PUBLIC DISCLOSURE STATEMENT

AUSTRALIAN MUSEUM

ORGANISATION CERTIFICATION
FY2023–24

Australian Government

Climate Active
Public Disclosure Statement

AUSTRALIAN MUSEUM

An Australian Government Initiative

Climate Active

NAME OF CERTIFIED ENTITY	Australian Museum Trust (trading as Australian Museum)
REPORTING PERIOD	1 July 2023 – 30 June 2024 Arrears report
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.* Erik Maranik Director, Corporate Services 04/11/2025

Australian Government
Department of Climate Change, Energy, the Environment and Water

Version 9.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	6,302 tCO_2-e
CARBON OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	24.14%
CARBON ACCOUNT	Prepared by: Pangolin Associates
TECHNICAL ASSESSMENT	29/06/2023 Pangolin Associates Next technical assessment due: 29/06/2026

Contents

2. CERTIFICATION INFORMATION

Description of organisation certification

This inventory has been prepared for the financial year from 1 July 2023 to 30 June 2024.

The certification covers all business operations of Australian Museum Trust trading as Australian Museum, ABN: 85 407 224 698, in the following locations and facilities:

- 1 William Street, Sydney NSW 2010
- Lizard Island Research Station, Cairns, QLD, 4892
- Museums Discovery Centre, Castle Hill, NSW, 2154
- Rydalmere – Storage, NSW, 2116
- Lilyfield – Storage, NSW, 2040
- Oxford Street Office, Darlinghurst, NSW, 2010

The certification excludes products sold in the merchandising shop and the tenant electricity consumption of the restaurant located at the 1 William Street facility in NSW.

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- Climate Active Standards
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with "Method 1" from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). These have been expressed as carbon dioxide equivalents (CO_2-e) using relative global warming potentials (GWPs).

Organisation description

The Australian Museum is a NSW Government organization operating under the Department of Creative Industries, Tourism, Hospitality and Sport. The Australian Museum is a statutory body governed by a

Board of Trustees established under the *Australian Museum Trust Act 1975 (NSW).* The Australian Museum is a dynamic source of scientific information on the pressing environmental and social challenges facing our region: the loss of biodiversity, a changing climate and the search for cultural identity.

Underpinning our research is an irreplaceable collection of international standing: over 22 million objects representing a timeline of the environmental and cultural histories of the Australian and Pacific regions.

Our collection holds many objects from Indigenous Australia and the Pacific, a record of human diversity and a living wellspring for regional cultural diversity.

It contains irreplaceable fossils, minerals, meteorites and gemstones that provide a geological perspective of the planet. It houses representative specimens of native Australian mammals, birds, reptiles, fish and countless invertebrates that tell many stories about our unique wildlife.

Climate change is one of the key issues of our times and the protection and management of our natural heritage has never been more important. As a leading natural history and cultural institution, the Australian Museum has a responsibility to educate, research, inspire and act on environmental sustainability.

An operational control approach was applied to consolidate the emissions of the reporting organisation.

3.EMISSIONS BOUNDARY

Inside the emissions boundary

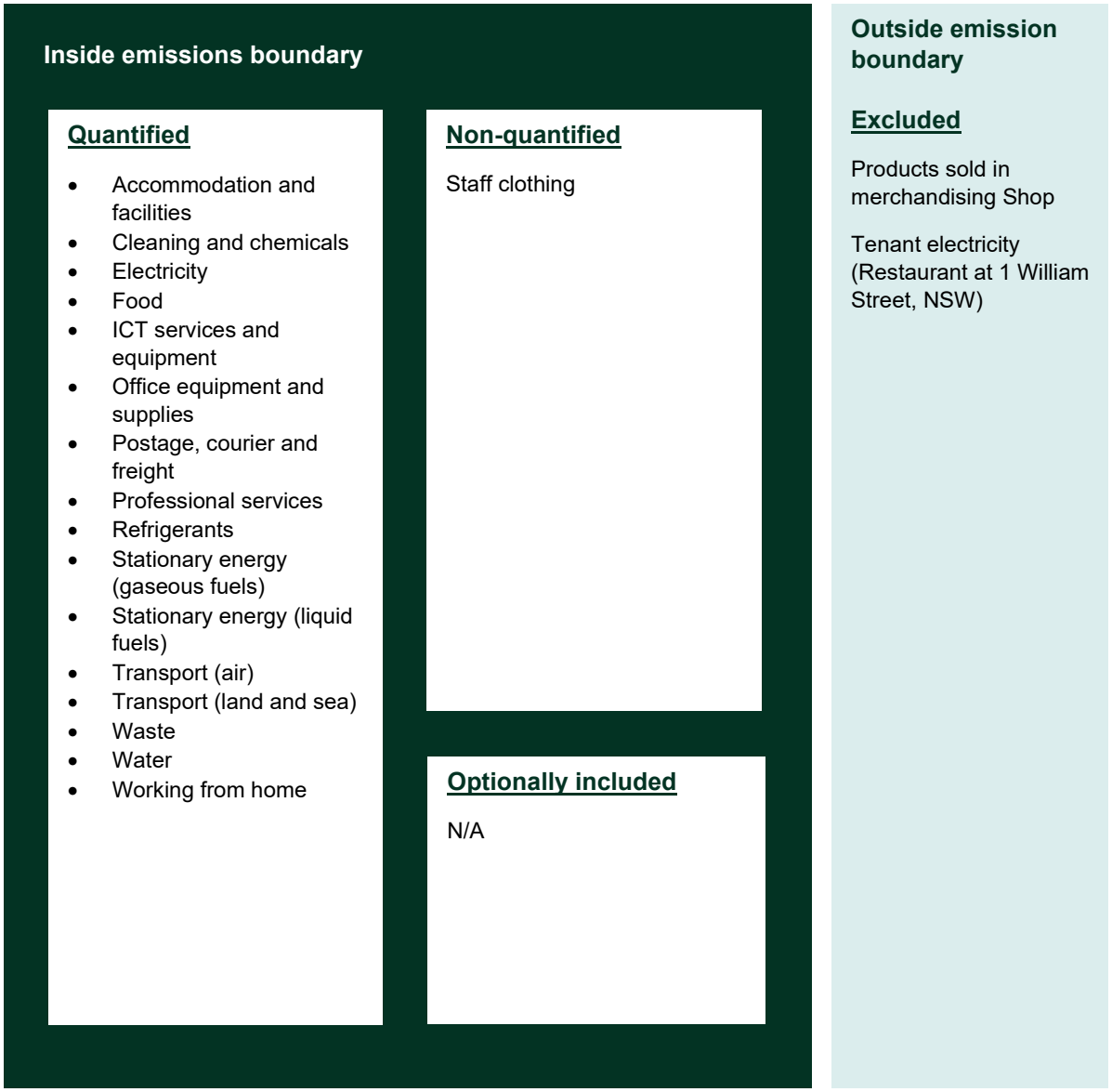
All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however are **optionally included**.

Non-quantified emissions have been assessed as relevant and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Excluded emissions are those that have been assessed as not relevant to an organisation's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.


Inside emissions boundary
Quantified
Accommodation and facilities
Cleaning and chemicals
Electricity
Food
ICT services and equipment
Office equipment and supplies
Postage, courier and freight
Professional services
Refrigerants
Stationary energy (gaseous fuels)
Stationary energy (liquid fuels)
Transport (air)
Transport (land and sea)
Waste
Water
Working from home
Non-quantified
Staff clothing
Optionally included
N/A
Outside emission boundary
Excluded
Products sold in merchandising Shop
Tenant electricity (Restaurant at 1 William Street, NSW)

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

As a NSW Government organisation, the Australian Museum is committed to the NSW Government's Net Zero plan, by which Net Zero will be reached by 2050. Stage 1 of the plan (2020-2030) aims to fast track emissions over the next decade by driving the uptake of emission reduction technologies, empowering consumers and businesses to make sustainable choices and invest in new innovative technologies. The Australian Museum's emission reduction objectives are aligned with and directly contribute to 6 of the United Nations Sustainable Development Goals (SDGs).

The Australian Museum has set an interim target to reduce emissions across the value chain by >35% on 2005 levels by 2030. The Australian Museum's 2005 measurement was based solely on energy consumption, and as stated in the Australian Museum's 2004-2005 Annual Report, the associated emissions were 4,037 t CO2-e. The Australian Museum's Climate Active reporting includes Scope 3 value chain emissions, which were not captured in the 2005 baseline.

The Australian Museum has a series of 5 key objectives to be delivered by 2025 as outlined in their Sustainability and Climate Action Plan 2023-2025.

Outcome 1. – Reduce Operational Impacts

Within a 2-year timeframe the Australian Museum aims to reduce energy, waste and resource use to reduce their overall emissions. Actions include:

- Increasing renewable energy consumption through NSW energy contract and considering implementing onsite renewables (Scope 2).
- Increase energy efficiency by upgrading the building management system, to better regulate internal environmental conditions by December 2025 (Scope 2).
- Transition company owned vehicles to at least 50% of the fleet hybrid or electric by 2026, and 100% of the fleet by 2030 (Scope 1).

Outcome 2 – Future-proof the museum

Future-proofing the museum involves imbedding sustainability best practice into all operations to prepare for and adapt to climate change. Actions include:

- All new developments endorsed by the Australian Museum must achieve a Green Star certification of 5 or 6 from June 2024.

Outcome 3 – Empower our people

The Australian Museum recognises the integral role of individuals in the climate crisis. It is committed to inspiring, engaging and involving their people, contractors and suppliers to reach their sustainability goals. Actions include:

- All staff will undertake compulsory training on Australian Museum sustainability policies and practices annually, and all new staff will have this training embedded into their onboarding.
- All staff are trained on different waste categories and responsible disposal in order to increase waste diversion rates on an annual basis.

Outcome 4 – Engage Stakeholders

The Australian Museum is committed to engaging with the community and stakeholders to share knowledge and encourage dialogue about sustainability. Actions include:

- They are an active member of the City of Sydney's Sustainable Destination Partnership.
- They aim to collaborate with the University sector by implementing projects that contribute to biodiversity conservation and ecosystem restoration.

Outcome 5 – Lead for climate action

The Australian Museum is committed to leading the global conversation on climate change and its consequences for people and nature. Actions include:

- Deliver new exhibitions and resources for the public to educate about sustainability and climate change by 2028.

Emissions reduction actions

The Australian Museum has undertaken a number of building efficiency initiatives to reduce its carbon emissions including:

- Upgrading and trialling climatic monitoring systems to the Australian Museum's air conditioning units to maximise energy efficiency, helping reduce energy consumption by 23%, while providing an innovative and green way to conserve and manage the Australian Museum's renowned collection.
- Completing a significant lighting upgrade replacing over 2,000 fluorescent luminaires with energy-efficient LED lights across large areas of the site
- Reducing the number of general waste bins, increased the range of recycling streams and improved waste signed across the Australian Museum, to increase diversion from landfill.
- Committing to eliminating single-use plastics across the Australian Museum's food and beverage operations.

At the Australian Museum, waste is considered a valuable resource to reduce, reuse and recycle. Project Discover, the Australian Museum's $57.5M building upgrade that was completed in 2020, achieved over a

90% diversion rate of construction waste to landfill. Hardwood flooring removed from the Pacific Collection stores was reused in the touring exhibition hall and stair balustrading was reused in signage.

The Australian Museum's waste system aims to reduce waste to landfill in both public and back-of-house spaces. The Australian Museum's waste streams include fluorescent lights, print cartridges, batteries, e-waste, mobile phones, soft plastics, organics, cardboard and paper, plastic/glass and aluminium as well as general waste. Compostable waste was added to the public waste streams in late 2020.

The Australian Museum is a founding member of the Sustainable Destination Partnership, a member of the NSW Government's Sustainable Advantage, and is proud to collaborate with The Australia Institute on their Climate of the Nation 2020 research report that shows a strong correlation between experience of climate impacts like bushfires and the intensity of concern about climate change.

The Australian Museum is committed to advancing understanding and engagement in solutions to climate change. It has grown its climate change community outreach by using exhibitions, education resources and public programs to advance action on climate change. This includes travelling exhibitions, permanent climate exhibitions, public orations, public programs, education resources for schools and a wide range of social media posts.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year			
		Total tCO_2-e (without uplift)	**Total tCO_2-e** (with uplift)
Base year:	2018-19	4,857	N/A
Year 1:	2019-20	4,002.7	N/A
Year 2:	2020-21	6,445.5	N/A
Year 3	2021-22	5,889.5	N/A
Year 4	2022-23	6,634.08	6,698.73
Year 5	2023-24	6301.31	N/A

Significant changes in emissions

Significant changes in emissions			
Emission source	**Previous year emissions** (t CO_2-e)	**Current year emissions** (t CO_2-e)	**Reason for change**
Electricity (market-based method, scope 2)	3572.84	2978.04	The facility at 7 Parsons Street, Lilyfield, NSW, whose electricity consumption was included in FY2023, was excluded as it is solely used for storage and does not contain any electrical or electronic equipment that consume electricity in FY2024.
Electricity (market-based method, scope 3)	652.01	728.01	This is primarily due to the increase in electricity consumption at the 1 William Street facility in Sydney, which rose by 460,526 kWh in FY2024 compared to FY2023.

Use of Climate Active carbon neutral products, services, buildings or precincts

Certified brand name	Product/Service/Building/Precinct used
Pangolin Associates	Consulting services

Emissions summary

The electricity summary is available in Appendix B. Electricity emissions were calculated using a location/market-based approach.

Emission category	Scope 1 emissions (tCO_2-e)	Scope 2 emissions (tCO_2-e)	Scope 3 emissions (tCO_2-e)	Total emissions (t CO_2-e)
Accommodation and facilities	0.00	0.00	9.90	9.90
Cleaning and chemicals	0.00	0.00	131.57	131.57
Electricity	0.00	2978.04	728.01	3706.05
Food	0.00	0.00	93.39	93.39
ICT services and equipment	0.00	0.00	86.28	86.28
Office equipment and supplies	0.00	0.00	384.25	384.25
Postage, courier and freight	0.00	0.00	62.08	62.08
Professional services	0.00	0.00	264.92	264.92
Refrigerants	1.36	0.00	0.00	1.36
Stationary energy (gaseous fuels)	513.45	0.00	130.53	643.98
Stationary energy (liquid fuels)	8.28	0.00	2.15	10.43
Transport (air)	0.00	0.00	183.88	183.88
Transport (land and sea)	49.13	0.00	291.79	340.92
Waste	0.00	0.00	282.21	282.21
Water	0.00	0.00	93.56	93.56
Working from home	0.00	0.00	6.53	6.53
Total emissions (tCO_2-e)	572.22	2978.04	2751.05	6301.31

Uplift factors

N/A

6.CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Verified Carbon Units (VCUs)	6302	100%

Project name	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
Bundled Wind Power Project by Mytrah Group	VCU	Verra Registry	22/1/2024	6918-358618584-358623724-VCU-034-APX-IN-1-1728-01012017-24112017-0	2017	5141	3483	0	1658	26.31%
Bundled Solar Power Project by Solararise India Projects PVT. LTD.	VCU	Verra Registry	6/2/2025	10730-245142996-245145278-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	2283	0	0	2283	36.23%

Bundled Solar Power Project by Solararise India Projects PVT. LTD.	VCU	Verra Registry	6/2/2025	10730-245142360-245142395-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	36	0	0	36	0.57%
Bundled Solar Power Project by Solararise India Projects PVT. LTD.	VCU	Verra Registry	6/2/2025	10730-245108515-245108760-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	246	0	0	246	3.90%
Bundled Solar Power Project by Solararise India Projects PVT. LTD.	VCU	Verra Registry	6/2/2025	10730-245135389-245136576-VCS-VCU-997-VER-IN-1-1762-26042018-31122018-0	2018	1188	0	0	1188	18.85%
Bundled Wind Power Project by Mytrah Group	VCU	Verra Registry	6/2/2025	14623-612931724-612932314-VCS-VCU-997-VER-IN-1-1728-01032022-31032022-0	2022	591	0	0	591	9.38%
Bundled Wind Power Project by Mytrah Group	VCU	Verra Registry	6/2/2025	14623-612936304-612936603-VCS-VCU-997-VER-IN-1-1728-01032022-31032022-0	2022	300	0	0	300	4.76%

Co-benefits

N/A

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

Location-based method:

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based method:

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

For this certification, electricity emissions have been set by using the **market-based approach.**

Market-based approach summary

Market-based approach	Activity Data (kWh)	Emissions (kg CO_2-e)	Renewable percentage of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	0	0	0%
LGC Purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	291,021	0	5%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCS surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,005,003	0	19%
Residual Electricity	4,072,581	3,706,048	0%
Total renewable electricity (grid + non grid)	1,296,024	0	24%
Total grid electricity	5,368,604	3,706,048	24%
Total electricity (grid + non grid)	5,368,604	3,706,048	24%
Percentage of residual electricity consumption under operational control	90%		
Residual electricity consumption under operational control	3,676,594	3,345,701	
Scope 2	3,272,573	2,978,041	
Scope 3 (includes T&D emissions from consumption under operational control)	404,021	367,659	
Residual electricity consumption not under operational control	395,986	360,348	
Scope 3	395,986	360,348	

Total renewables (grid and non-grid)	24.14%
Mandatory	18.72%
Voluntary	5.42%
Behind the meter	0.00%
Residual scope 2 emissions (t CO_2-e)	2,978.04
Residual scope 3 emissions (t CO_2-e)	728.01
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	2,978.04
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	728.01
Total emissions liability (t CO_2-e)	3,706.05

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location-based approach summary

Location-based approach	Activity Data (kWh) total	Under operational control			Not under operational control	
Percentage of grid electricity consumption under operational control	**91%**	**(kWh)**	**Scope 2 Emissions ($kgCO_2$-e)**	**Scope 3 Emissions ($kgCO_2$-e)**	**(kWh)**	**Scope 3 Emissions ($kgCO_2$-e)**
ACT	0	0	0	0	0	0
NSW	5,326,202	4,842,861	3,293,146	242,143	483,340	352,838
SA	0	0	0	0	0	0
VIC	0	0	0	0	0	0
QLD	42,403	38,555	28,145	5,783	3,848	3,386
NT	0	0	0	0	0	0
WA	0	0	0	0	0	0
TAS	0	0	0	0	0	0
Grid electricity (scope 2 and 3)	5,368,604	4,881,416	3,321,291	247,926	487,188	356,224
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	0	0	0	0		
Total electricity (grid + non grid)	5,368,604					

Residual scope 2 emissions (t CO_2-e)	3,321.29
Residual scope 3 emissions (t CO_2-e)	604.15
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	3,321.29
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	604.15
Total emissions liability	3,925.44

Operations in Climate Active buildings and precincts

Operations in Climate Active buildings and precincts	Electricity consumed in Climate Active certified building/precinct (kWh)	Emissions (kg CO_2-e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their building or precinct certification. This electricity consumption is also included in the market based and location-based summary tables. Any electricity that has been sourced as renewable electricity by the building/precinct under the market-based method is outlined as such in the market-based summary table.

Climate Active carbon neutral electricity products

Climate Active carbon neutral electricity product used	Electricity claimed from Climate Active electricity products (kWh)	Emissions (kg CO_2-e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their electricity product certification. This electricity consumption is also included in the market based and location-based summary tables. Any electricity that has been sourced as renewable electricity by the electricity product under the market-based method is outlined as such in the market-based summary table.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
Staff clothing	Immaterial as offered to only the front of house staff

Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to this organisation's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions.

2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.

3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.

4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.

5. **Outsourcing** The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.

Excluded emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Products sold in merchandising Shop	N	N	N	N	N	It is not part of the Australian Museum's administrative operations, and there is no available data on all items sold within the shop.
Tenancy electricity (Restaurant)	N	N	N	N	N	It is not part of the Australian Museum's administrative operations, and is run a tenant (third party).

An Australian Government Initiative

Climate Active