



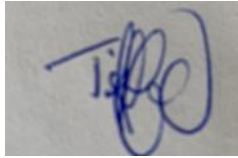
PUBLIC DISCLOSURE STATEMENT

**CITY OF MELBOURNE
FIRELIGHT FESTIVAL
JUNE 30 - JULY 2, 2023**

POST-EVENT REPORT

Australian Government
Climate Active
Public Disclosure Statement



RESPONSIBLE ENTITY NAME	City of Melbourne
NAME OF EVENT	Firelight Festival 2023
EVENT DATE(S)	June 30 – July 2, 2023
DECLARATION	<p><i>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.</i></p>  <p>Tiffany Crawford Co-director, Climate Change and City Resilience, City of Melbourne 24/08/2023</p>



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

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Version: March 2023



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	490 tCO ₂ -e
OFFSETS USED	20% VERs, 80% VCUs
RENEWABLE ELECTRICITY	18.8%
CARBON ACCOUNT	Prepared by: City of Melbourne
TECHNICAL ASSESSMENT	Next technical assessment due: 2025
THIRD PARTY VALIDATION	N/A

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2. CARBON NEUTRAL INFORMATION

Description of certification

Event name: Firelight Festival

Event date(s): June 30 – July 2, 2023

Event location(s): Docklands, Victoria

Attendees: 87,653

Activity data collected from this event has informed the preparation of this carbon inventory.

Event description

Melbourne's Firelight Festival is a multi-day celebration of the winter solstice held in the Docklands precinct of Melbourne. Owned and produced by the City of Melbourne, the Firelight Festival revels in themes of family and community, food and feasting, singing and music and renewal and rebirth. Attracting over 87,000 attendees in 2023 saw the continued success of this new staple to the Melbourne event calendar.

All attendee transport, activations, food and beverage sales and entertainment brought to the precinct by Firelight organisers is included in the scope of this certification. The fuels, electricity, management costs, bump-in and bump-out services, waste and post-event clean-up are also part of the certification scope. Any uplift to existing Docklands businesses is not included in the scope.

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 event, 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 the event'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
Office equipment & supplies
Products
Professional Services
Stationary Energy (liquid fuels)
Stationary Energy (solid fuels)
Transport (Air)
Transport (Land and Sea)
Waste
Water

Non-quantified

N/A

Outside emission boundary

Excluded

N/A

Data collection – changes since the pre-event report

Emission source	Data collection method
Attendee travel	A sample of 868 attendees are surveyed on their travel mode, origin postcode and purposes of their travel. Total distance by mode figures are extrapolated across all attendees to the event and a proportional attribution factor applied dependent on the average number of 'other activities' an attendee was engaged in on that day.
Accommodation	All interstate management staff are surveyed regarding their accommodation arrangements and all hotel nights are reported.
Food and drinks	All food and beverage vendor sales figures are collected by Firelight management.
Electricity	Sub-metering data is collected by event management contracting for all plug-in loads.
Services	A central budget is managed for Firelight Festival detailing all invoiced services for the event.
Stationary Energy (liquid fuels)	All contractors responsible for fuel consuming equipment are briefed before the event of the requirement to report on fuel use. Data collection sheets are used to record fuel use.

4. EMISSIONS REDUCTIONS

Emissions reduction measures

Firelight is in its second year of carbon neutrality. The 2023 event aimed to build improve on the baseline set in 2022.

1. Limited the amount of new construction – No new activations were constructed in 2023. All feature constructions were reused from previous years.
2. Waste, including food waste is a significant and visible environmental impact of Firelight. Food organics were collected and sent to a composting facility to minimise emissions from waste in landfill in 2023.

5. EMISSIONS SUMMARY

Significant changes in emissions – pre-event vs post-event

Emission source	Pre-event emissions (t CO ₂ -e)	Post-event emissions (t CO ₂ -e)	Reason for change
Transport (Land and Sea)	165.5	184.67	There was a 9% increase in the number of passenger kilometres travelled by car (64,435km) and a 161% increase in the number of passenger kilometres travelled by taxi (20,658) by attendees compared with 2022 figures.

Use of Climate Active carbon neutral products and services

N/A

Emissions summary

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

Emission category	Pre-event emissions totals (tCO ₂ -e)	Scope 1 emissions (tCO ₂ -e)	Scope 2 emissions (tCO ₂ -e)	Scope 3 emissions (tCO ₂ -e)	Total emissions (tCO ₂ -e)
Accommodation and facilities	2	0	0	1.03	1.03
Cleaning and Chemicals	2.9	0	0	2.28	2.28
Electricity	1.1	0	0.66	0	0.66
Food	145.6	0	0	154.45	154.45
Office equipment & supplies	3.3	0	0	0.24	0.24
Products	0.6	0	0	0.25	0.25
Professional Services	127	0	0	118.59	118.59
Stationary Energy (liquid fuels)	13.6	16.81	0	4.77	21.59
Stationary Energy (solid fuels)	0.1	0	0	0.1	0.10
Transport (Air)	2.8	0	0	0.95	0.95
Transport (Land and Sea)	165.5	0	0	184.67	184.67
Waste	4.8	0	0	4.32	4.32
Water	0.1	0	0	0.09	0.09
Total emissions	469.4	16.81	0.66	471.64	489.21
Difference between pre-event and post-event emissions	-19.81				

Uplift factors

N/A

Reason for uplift factor	tCO ₂ -e
Total of all uplift factors	0
Total footprint to offset <i>(total net emissions from summary table + total uplifts)</i>	489.21

6. CARBON OFFSETS

Eligible offsets retirement summary

The total emissions to offset for this certification are 490 t CO₂-e. The total number of eligible offsets used in this report is 490. Of the total eligible offsets used, 470 were retired as part of the pre-event report, and an additional 20 were newly purchased and retired. Zero units are remaining to be banked for future use.

Offsets retired for Climate Active certification

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO ₂ -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R. China	VCU	VERRA	30/03/2022	10901-255317839-255318438-VCS-VCU-785-VER-CN-1-438-26122015-27032016-1	2016	-	600	208	0	392	80%
Miaoli 49.8MW Wind Farm Project	VER	Gold Standard	21/02/2023	GS1-1-TW-GS931-12-2014-4575-35491-35568	2014	-	78	0	0	78	16%
<i>Stapled to</i> Mount Sandy Conservation Project	Australian Biodiversity Unit	N/A	28/02/2023	39580-39657 NVCR allocation reference: 2019/4003 VOL 003	-	78	-	-	-	-	-

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO ₂ -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Miaoli 49.8MW Wind Farm Project <i>Stapled to</i>	VER	Gold Standard	01/09/2023	GS1-1-TW-GS931-12-2014-4575-35835-35854	2014	-	20	0	0	20	4%
Mount Sandy Conservation Project	Australian Biodiversity Unit	N/A	12/09/2023	59934-59953 NVCR allocation reference: 2019/4003 VOL 003	-	20	-	-	-	-	-
Total offsets retired this report and used in this report										490	
Total offsets retired this report and banked for future reports									0		

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Emissions Reductions (VERs)	98	20%
Verified Carbon Units (VCUs)	392	80%

Co-benefits

Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R. China

Huoshi Grouped Small Hydro consists of multiple small-scale hydropower plants that generate renewable energy for rural Southwest and South Central China. By supplying clean hydroelectric power to the local grid, the project displaces greenhouse gas emissions, helping mitigate climate change and improving the lives of local people.

Mount Sandy conservation biodiversity units

Located on the traditional lands of the Ngarrindjeri people, Traditional Custodians of the Coorong, Mount Sandy is a rare pocket of intact native vegetation in a region now dominated by farmlands. The site features a unique mix of coastal shrub-lands and saline swamplands that provide strategic habitat for iconic native wildlife, such as the short-beaked echidna, purple-gaped honeyeater and elegant parrot. The Mount Sandy project ensures permanent protection for a regionally and culturally important pocket of biodiversity-rich land in partnership with its Traditional Owners. Local birds, animals and plants flourish undisturbed, while native plants for revegetation will be supplied by the local nursery at Raukkan Aboriginal Community, a self-governed Indigenous community 50 kilometres northwest of the project site.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

N/A

APPENDIX A: ADDITIONAL INFORMATION





**Verified Carbon
Standard**

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 30 Mar 2022, 600 Verified Carbon Units (VCUs) were retired on behalf of:

City of Melbourne - Firelight Festival 2022

Project Name
Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R. China

VCU Serial Number
10901-255317839-255318438-VCS-VCU-785-VER-CN-1-438-26122015-27032016-1

Additional Certifications
Social Carbon

Powered by  APX

CERTIFICATE

MOUNT SANDY
CONSERVATION PROJECT

20

Australian Biodiversity Units
(30 square metres)
were purchased and retired by:

CITY OF MELBOURNE
CRN 105685
SERIAL NUMBERS 59934-59953

AN AUSTRALIAN BIODIVERSITY UNIT (ABU) REPRESENTS THE PERMANENT
PROTECTION OF 1.5 SQUARE METRES OF HIGH CONSERVATION VALUE
NATIVE HABITAT



12/09/2023

REGISTRAR CERTIFICATION

DATE

NVCR ALLOCATION REFERENCE: 2019/4003 VOL 003

CERTIFICATE

MOUNT SANDY
CONSERVATION PROJECT

78

Australian Biodiversity Units
(117 square metres)
were purchased and retired by:

CITY OF MELBOURNE FIRELIGHT
FESTIVAL 2023
CRN 105685
SERIAL NUMBERS 39580-39657

AN AUSTRALIAN BIODIVERSITY UNIT (ABU) REPRESENTS THE PERMANENT
PROTECTION OF 1.5 SQUARE METRES OF HIGH CONSERVATION VALUE
NATIVE HABITAT



28 FEB 2023

REGISTRAR CERTIFICATION

DATE

NVCR ALLOCATION REFERENCE: 2019/4003 VOL 003

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	0	0	0%
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)	161	0	19%
Residual Electricity	697	665	0%
Total renewable electricity (grid + non grid)	161	0	19%
Total grid electricity	858	665	19%
Total electricity (grid + non grid)	858	665	19%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	697	665	
Scope 2	615	588	
Scope 3 (includes T&D emissions from consumption under operational control)	81	78	
Residual electricity consumption not under operational control	0	0	
Scope 3	0	0	

Total renewables (grid and non-grid)	18.80%
Mandatory	18.80%
Voluntary	0.00%
Behind the meter	0.00%
Residual scope 2 emissions (t CO₂-e)	0.59
Residual scope 3 emissions (t CO₂-e)	0.08
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	0.59
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	0.08
Total emissions liability (t CO₂-e)	0.67
<i>Figures may not sum due to rounding. Renewable percentage can be above 100%</i>	

Location Based Approach Summary

Location Based Approach	Activity Data (kWh) total	Under operational control			Not under operational control	
		(kWh)	Scope 2 Emissions (kg CO2-e)	Scope 3 Emissions (kg CO2-e)	(kWh)	Scope 3 Emissions (kg CO2-e)
Percentage of grid electricity consumption under operational control	100%					
VIC	858	858	729	60	0	0
Grid electricity (scope 2 and 3)	858	858	729	60	0	0
VIC	0	0	0	0		
Non-grid electricity (behind the meter)	0	0	0	0		
Total electricity (grid + non grid)	858					

Residual scope 2 emissions (t CO ₂ -e)	0.73
Residual scope 3 emissions (t CO ₂ -e)	0.06
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	0.73
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	0.06
Total emissions liability (t CO ₂ -e)	0.79

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. These emissions are accounted for through an uplift factor. 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.

N/A – no emission sources have been non-quantified in the carbon inventory of this event.

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

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 event's electricity.
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 event's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken within the event's boundary or from outsourced activities that are typically undertaken within the boundary for comparable events.

Excluded emissions sources summary

N/A – no emission sources have been excluded from the emissions boundary of this event.

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