



# **PUBLIC DISCLOSURE STATEMENT**

**AUSTRALIAN MUSEUM**

**ORGANISATION CERTIFICATION  
FY 2020-2021**

Australian Government  
**Climate Active  
Public Disclosure Statement**



NAME  
Museum

OF CERTIFIED ENTITY: Australian

REPORTING PERIOD: 1 July 2020 – 30 June 2021

**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.



**Australian Government**  
**Department of Industry, Science,  
Energy and Resources**

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Version number February 2021



# 1. CARBON NEUTRAL INFORMATION

## Description of certification

This inventory has been prepared for the financial year from 1 July 2020 to 30 June 2021.

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

- 1 Williams Street, Sydney NSW 2010
- Lizard Island Research Station, PMB 37 Cairns QLD 4892 Australia
- Museums Discovery Centre, 72 Showground Road, Castle Hill

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<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>). These have been expressed as carbon dioxide equivalents (CO<sub>2</sub>-e) using relative global warming potentials (GWPs).

*“As a world-renowned scientific research, education and cultural institution it is important that the Museum shows leadership and tangible actions in reducing our impact on the environment.”*

## Organisation description

The Australian Museum is Australia's first Museum established nearly 200 years ago it chronicles the natural history and culture of Australia and its region. As the custodian of over 21.9 million objects of natural history and culture from Australia and our region. The Collection is a dynamic source of scientific information on the pressing environmental and social challenges facing our region: the loss of biodiversity, a changing climate, information of climate solutions and the connections of humans to these complex ecosystems.

The AM uses the Collection to understand our world and share that knowledge with the public through exhibitions, programs and education outreach.

In identifying that climate change is one of the key issues of our time AM established the Sustainability Action Plan 2019-2021 with the goal to reduce our carbon footprint and become carbon neutral by 2021. As a world-renowned scientific research, education and cultural institution it is important that the Museum shows leadership and tangible actions in reducing our impact on the environment.

A series of emissions reduction projects have been undertaken as well as other environmental indicators

## 2. EMISSION BOUNDARY

### Diagram of the certification boundary



### **Non-quantified sources**

Merchandising and Staff Clothing have been non-quantified due to being immaterial.

### **Data management plan**

N/A

### **Excluded sources (outside of certification boundary)**

N/A

*“As a world-renowned scientific research, education and cultural institution it is important that the Museum shows leadership and tangible actions in reducing our impact on the environment.”*

# 3. EMISSIONS SUMMARY

## Emissions reduction strategy

AM has created a comprehensive Sustainability Action Plan with goals to reduce emissions and ensure a broad range of sustainability actions are taken place.

Included in the commitment are

- Carbon neutral plan which includes means to reduce emissions
- Staff are provided sustainability training
- Implementing sustainability KPIs which are embedded with reporting
- Develop ways to engage with the public as well as staff on sustainability as well as promote the sustainable actions AM takes

A comprehensive emissions reduction strategy will be developed in FY2021-22.

## Emissions over time

Australian Museum was closed for major renovations for 15 months, reopening in December 2020; this has a significant impact on the 2019-20 emissions, as the museum was not open to the public for the majority of this reporting period. The renovations added 3,000sqm to the overall floor space, and a resulting increase in emissions have been observed in 2020-21. Additionally, actual activity data was able to be obtained for the Museums Discovery Centre, which has contributed to the increase in electricity.

Table 1

Emissions since base year			
	Base year: 2018-19	Year 1: 2019-20	Current year Year 2: 2020-21
<i>Total tCO<sub>2</sub>-e</i>	4,857.	4,002.7	6445.5

## Emissions reduction actions

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

- Upgrading and trialing climatic monitoring systems to the AM's air conditioning units to maximise energy efficiency, helping reduce energy consumption by 25%, while providing an innovative and green way to conserve and manage the AM's renowned collection
- Completing a significant lighting upgrade replacing nearly 2,000 fluorescent luminaires with energy-efficient LED lights across large areas of the site
- Committing to eliminating single-use plastics across the AM's food and beverage operations.

At the AM waste is considered a valuable resource to reduce, reuse and recycle. Project Discover the AM's \$57.5M building upgrade 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 AM's waste system aims to reduce waste to landfill in both public and back-of-house spaces. The AM'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 AM 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.



## Emissions summary (inventory)

Table 2

Emission source category	tonnes CO <sub>2</sub> -e
Accommodation and facilities	12.36
Air Transport (km)	33.23
Carbon neutral products and services	0.00
Cleaning and Chemicals	136.25
Electricity	4,269.92
Food	21.84
ICT services and equipment	62.86
Land and Sea Transport (\$)	0.43
Land and Sea Transport (fuel)	37.93
Land and Sea Transport (km)	30.44
Office equipment & supplies	499.26
Postage, courier and freight	90.54
Professional Services	306.17
Refrigerants	4.09
Stationary Energy	760.94
Waste	75.16
Water	98.68
Working from home	15.37
<i>Total Net Emissions</i>	<b>6,455.50</b>

## Uplift factors

Table 3

Reason for uplift factor	tonnes CO <sub>2</sub> -e
N/A	
<i>Total footprint to offset (uplift factors + net emissions)</i>	<b>6,455.50</b>

## Carbon neutral products

Carbon neutral paper (Revive laser 100% recycled carbon neutral paper)

## Electricity summary

Electricity was calculated using a market-based approach.

### Market-based approach summary

Table 4

Market-based approach	Activity Data (kWh)	Emissions (kgCO <sub>2</sub> -e)	Renewable %
Behind the meter consumption of electricity generated	0	0	0%
<b>Total non-grid electricity</b>	<b>0</b>	<b>0</b>	<b>0%</b>
LGC Purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	753	0	0%
Jurisdictional renewables	0	0	0%
Residual Electricity	3,979,128	4,269,925	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	929,007	0	19%
<b>Total grid electricity</b>	<b>4,908,888</b>	<b>4,269,925</b>	<b>19%</b>
<b>Total Electricity Consumed (grid + non grid)</b>	<b>4,908,888</b>	<b>4,269,925</b>	<b>19%</b>
Electricity renewables	929,760	0	
Residual Electricity	3,979,128	4,269,925	
<b>Exported on-site generated electricity</b>	<b>0</b>	<b>0</b>	
Emission Footprint (kgCO <sub>2</sub> -e)		4,269,925	

<b>Emission Footprint (tCO<sub>2</sub>-e)</b>	<b>18.94%</b>
<b>LRET renewables</b>	<b>18.93%</b>
<b>Voluntary Renewable Electricity</b>	<b>0.02%</b>
<b>Total renewables</b>	<b>0.00%</b>

**Location-based approach summary  
Table 5**

Location-based approach	Activity Data (kWh)	Emissions (kgCO <sub>2</sub> -e)
ACT	0	0
NSW	4,908,888	4,417,999
SA	0	0
Vic	0	0
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
<b>Grid electricity (scope 2 and 3)</b>	<b>4,908,888</b>	<b>4,417,999</b>
ACT	0	0
NSW	0	0
SA	0	0
Vic	0	0
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
<b>Non-grid electricity (Behind the meter)</b>	<b>0</b>	<b>0</b>
<b>Total Electricity Consumed</b>	<b>4,908,888</b>	<b>4,417,999</b>

  

<b>Emission Footprint (tCO<sub>2</sub>-e)</b>	<b>4,418</b>
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## 4. CARBON OFFSETS

### Offsets strategy

Table 6

Offset purchasing strategy:	
In arrears	
1. Total offsets previously forward purchased and banked for this report	855
2. Total emissions liability to offset for this report	6,456
3. Net offset balance for this reporting period	5,601
4. Total offsets to be forward purchased to offset the next reporting period	0
5. Total offsets required for this report	6,456

### Co-benefits

#### Grid Interactive Solar Photovoltaic Power Project in Gujarat

This project consists of 25 MW of grid interactive solar photovoltaic power and is the first renewable energy project situated in the Surendranagar District. It is estimated to reduce or remove 41,034 tonnes of greenhouse gas emissions annually. The benefits of the project extend to an improved local economy and social well-being. It is a source of employment and its success encourages growth into the region.

#### Guanacaste Wind Farm CER Credit, Costa Rica

The project will contribute to the sustainable development of Costa Rica as it will foster and stimulate the expansion of renewable energy technologies, reduce the country's dependency on fuel imports and consequently improve its trade balance. Furthermore, by demonstrating the viability of larger grid connected wind farms, the project will strengthen and diversify the national energy supply, foster the development of sustainable energy technologies, and improve local living standards.

## Offsets summary

### Proof of cancellation of offset units

Table 7

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (tCO <sub>2</sub> -e)	Quantity used for previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period claim	Percentage of total (%)
Grid Interactive Solar Photovoltaic Power Project in Gujarat	VCUs	VERRA	25 August 2020	<a href="#">7889-434629773-434634390-VCU-030-APX-IN-1-1413-01012015-31122015-0</a>	2015	4,618	3,763	0	855	13.2%
Guanacaste Wind Farm CER Credit, Costa Rica	CERs	ANREU	7 April 2022	<a href="#">1,833,116 – 1,838,716</a>	2018	5,601	0	0	5,601	86.7%
<b>Total offsets retired this report and used in this report</b>									6,456	100%
<b>Total offsets retired this report and banked for future reports</b>									0	0

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total
Certified Emissions Reductions (CERs)	5,601	86.7%
Verified Carbon Units (VCUs)	855	13.2%

Transaction ID	AU21864
Current Status	Sending (91)
Status Date	08/04/2022 11:48:28 (AEST) 08/04/2022 01:48:28 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	Stuart, Benjamin Mathew Clarke
Transaction Approver	Rockliff, Nathan Stephen
Comment	Retiring for: Australian Museum Retirement Reason: "Retired on behalf of Australian Museum for Climate Active emissions for FY2021"

At



## 5. USE OF TRADE MARK

Table 8

Description where trademark used	Logo type
Website	Certified Organisation
Social Media	Certified Organisation
Presentations	Certified Organisation
Reports (Internal and External)	Certified Organisation

## 6. ADDITIONAL INFORMATION

N/A

# APPENDIX 1

## Excluded emissions

To be deemed relevant an emission must meet two of the five relevance criteria. Excluded emissions are detailed below against each of the five criteria.

**Table 9**

Relevance test					
Excluded emission sources	<i>The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions</i>	<i>The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.</i>	<i>Key stakeholders deem the emissions from a particular source are relevant.</i>	<i>The responsible entity has the potential to influence the reduction of emissions from a particular source.</i>	<i>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.</i>

N/A



# APPENDIX 2

## Non-quantified emissions for organisations

Table 10

Non-quantification test				
Relevant-non-quantified emission sources	<i>Immaterial &lt;1% for individual items and no more than 5% collectively</i>	<i>Quantification is not cost effective relative to the size of the emission but uplift applied.</i>	<i>Data unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.</i>	<i>Initial emissions non-quantified but repairs and replacements quantified</i>
Merchandising	Yes	No	No	No
Staff Clothing	Yes	No	No	No



An Australian Government Initiative

