



PUBLIC DISCLOSURE STATEMENT

THE INSTITUTION OF ENGINEERS
AUSTRALIA (ENGINEERS AUSTRALIA)

ORGANISATION CERTIFICATION
CY2023

Australian Government

Climate Active Public Disclosure Statement



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	THE INSTITUTION OF ENGINEERS AUSTRALIA (ENGINEERS AUSTRALIA)
REPORTING PERIOD	1 January 2023 – 31 December 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><i>Jamie Sheehan</i></p> <p>Jamie Sheehan Facilities Manager 29.05.2024</p>



Australian Government

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

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Version August 2023.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	3,985tCO ₂ -e
CARBON OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	59.01%
CARBON ACCOUNT	Prepared by: Engineers Australia
TECHNICAL ASSESSMENT	4/12/2023 Pangolin Associates Pty Ltd Next technical assessment due: CY 2025 report

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2. CERTIFICATION INFORMATION

Description of organisation certification

This organisation certification is for the business operations of the Institution of Engineers Australia (Engineers Australia), ABN 63 020 415 510, including the subsidiaries listed in the table below.

This Public Disclosure Statement includes information for CY2023 reporting period.

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 (CO₂), methane (CH₄), nitrous oxide (N₂O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). These have been expressed as carbon dioxide equivalents (CO₂-e) using relative global warming potentials (GWPs).

Organisation description

The operational boundary has been defined based on an operational control test, in accordance with the principles of the National Greenhouse and Energy Reporting Act 2007. This includes all operations which are controlled by Engineers Australia.

Founded in 1919 as the Institution of Engineers Australia, trading as Engineers Australia, ABN 63 020 415 510, stands as the peak body for the engineering profession in the country, representing over 120,000 members.

Positioned at the forefront of transformative thinking and innovation, we serve as the essential link between ideation and execution, believing that engineering is the catalyst for positive, sustainable change that influences every facet of modern society. Committed to supporting engineers who identify challenges and seek opportunities, we provide resources, connections, and growth opportunities to ensure our members excel at ethical, competent, and high-value work. From inspiring students to opening doors for graduates, we enrich the skill sets of professionals, offering globally recognized Chartered credentials.

Functioning as a trusted ally, our strategic partnerships with business, government, and universities create a network of world-class engineers, propelling progress across sectors.

Our organizational mission is clear: to comprehensively support the engineering profession through policy advocacy, professional standards, talent nurturing, and the celebration of achievements. Engineers Australia, with its rich history and forward-looking vision, proudly stands with today's problem-solvers, empowering them to shape a better tomorrow.

All 11 offices situated in Western Australia, New South Wales, Australian Capital Territory, Northern Territory, Queensland, South Australia, Tasmania, and Victoria fall within the organisational boundary.

The following subsidiaries are also included within this certification:

Legal entity name	ABN	ACN
Engineering Education Australia Pty. Limited	45 008 663 349	

Engineers Education Australia, a subsidiary, has been included in the CY2023 inventory. Although this subsidiary existed before Engineers Australia's initial Climate Active certification, it was not included in our baseline year (CY2022). Following updated advice from a new carbon management advisor, and in the spirit of disclosures becoming more comprehensive over time, we have decided to include Engineers Education Australia in our current and future disclosures.

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

- Stationary energy & fuels
- Electricity
- Accommodation
- Carbon neutral products & services
- Cleaning & Chemicals
- Construction materials & services
- Food
- ICT services & equipment
- Professional services
- Office equipment & supplies
- Postage, courier & freight
- Refrigerants
- Transport (air)
- Transport (land & sea including commute)
- Waste
- Water
- Working from home

Non-quantified

N/A

Optionally included

N/A

Outside emission boundary

Excluded

N/A

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Engineers Australia (EA) commits to reduce their scope 1 & 2 GHG emissions by 100% and Scope 3 GHG emissions by 43.10% by 2030, compared to a CY22 base year.

Scope 1 Emissions:

The biggest contributor to Scope 1 GHG emissions for EA is under the Stationary Energy (gaseous fuels) category. Scope 1 emissions will be reduced by 100% to 0.00 tonne in 2030 compared to a CY22 base year by:

- Invest in implementation of electrified plant equipment. Eliminate the usage of natural gas as an energy source.

Scope 2 Emissions + Third Party Electricity

The only contributor to EA's scope 2 emissions is under Electricity category. Scope 2 emissions will be reduced by 100% to 0.00 tonne in 2030 compared to an CY22 base year by:

- Switching to carbon neutral purchase/renewable options for the rest of their Scope 2 emissions for NSW, QLD and NT where the purchase of electricity is owned by EA.
- Implementing and improving energy efficiency measurements throughout the offices such as lighting controls and setting temperature set points.
- Completing energy audit & data collection for hot spots to implement changes.
- Implementing behavioural change initiatives (i.e. turning off monitors at night).
- Partnering with landlords to reduce emissions with a goal of becoming carbon neutral (re-negotiation if required).

Scope 3 Emissions:

The biggest contributors to EA's Scope 3 emissions are comprised of the following categories, 29% for Professional Services, 14.5% for ICT Services and 13% for Air Travel. Scope 3 emissions will be reduced by 43.10% to 1596.56 tonne in 2030 compared to an CY22 base year by undertaking the following actions:

ICT Services & Professional Services:

- Partnering & procuring services from carbon neutral suppliers.
- Explore options such as using technology sourced from members of the GreenGrid and using their optional services that's allows offset emissions.
- Gathering carbon emissions data from suppliers rather than using expense-based emission factors where possible.

Flights & Travel:

- Purchasing offset options at the check out for flights & Uber rides required for each employee for their travel.
- Introducing an efficiency policy on interstate flights with the aim of reducing business travel where appropriate.

Alongside these efforts, we're also addressing organisational waste by instituting measures to quantify our waste streams wherever feasible. This entails weighing our waste prior to disposal whenever possible.

In our second year of measurement, emissions saw a notable increase primarily attributable to our expanding business operations.

Emissions reduction actions

2023 calendar year primarily served as a foundational year for data collection due to the prolonged CY22 certification process, significant initiatives were not undertaken during this period. Nonetheless, groundwork was laid for forthcoming endeavors, notably the installation of solar panels on the roof of our Canberra office, set to impact operations in CY24. Our focus remains on bolstering green energy procurements and forging strategic partnerships with external entities that share our commitment to sustainability as we progress.

5.EMISSIONS SUMMARY

Emissions over time

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Emissions since base year			
		Total tCO ₂ -e (without uplift)	Total tCO ₂ -e (with uplift)
Base year/Year 1:	2022	3,980.4	N/A
Year 2:	2023	3,984.2	N/A

Significant changes in emissions

No significant changes in emissions to disclose.

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

Certified brand name	Product/Service/Building/Precinct used
Powershop	Electricity service at Newcastle office
Powershop	Electricity service at Melbourne office

Emissions summary

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

Emission category	Sum of Scope 1 (t CO2-e)	Sum of Scope 2 (t CO2-e)	Sum of Scope 3 (t CO2-e)	Sum of Total Emissions (t CO2-e)
Accommodation and facilities	0.00	0.00	83.35	83.35
Cleaning and chemicals	0.00	0.00	23.05	23.05
Construction materials and services	0.00	0.00	27.05	27.05
Electricity	0.00	214.61	182.59	397.20
Food	0.00	0.00	273.13	273.13
ICT services and equipment	0.00	0.00	636.56	636.56
Postage, courier and freight	0.00	0.00	297.82	297.82
Professional services	0.00	0.00	1255.57	1255.57
Refrigerants	14.14	0.00	0.00	14.14
Stationary energy (gaseous fuels)	65.46	0.00	16.64	82.10
Transport (air)	0.00	0.00	160.90	160.90
Transport (land and sea)	0.00	0.00	152.66	152.66
Waste	0.00	0.00	53.50	53.50
Water	0.00	0.00	7.03	7.03
Working from home	0.00	0.00	86.76	86.76
Office equipment and supplies	0.00	0.00	433.44	433.44
Total	79.59	214.61	3690.06	3984.26

Uplift factors

N/A.

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions that cannot be reasonably quantified or estimated. This conservative accounting approach helps ensure the integrity of the carbon neutral claim.

6.CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Carbon Units (VCUs)	3,985	100%

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 (%)
Energising India using Solar Energy Projects	VCU	Verra	28/05/2024	11436-329921727-329926110-VCS-VCU-997-VER-IN-1-1931-01032020-31122020-0	2020	4384	4384	0	399	3,985	100%
Stapled to: Airseed Seed Pods Impact Units			29/05/2024	Aseed-Nrivers-00001 – AseedNrivers-08674	2024	8674 Pods					

Total eligible offsets retired and used for this report	3,985
Total eligible offsets retired this report and banked for use in future reports	399

Co-benefits

The main purpose of this offset project activity is to generate clean form of electricity through renewable solar energy sources. The total AC capacity of the project activity is 416.9 MW solar power project is in Uttar Pradesh, Telangana, Andhra Pradesh, Gujarat.



SDG 7: Over its lifetime, the project supplied 3,993,255 MWh of renewable electricity to India's grid, reinforcing the renewable energy share and enhancing the total final energy consumption's sustainability, as confirmed by VVB's review of previous verification reports.



SDG 13: The solar farm installation has successfully avoided the release of 3,470,882 tCO₂e emissions throughout its operational period, illustrating the project's contribution to eco-friendly, greenhouse gas-free power generation and promoting the sustainable development of the local area.

Engineers Australia also purchased Airseed Seed Pods Impact Units along with the Carbon Credits. Using proprietary drone technology, AirSeed plants trees helping to mitigate deforestation. This project establishes koala habitat and food trees following the bushfire and flooding events which caused widespread damage in 2019-2020. By adding koala food trees to the area, the Cattai Wetlands will serve as a corridor between Cooperook State Forest and Crowdy Bay National Park.



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	164,997	0	13%
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)	377,699	0	29%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	96,603	0	7%
Large Scale Renewable Energy Target (applied to grid electricity only)	132,484	0	10%
Residual Electricity	536,044	487,800	0%
Total renewable electricity (grid + non grid)	771,783	0	59%
Total grid electricity	1,307,827	487,800	59%
Total electricity (grid + non grid)	1,307,827	487,800	59%
Percentage of residual electricity consumption under operational control	61%		
Residual electricity consumption under operational control	325,379	296,095	
Scope 2	289,623	263,557	
Scope 3 (includes T&D emissions from consumption under operational control)	35,756	32,538	
Residual electricity consumption not under operational control	210,665	191,705	
Scope 3	210,665	191,705	

Total renewables (grid and non-grid)	59.01%
Mandatory	17.52%
Voluntary	41.50%
Behind the meter	0.00%
Residual scope 2 emissions (t CO₂-e)	263.56
Residual scope 3 emissions (t CO₂-e)	224.24
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	214.61
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	182.59
Total emissions liability (t CO₂-e)	397.2

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	61%	(kWh)	Scope 2 Emissions (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)	(kWh)	Scope 3 Emission (kgCO ₂ -e)
ACT	509,509	309,272	210,305	15,464	200,237	146,173
NSW	191,445	116,207	79,021	5,810	75,238	54,924
SA	82,680	50,187	12,547	4,015	32,493	10,723
VIC	258,676	157,016	124,043	10,991	101,660	87,427
QLD	100,713	61,113	44,627	9,170	39,580	34,831
NT	38,373	23,292	12,578	1,630	15,081	9,199
WA	114,029	69,216	36,684	2,769	44,813	25,544
TAS	12,402	7,528	903	75	4,874	634
Grid electricity (scope 2 and 3)	1,307,827	793,851	520,708	49,924	513,976	369,454
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)	1,307,827					

Residual scope 2 emissions (t CO ₂ -e)	520.71
Residual scope 3 emissions (t CO ₂ -e)	419.38
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	473.60
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	382.09
Total emissions liability	855.69

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
<i>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.</i>		

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)
Powershop	9,443	0
Powershop	90,119	0
<i>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.</i>		

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
N/A	N/A

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
N/A	N/A	N/A	N/A	N/A	N/A	N/A



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