



PUBLIC DISCLOSURE STATEMENT

**ENGINEERS AUSTRALIA
CLIMATE SMART ENGINEERING CONFERENCE
29-30 NOVEMBER 2023**

POST-EVENT REPORT

Australian Government

Climate Active Public Disclosure Statement



RESPONSIBLE ENTITY NAME	Engineers Australia
NAME OF EVENT	Climate Smart Engineering Conference
EVENT DATE(S)	29-30 November 2023
DECLARATION	<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> <i>Yolanda Santo</i> Name of signatory: Yolanda Santo Position of signatory: Head of Professional Development Date: <i>Note: you can submit this document to Climate Active unsigned. The Climate Active team will invite you to sign this document once they have completed their review.</i>



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

Public Disclosure Statement documents are prepared by the submitting organisation. The material in the Public Disclosure Statement documents represents the views of the organisation and do not necessarily reflect the views of the Commonwealth. The Commonwealth does not guarantee the accuracy of the contents of the Public Disclosure Statement document and disclaims liability for any loss arising from the use of the document for any purpose.

Version: August 2023



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	292 tCO ₂ -e
CARBON OFFSETS USED	100% VCU's
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Pangolin Associates

Contents

1. Certification summary.....	3
2. Certification information.....	4
3. Emissions boundary.....	5
4. Emissions reductions	8
5. Emissions summary	9
6. Carbon offsets	11
7. Renewable Energy Certificate (REC) Summary	14
Appendix A: Additional Information.....	15
Appendix B: Electricity summary.....	16
Appendix C: Inside emissions boundary	19
Appendix D: Outside emissions boundary	20

2.CERTIFICATION INFORMATION

Description of certification

This certification has been prepared for the Climate Smart Engineering Conference 2023 (CSE23), which occurred on the 29th and the 30th of November 2023. The event had 358 attendees and was held at the at the Melbourne Convention and Exhibition Centre (MCEC). Set up and pack up activities have also been included in this certification.

The Climate Active event calculator was used to prepare this carbon inventory, which is based on the *Climate Active Carbon Neutral Standard for Events*.

Event description

CSE23 will bring you the latest in world-leading views and engaging debate on solutions to address climate change, responding to extreme events, biodiversity loss, boosting the circular economy and upholding the principles of sustainable practices in engineering.

As creative problem solvers and systems thinkers, engineers are at the forefront of the fight against climate change. The profession stewards the delivery of mitigation and adaptation strategies to address the worst impacts of global warming and innovates to deploy new technologies for a clean fuel and energy future.

CSE will be a two-day conference program with plenary and technical sessions. There will be a full exhibition during breaks for delegates to network. Networking drinks will also be held in the exhibition area at the conclusion of day one followed by the Engineers Australia Excellence Awards gala dinner.

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
Electricity
Food
ICT services and equipment
Products
Stationary energy (gaseous fuels)
Air Transport
Land and sea transport
Bus Tours

Non-quantified

Water
Waste
Refrigerants

Outside emission boundary

Excluded

N/A

Data collection – changes since the pre-event report

Emissions source	Data collection method	Assumptions / conservative approach taken
Attendee travel	Event Planning Documents and discussion with event organiser	Flights were reported by distance category. The departure location for each flight was allocated to the largest airport in each state/country. It is assumed that all flights will be return, economy and not offset. It is assumed that all car transport uses a medium petrol car. For transport to and from the venue, it has been assumed that 50% of attendees will travel by car or private transport, and 50% will travel by public transport. The mode of public transport was assumed to be by tram. For transport to and from the airport, it has been assumed that 50% of the interstate attendees will travel by car or private transport, and 50% will travel by public transport. The mode of public transport was assumed to be by bus.
Attendee accommodation	Hotel summary was provided by Engineers Australia that has nights per hotel.	No assumptions
Food and drinks	Total costing for food and drinks	No assumptions
Electricity	Venue estimate	The venue provided an estimate of the event electricity by room based on size and expected usage.
General Products and Merchandise	Total costing for General Products and Merchandise	No assumptions
Computer and electrical components, hardware and accessories	Total costing for Computer and electrical components, hardware and accessories	No assumptions

4.EMISSIONS REDUCTIONS

Emissions reduction measures

Engineers Australia have identified the following opportunities to reduce emissions for the Climate Smart Engineering Conference:

- Selected a 6 star rated venue under the Green Star rating system – The Melbourne Convention and Exhibition Centre (MCEC). This venue is able to provide accurate data for electricity, water and waste.
- Engaging hotel and accommodation options with energy star ratings and sustainability plans.
- Encouraging attendees to travel via public transport or walk/bike riding. Attendees will be surveyed post-event to determine what transport modes were used.
- Ensuring all lighting within the staging and exhibition is LED lights.
- Exhibitions typically create a large amount of waste, so Engineers Australia are ensuring that all materials are sustainable and reusable (no single-use items)
- No plastic holders for lanyards will be used.
- No beef products will be served to reduce the food emissions.

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
Food & catering	30.07	40.17	In the pre-event it was assumed that there would be 550 meals each costing \$250 which before GST equals \$137,500. In the post-event there was actual data of, 202,036.56.
Short economy class flights (>400km, ≤3,700km) B	100.53	145.36	There were more attendees attending from out of state and internationally than expected.

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

N/A

Emissions summary

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

Emission category	Pre-event		Post-event		
	Total emissions (t CO ₂ -e)	Sum of scope 1 (tCO ₂ -e)	Sum of scope 2 (tCO ₂ -e)	Sum of scope 3 (tCO ₂ -e)	Sum of total emissions (t CO ₂ -e)
Accommodation and facilities	8.73	0.00	0.00	17.98	17.98
Electricity	11.74	0.00	10.84	0.89	11.74
Food	30.08	0.00	0.00	40.17	40.17
ICT services and equipment	18.54	0.00	0.00	22.02	22.02
Products	14.54	0.00	0.00	17.01	17.01
Professional services	0.00	0.00	0.00	1.77	1.77
Stationary energy (gaseous fuels)	0.001	0.00	0.00	0.00	0.00
Transport (air)	100.54	0.00	0.00	172.56	172.56
Transport (land and sea)	11.05	5.38	0.00	3.05	8.43
Total pre-event emissions (tCO₂-e)	195.21				
Total post-event emissions (tCO₂-e)		5.38	10.84	275.47	291.69
Difference between pre-event and post-event emissions			96.48 tCO₂-e		

Uplift factors

N/A

6.CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

This is a post-event report. The eligible offsets below are a reconciliation of those from the pre-event report. The table may also show additional eligible offsets purchased and retired for this event based on the post-event emissions calculations.

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Carbon Units (VCUs)	293	100%

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO2-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 (%)
Midilli Hydroelectric Power Plant	VCU	Verra	20 Aug 2023	12430-410538315-410538510-VCS-VCU-290-VER-TR-1-1330-01012015-31122015-0	2015		196	0	0	196	67%
	NCU	GreenFleet	2 Aug 2023	-	-	196					
Midilli Hydroelectric Power Plant	VCU	Verra	28 FEB 2024	12431-410551616-410551712-VCS-VCU-290-VER-TR-1-1330-01012019-31122019-0	2019		97	0	0	97	33%

	NCU	GreenFleet	20 Feb 2024		-	97					
	Total offsets retired this report and used in this report									293	
	Total offsets retired this report and banked for future reports								0		



Co-benefits

Midilli Hydroelectric Power Plant

As for social impacts, significant positive employment effects occurred especially during the construction and installation period. Management, operation, and maintenance of the HPP creates permanent jobs which require high qualification, contributing to capacity building and know-how dissemination in Turkey. Moreover, since it is a renewable energy project, it contributes to achieve nationally stated sustainable development priorities which were indicated like in the law on use of renewable energy resources for electricity generation. Introduction purpose of this Law; the use of renewable energy resources for electrical energy generation to spread these resources to the economy in a reliable, economical, and quality manner, decreasing greenhouse gas emissions, utilizing wastes, protecting the environment, and developing the manufacturing sector needed to achieve these objectives. Moreover, sustainable development goals outcomes and the actual results of the contributed sustainable development indicators by the project during the monitoring period such as Climate Action and Affordable and clean energy.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

N/A

APPENDIX A: ADDITIONAL INFORMATION



This is to certify

Engineers Australia

offset 196.00 tonnes of CO₂-e with Greenfleet.

Your support will help us restore native forests and ecosystems, which provide crucial habitat for endangered wildlife, help counter the devastating impact of the bushfires, and reduce the impacts of climate change.

Greenfleet will plant enough biodiverse native trees on your behalf to offset these emissions.

Thank you for helping us grow our forests and grow climate hope.

A handwritten signature in black ink, appearing to read "Wayne Wescott".

Wayne Wescott | Greenfleet CEO

02/08/2023



This is to certify

Engineers Australia

offset 97.00 tonnes of CO₂-e with Greenfleet.

Your support will help us restore native forests and ecosystems, which provide crucial habitat for endangered wildlife, help counter the devastating impact of the bushfires, and reduce the impacts of climate change.

Greenfleet will plant enough biodiverse native trees on your behalf to offset these emissions.

Thank you for helping us grow our forests and grow climate hope.

A handwritten signature in black ink, appearing to read "Wayne Wescott".

Wayne Wescott | Greenfleet CEO

20/02/2024

Thank you

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 **location-based approach**

Market-based approach summary			
Market-based approach	Activity Data (kWh)	Emissions (kgCO 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)	2,398	0	19%
Residual Electricity	10,358	9,891	0%
Total renewable electricity (grid + non grid)	2,398	0	19%
Total grid electricity	12,756	9,891	19%
Total electricity (grid + non grid)	12,756	9,891	19%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	10,358	9,891	
Scope 2	9,147	8,735	
Scope 3 (includes T&D emissions from consumption under operational control)	1,211	1,156	
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)	8.74
Residual scope 3 emissions (t CO₂-e)	1.16
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	8.74
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	1.16
Total emissions liability (t CO₂-e)	9.89

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	100%	(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	0	0	0	0	0	0
SA	0	0	0	0	0	0
VIC	12,756	12,756	10,842	893	0	0
QLD	0	0	0	0	0	0
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)	12,756	12,756	10,842	893	0	0
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)	12,756					

Residual scope 2 emissions (t CO ₂ -e)	10.84
Residual scope 3 emissions (t CO ₂ -e)	0.89
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	10.84
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	0.89
Total emissions liability	11.74

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 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 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 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. 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.

Relevant non-quantified emission sources	Justification reason
Water	Immaterial
Waste	Immaterial
Refrigerants	Immaterial

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

Emission sources tested for relevance						Justification
	Size	Influence	Risk	Stakeholders	Outsourcing	
N/A						



An Australian Government Initiative

