900	kWh	0.01879	kg CO2e/kWh	128.9	
Fuels	Natural Gas	Scope 1	8,441,692	kWh	0.18316	kg CO2e/kWh	1,546.2	
Fuels	LPG litres	Scope 1	46,038	litres	1.55709	kg CO2e/litre	71.7	
	Hybrid/Homeworking emissions	Scope 3	100.00%	percentage of total FTEs	0.30000	tCO2e/FTE/annum	123.6	
							1,870.3	

Total is different to that number quoted in Q3a, please check and/or state why in comments cell above

No Scope 2 emissions reported, please check and/or state why in comments above

3c **Generation, consumption and export of renewable energy**

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

Technology	Renewable Electricity		Renewable Heat		
	Total consumed by the body (kWh)	Total exported (kWh)	Total consumed by the body (kWh)	Total exported (kWh)	Comments
Please select from drop down box					
Please select from drop down box					
Please select from drop down box					
Please select from drop down box					
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Targets

3d **Organisational targets**

List all of the body's targets of relevance to its climate change duties. Where applicable, targets for reducing indirect emissions of greenhouse gases, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included. Where applicable, you should also provide the body's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets.

Name of target	Type of target	Target	Units	Boundary/scope of target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Progress against target	Comments
Targets for direct and indirect carbon emissions will be set in our Sustainable Strategy 2023-2030, currently under development, to be published in 2023	Please select from drop down box		Please select from drop down box	Please select from drop down box	Please select from drop down box		Please select from drop down box	Please select from drop down box		

3da	**How will the body align its spending plans and use of resources to contribute to reducing emissions and delivering its emission reduction targets?** Provide any relevant supporting information
	Every annual budget planning cycle allocates funds for carbon reduction activities in our Estates Department and since our baseline a decade ago, we have reduced our energy-related carbon emissions by 72%. Furthermore, in 2022 we plan to invest in consultancy services to support the creation of a Heating Decarbonisation Plan which will guide our future investment planning priorities between 2022/23 and 2029/2030 in order to achieve the Scottish Government target of 75% reductions.
3db	How will the body publish, or otherwise make available, it's progress towards achieving its emissions reduction targets? Provide any other relevant supporting information. In the event that the body wishes to refer to information already published, provide information about where the publication can be accessed.
	Our Annual Report 21/22 is linked to our dedicated sustainability webpage.
	Projects and changes

3e **Estimated total annual carbon savings from all projects implemented by the body in the report year**
If no projects were implemented against an emissions source, enter "0".
If the body does not have any information for an emissions source, enter “Unknown”.
If the body does not include the emissions source in its carbon footprint, enter “N/A”.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity	-96	Comparison on year for pandemic lockdown, increased consumption due to staff returning to workplace
Natural gas	185	Anticipated reduction impacted by staff return to workplace and increased demand of heat load.
Other heating fuels		
Waste		
Water and sewerage		
Travel		
Fleet transport		
Other (please specify in comments)		
Total	**89**	

3f **Detail the top 10 carbon reduction projects to be carried out by the body in the report year**

Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.

Project name	Funding source	First full year of CO_2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/ emission source saved	Estimated carbon savings per year (tCO_2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
Replacement of burners and controls to boiler 2 &34	SG Capital	2021/22	Estimated	81,000			Natural Gas	76	9600	No	The completion of this project has effectively reduced natural Gas consumption by 20% overall, this is effectively due to the higher efficiency burners that can better match the demand with an improved turn down ration of 5:1 from 2:1, these burners will also extend the life of the existing boiler plant by an anticipated 10 years and are also reducing the NOx

												emission to be compliant with the Medium Combustion Regulations 2025.
	LED Lighting upgrade to Early People Gallery in MoS, stairwell and back of house areas in NMoRL	SG Capital	2021/22	Estimated	10,000			Grid Electricity (generation)	12	1500	No	
			Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	

3g **Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the report year**

If the emissions increased or decreased due to any such factor in the report year, provide an estimate of the amount and direction

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Please select from drop down box	
Service provision		Please select from drop down box	
Staff numbers	110	Increase	Staff return to workplace post pandemic
Other (please specify in comments)		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Total		**110**	

3h **Anticipated annual carbon savings from all projects implemented by the body in the year ahead**

If no projects are expected to be implemented against an emissions source, enter “0”.
If the organisation does not have any information for an emissions source, enter “Unknown”.
If the organisation does not include the emissions source in its carbon footprint, enter “N/A”.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity		
Natural gas	150	Further changes to controls strategy and plant run times across entire Estate.
Other heating fuels	71	Replacement of LPG heating with ASHP in Hanger 4 NMoF
Waste		
Water and sewerage	1	Waterless urinal installation
Travel		
Fleet Transport		
Other (please specify in comments)		
Total	**222**	

3i **Estimated decrease or increase in emissions from other sources in the year ahead**

If the body’s corporate emissions are likely to increase or decrease for any other reason in the year ahead, provide an estimate of the amount and direction.

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Please select from drop down box	
Service provision		Please select from drop down box	
Staff numbers		Please select from drop down box	
Other (please specify in comments)		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	

Please select from drop down box		Please select from drop down box		
Please select from drop down box		Please select from drop down box		
Please select from drop down box		Please select from drop down box		
Please select from drop down box		Please select from drop down box		
Please select from drop down box		Please select from drop down box		
Please select from drop down box		Please select from drop down box		
Total		**-**		

3j **Total carbon reduction project savings since the start of the year which the body used as a baseline for its carbon footprint**

If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").

Total savings	Total estimated emissions savings (tCO_2e)	Comments
Total project savings since baseline year	8,206	

Further information

3k **Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to corporate emissions, targets and projects.

There has been a continuation of planned reductions in plant run times and space temperatures across the entire estate that continue to have a significant impact on energy consumption.

PART 4	Adaptation
	Assessing and managing risk
4a	**Has the body assessed current and future climate-related risks?** If yes, provide a reference or link to any such risk assessment(s).
	The organisation supports the Scottish Government and world organisation agenda in initiating and maintaining climate change initiatives and has a Sustainability Development Group that has generated a Sustainable Development Strategy 2015-2020, setting targets and monitoring procedures and progress to enhance sustainability. A risk assessment will be undertaken in the development of our next Sustainable Development Strategy in 2023.
4b	**What arrangements does the body have in place to manage climate-related risks?** Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.
	We have a Sustainability Strategy, Procurement Strategy and an annual Action Plan. Target setting is agreed with the Executive Team and Board of Trustees. The Sustainable Development Group oversees these annual targets; monitors progress and reports on outcomes and outputs.
	Taking action
4c	**What action has the body taken to adapt to climate change?** Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action. The body may wish to make reference to the Scottish Climate Change Adaptation Programme ("the Programme").

(NB Our response to this question is spread between this box and the one below). Our organisational work particularly meets three of the seven Climate Change Adaptation Outcomes:

**Our communities are inclusive, empowered, resilient and safe in response to climate change.*

We work with a wide variety of communities including our internal workforce, general public and bespoke community groups. Two case studies that demonstrate our work in this area are:

1. Museum Audience Survey Work: over summer 2021 we commissioned an independent research company to undertake consultation with museums audiences to better understand their commitment to sustainability and the environment; their awareness of NMS's commitment and delivery on these issues; their perception of NMS as a trusted source of information and climate change and biodiversity loss. A total of 763 surveys were completed revealing an environmentally and culturally engaged audience who clearly had an interest in the key issues of climate change and biodiversity loss. There was a significant interest in both issues with respondents more likely to feel that they were well informed about climate change than biodiversity loss.

2. Public Engagement Work:

2a. The Summer of Play project - Brilliant Bugs was delivered through the summer holidays engaging with diverse and under-represented audiences in a country park and museum settings in National Museum of Flight and Hawick Museum, Dumfries and Galloway. We delivered seven sessions of day-out programmed activity, across three sites reaching 150 people, online activity for all, reaching an estimated 2,000 families and four days of a performance artists across two sites reaching approximately 300 families. This project explored local biodiversity through planned activities including a forest insect survey and a meadow survey, where families worked with an artist to make badges, shared a picnic lunch together, interacted with the performance artists and explored their local surroundings. Travel and lunches were arranged and everyone received a goody bag.

2b. Scotland's Climate Challenge, from 24 Sep 2021 - 27 Mar 2022
This exhibition highlighted the exciting work being carried out in Scotland to fight against climate change. It brought together just some of the technological responses that have been developed in Scotland or that are being used here in the effort to cut carbon dioxide emissions. On show was a range of leading-edge equipment, much of it newly collected, alongside samples of natural material. Scotland's Climate Challenge also looked at the efforts made to ensure these new technologies are themselves sustainable, both in terms of their impact on the environment and ecosystems and the resources consumed in their manufacture.

2c. Adventure Planet, permanent gallery reopened on 8 April 2022
Following a significant redevelopment to create a revitalised, immersive space, younger visitors and their families are returning to explore and learn about the natural world. Fun and thought-provoking activities and interactive games have been incorporated to spark ideas about caring for wildlife and the steps everyone can take to preserve the natural world in their everyday lives. Old favourites have been updated and additional specimens from our world-renowned natural sciences collection included as Adventure Planet puts a renewed focus on the environment and biodiversity.

2d. Extinction Bell, artistic intervention from 24 Sept 2021 – 09 Jan 2022
Extinction Bell is a work by Bristol-based artist Luke Jerram that aimed to raise awareness of biodiversity loss. A fire engine bell from National

	Museums Scotland's collection was adapted to toll at random intervals 150-200 times per day: each ring of the bell marks the extinction of a species, representing the number of species being lost every 24 hours, according to a 2007 report from the United Nations. The 19th century brass bell, chosen by curators, was originally used on a horse-drawn fire engine from St Mary's Isle estate near Kirkcudbright.
4d	**Where applicable, what contribution has the body made to helping deliver the Programme?** Provide any other relevant supporting information
	Continuation of previous answer: **Our natural environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change.* A case study that particularly highlights our work is this area is the implementation of a Biodiversity Action Plan at the National Museums Collection Centre, Granton. Having monitored the site for flora and fauna we are now designating areas for wild growth and tracking wildlife incidence. Wildflowers and insect presence are increasing. **Our society's supporting systems are resilient to climate change.* We have been working with suppliers, contractors and consultants to ensure sustainability is consistent in our procurement process: specification writing, evaluation and implementation. An example is the recent tender for a waste production contractor: through the review of our specification and in dialogue with the market, we now have a contract with a waste contractor who is able to weigh our waste to ensure accurate carbon emissions data and puts nothing into landfill.
	Review, monitoring and evaluation
4e	**What arrangements does the body have in place to review current and future climate risks?** Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

	The organisation's Sustainable Development Group meets monthly to create, discuss, review and implement the annual Action Plan. This document leads our priorities for the year, and we regularly evaluate progress made; quarterly reports are developed for the Estates Committee, a Board of Trustees sub-group and annual reports to the Board of Trustees. In addition, Carbon Reduction meetings, Carbon Counting meetings and Biodiversity Action Plan meetings are also established throughout the year cycle. Our evaluation of progress happens in a variety of ways including: Committee review; audience and staff surveys, and consultant-led auditing at year end.
4f	**What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?** Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).
	*Utilities: The organisation has all of its utilities metered on all sites and sub metered to provide additional management information where required. All utility meters are read and information recorded and consumption monitored monthly to determine trends and any unusual patterns investigated. In addition, many buildings are continually monitored by Building Management Systems and automatic alarms set to highlight any unusual or high incidents of consumption or plant failure to key personnel *Behaviour Change: We monitor year on year progress with factors such as climate change understanding; clarity about our role as a public body; enjoyment of our public programmes; and confidence with behaviour change. *Biodiversity Development: Annual survey work is undertaken at our sites, and year on year comparisons made.
	Future priorities for adaptation
4g	**What are the body's top 5 climate change adaptation priorities for the year ahead?** Provide a summary of the areas and activities of focus for the year ahead.

As a public body in the cultural sector we spread our efforts across three areas of focus:
1) our public engagement work
2) our research and collections development
3) and ensuring that our own practices and activities meet the Scottish Government's targets for carbon reduction
In addition to these three broad areas of work, we will be focussing on:
4) The implementation of an all staff training programme, bespoke to different job roles
5) The development of an investment plan for our estate and infrastructure, to ensure we are impactful with resources

Further information

4h **Supporting information and best practice**
Provide any other relevant supporting information and any examples of best practice by the body in relation to adaption.

We identified COP26 in Glasgow as an opportunity to help our audiences make the connection between themselves and this global summit happening on their doorsteps. A programme of onsite activities, film and streaming was developed, designed to appeal to a range of audience demographics. As well as using minimal core budget, we attracted external funding to support our plans from Museums Galleries Scotland; Scottish Government; Scottish Power Foundation, and Creative Scotland. The programme included a specially commissioned Climate Emergency film series created with and for P7-S3 pupils. The films were screened on Museums Takeover Day with climate ambassadors invited to the event to participate in Q&A sessions with senior management about our climate and biodiversity work. The films have a lasting legacy on our website, attracting over 1,350 page views since launch. Onsite, artists' collective If Not Now When delivered a creative art installation, screened for over three weeks in the National Museum of Scotland. Our school holiday programmes featured climate emergency-related events and activities targeted at family audiences, including Fish for Facts, Reduce and Rewild, Upcycling, Small Changes Big Difference, Maths Week Scotland activities and Designing for the Climate. Online events included Art and Science: Communicating the Climate Emergency, involving a panel of artists and curators, and Biodiversity Life in Scotland, a digitally delivered schools session. Alongside our own digital channels, the programme was publicised on the COP26 web pages and by our delivery partners.

PART 5	Procurement
5a	**How have procurement policies contributed to compliance with climate change duties?** Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.
	Sustainable Procurement Policy was developed and approved in 2016 and is undergoing development in 2021 in line with our Sustainability Vision. The principles embedded within our procurement activities are outlined to ensure that value for money products and services are selected and that a balanced consideration of social, ethical, environmental and economic impacts are undertaken throughout the procurement process. The Policy launched in July 2022 includes revised sections on promoting sustainable procurement. In addition to the revised Policy, we will launch an updated Procurement Playbook and a revised Travel and Subsistence Policy which focus on a number of practical steps to be taken by procurers including placing a greater emphasis on sourcing goods and services locally and adopting Climate Conscious Travel. An associated procurement training is also being updated.
5b	**How has procurement activity contributed to compliance with climate change duties?** Provide information relating to how procurement activity by the body has contributed to its compliance with climate changes duties.
	Our tender selection criteria ensure that the tenderer has fully considered sustainability and climate change issues in the way they and their supply chain work. All service and goods providers are also required to provide their carbon emissions data at the point of invoice. This ensures we have a detailed understanding of their supply chain.
	Further information
5c	**Supporting information and best practice** Provide any other relevant supporting information and any examples of best practice by the body in relation to procurement.
	Our Annual Procurement Report 2021-2022 highlights that 84% of our procurement spend was with local suppliers.

PART 6	Validation and Declaration

6a Internal validation process

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

For Utilities: factual statistical information gathered from monthly utility meter readings, converted into management information from which statistical consumption information is derived.
For indirect emissions we have used the UK Government GHG Conversion Factors. Any other supplementary conversion factors are listed as Technical Notes in our Carbon Management Plan. Quarterly meetings bring together cross departmental colleagues to review and discuss our Carbon Management Plan.

6b Peer validation process

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

The information within this report is collated by the Estates Department and SDG. The information and data stems from reports developed in year for Estates Committee and Board of Trustees, that has been externally audited.

6c External validation process

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

At year end a consultancy service (Wardell Armstrong) was employed to audit our Carbon Management Plan output and development process. A Technical Note in the Carbon Management Plan lists our (site and activity) boundaries, scopes, thresholds and conversion factors.

6d No Validation Process

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

n/a

6e Declaration

I confirm that the information in this report is accurate and provides a fair representation of the body's performance in relation to climate change.

Name:	Keith Sefton
Role in the body:	Head of Estates
Date:	24/11/2022