



# **PUBLIC DISCLOSURE STATEMENT**

**AUSTRALIAN MUSEUM**

**ORGANISATION CERTIFICATION  
FY 2019-2020**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**



NAME OF CERTIFIED ENTITY: Australian Museum

REPORTING PERIOD: 1 July 2019 – 30 June 2020 (True-up 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.

Signature

A handwritten signature in black ink that reads "Amanda Farrar".

Date 1/11/2021

Name of Signatory – Amanda Farrar, – Director, Public Affairs & Development

Australian Museum



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

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# 1. CARBON NEUTRAL INFORMATION

## Description of certification

This inventory has been prepared for the financial year from 1 July 2019 to 30 June 2020.

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

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).

*“The AM’s mission is to ignite wonder, inspire debate and drive change with a vision to be a leading voice for the richness of life, the earth and culture in Australia and the Pacific*”

## 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 and specimens 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's mission is to ignite wonder, inspire debate and drive change with a vision to be a leading voice for the richness of life, the earth and culture in Australia and the Pacific. We commit to transforming the conversation around climate change, the environment and wildlife conservation, be a strong advocate for First Nations culture and continue to develop world leading science, collections, exhibitions and education programs.

In identifying that climate change is one of the key issues of our time the 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

## Emissions over time

Australian Museum was closed for Project Discover a significant cultural infrastructure project for 15 months, reopening in November 2020; this has had an impact on the 2019-20 emissions as the museum was not open to the public for the majority of the reporting period. Project Discover added 3,000sqm to the public floor space, so it is expected that increases in emissions will be observed in 2020-21.

Table 1

Emissions since base year		
	Base year: 2018-19	Current year Year 1: 2019-20
<i>Total tCO<sub>2</sub>-e</i>	4,857.3	4,002.7

## 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 reducing waste 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	Projected Emissions tonnes CO <sub>2</sub> -e	Actual Emissions tonnes CO <sub>2</sub> -e
Accommodation and facilities	91.074	11.266
Air Transport (km)	114.912	102.665
Cleaning and Chemicals	95.048	58.962
Electricity	3350.104	2,771.084
Food	104.889	24.020
ICT services and equipment	46.931	18.726
Land and Sea Transport (fuel)	25.698	36.832
Land and Sea Transport (km)	64.861	60.187
Office equipment & supplies	72.379	232.123
Postage, courier and freight	132.081	82.038
Professional Services	109.297	34.607
Refrigerants	2.161	4.080
Stationary Energy	562.6	513.810
Taxis	0	1.416
Waste	58.831	17.227
Water	26.459	8.106
Working From Home	0	25.532
<i>Total Net Emissions</i>	<b>4857.325</b>	<b>4,002.678</b>
<i>Difference between the years</i>	<b>-854.467</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>4,002.678</b>

## Carbon neutral products

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

## Electricity summary

Electricity was calculated using a Location-based approach.

The Climate Active team are consulting on the use of a market vs location-based approach for electricity accounting with a view to finalising a policy decision for the carbon neutral certification. Given a decision is still pending on the accounting way forward, a summary of emissions using both measures has been provided for full disclosure and to ensure year on year comparisons can be made.

### Market-based approach electricity summary

Table 4

Electricity inventory items	kWh	Emissions (tonnes CO <sub>2</sub> -e)
Electricity Renewables	760,893	0.00
Electricity Carbon Neutral Power	0	0.00
Electricity Remaining	2,318,089	2,506.086
Renewable electricity percentage	24%	
<i>Net emissions (Market based approach)</i>		<b>2,506.086</b>

### Location-based summary

Table 5

State/ Territory	Electricity Inventory items	kWh	Full Emission factor (Scope 2 +3)	Emissions (tonnes CO <sub>2</sub> -e)
ACT/NSW	Electricity Renewables	188,202	-0.90	-169.382
ACT/NSW	Electricity Carbon Neutral Power	-	-0.90	0.00
ACT/NSW	Netted off (exported on-site generation)	3,267,184	-0.81	2,940.465
ACT/NSW	Electricity Total	-	0.90	0.00
	<i>Total net electricity emissions</i>		<i>0.00</i>	<b>2,940.465</b>

## 4. CARBON OFFSETS

### Offset purchasing strategy: Arrears

Table 6 True-up for FY19/20

Arrears	
1. Total offsets previously forward purchased for this reporting period	4858
2. Total offsets required for this reporting period	4,003
3. Net offset balance for this reporting period	-855
4. Total offsets to be forward purchased for next reporting period	855

## Offsets summary

Table 7

<b>1. Total offsets required for this report</b>				4,003					
<b>2. Offsets retired in previous reports and used in this report</b>				0					
<b>3. Net offsets required for this report</b>				4,003					
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Quantity (tonnes CO <sub>2</sub> -e)	Quantity used in previous report	Quantity banked for future years	Quantity used in this report
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	0	855	3,763
Tiwi Islands, NT, Aboriginal Savanna Burning Project	ACCUs	ANREU	25 August 2020	3,772,959,447-3,772,959,556	2018	120	0	0	120
CECIC HKC Gansu Changma Wind Power project	VCUs	VERRA	25 August 2020	<a href="#">7821-430268943-430269062-VCU-034-APX-CN-1-717-24092018-31122018-0</a>	2018-19	120	0	0	120
<i>Total offsets retired this report and used in this report</i>								<b>4,003</b>	
<i>Total offsets retired this report and banked for future reports</i>								<b>855</b>	
<i>Net offsets required for this report</i>								<b>-855</b>	

## 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.

### Tiwi Islands, NT, Aboriginal Savanna Burning Project

In the Tiwi Islands, savanna burning is an important carbon farming project that is delivered in partnership with Tiwi Land Council and Charles Darwin University. Savanna burning is a fire management method that prevents destructive bushfires (prevalent in tropical savannas of northern Australia) by reducing the fuel load in a controlled manner and therefore reducing greenhouse gas emissions. By practicing traditional patchwork burning in the early dry season when fires are cooler and by burning less country, there are fewer emissions released and more carbon is stored in the soil and plants, keeping the land healthy for the Tiwi people.

This method generates Australian Carbon Credit Units (“ACCU”) and in turn brings environmental, social and cultural co-benefits such as:

- Elders sharing traditional ecological knowledge with young people;
- Protection of rock art and sacred sites;
- Protection of the environment by Aboriginal led land and sea management;
- Meaningful employment aligning with the interests and values of Traditional Owners; and
- Contribution to increased pride and self- esteem of Aboriginal people.

### CECIC HKC Gansu Changma Wind Power project

The purpose of the project is to generate electricity using wind power resources in the region and to deliver to the Northwest China Power Grid (NWPG) which is predominated by connected fossil fuel fired power plants. The project aims to generate a total of 431,949 MWh of clean electricity to the NWPG annually and has been estimated to reduce GHG emissions by 430,588 tCO<sub>2</sub>-e annually. The project is also a source of employment and educational opportunities for the community.

## 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

### Greenfleet Biodiversity Offsets

Australian Museum purchased an additional 120 tonnes of biodiversity offsets through Greenfleet. Greenfleet is a leading Australian not-for-profit environmental organisation on a mission to protect our climate by restoring forests. Greenfleet forests address critical deforestation, restore habitat for wildlife including many endangered species, capture carbon emissions to protect our climate, reduce soil erosion, improve water quality, and economically support local and indigenous communities.

# 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

Please advise which of the reasons applies to each of your non-quantified emissions. You may add rows if required.

**Table 10**

<b>Non-quantification test</b>				
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