



PUBLIC DISCLOSURE STATEMENT

**CRRRC TIMES ELECTRIC AUSTRALIA PTY
LTD**

**ORGANISATION CERTIFICATION
CY2021**

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	CRRC Times Electric Australia
REPORTING PERIOD	1 January 2021 – 31 December 2021 Arrears report
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>Atif Mansoor</i></p> <p>Atif Mansoor Registered Consultant 05/05/2022</p>



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

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Version March 2022. To be used for FY20/21/CY2021 reporting onwards.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	270.99 tCO ₂ -e
OFFSETS BOUGHT	100% VCUs.
RENEWABLE ELECTRICITY	18.54%
TECHNICAL ASSESSMENT	06/05/2022 Atif Mansoor NettZero Pty Ltd Next technical assessment due:
THIRD PARTY VALIDATION	Type 1 01/06/2022 Emma Baird <i>Pangolin Associates</i>

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2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the Calendar year from 01 January 2021 to 31 December 2021.

The organization is classed as a medium organization.

The certification covers the business operations of CRRC Times Electric Australia ABN 16 156 371 158 which will be offset and certified. This includes the following facilities and offices:

- L21, North Tower, 459 Collins Street
- 6A Hazelwood Drive, Morwell, VIC 3840

All calculation methods used in collecting data, calculating emissions and preparing the carbon account are adhering to the following standards:

- Climate Active Standard for Organizations
- 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).

As an Australian based company, CTEA (CRRC Times Electric Australia Pty Ltd) has been actively taking its responsibility to protect the unique and fragile environment. Aside from preparation of Annual Corporate Social Responsibility Report. CTEA also intends to send out a clear message to the society that the company is actively addressing the climate issue and is seriously committed to sustainability and making actual contributions to reach Net Zero by 2050. CTEA believes that obtaining and maintaining the Climate Active Certification is a great way to track and manage the emissions from company operation, evaluate emission reduction results, and track the progress on achieving a carbon neutral target.

Organization description

With a history of 140 years, CRRC is a world leading supplier of rail transit equipment with a complete product portfolio and advanced technologies. CRRC committed to providing leading, efficient system solutions for the sustainable development of the global rail industry with safe, reliable, efficient, comfortable and eco-friendly products and services. As of the end of 2020, CRRC had established 78 overseas entities in 27 countries and regions, providing products and services for 109 countries and regions around the world.

CRRC strives to become "a full-value creator with high-end equipment as our core". The core value of our brand is also reflected in the Company's name (CRRC):



In Australia and New Zealand, CRRC regards eco-friendly development and environmental protection as the bottom-line principle in our local production and operations. We are committed to providing environment-friendly products and services to our customers, positively reducing energy consumption and greenhouse gas emissions during our production and operations, and working with our Australian partners to continuously build a sound environmental management system and contribute to the protection of the common global home of mankind.

Whether for passenger or freight transportation, CRRC has been pursuing the goal of providing environment-friendly rail equipment products. Due to the continuous expansion of urban development and people's activity space, the travels of urban residents are leading to constant increase in energy consumption. It is estimated that rail transit represents the most efficient means of passenger transportation. Besides, it has the characteristics of land saving, high capacity, low environmental pollution, low energy consumption per unit, safety and comfort, etc., thus becoming the optimal solution.

3. EMISSIONS BOUNDARY

Inside the emissions boundary

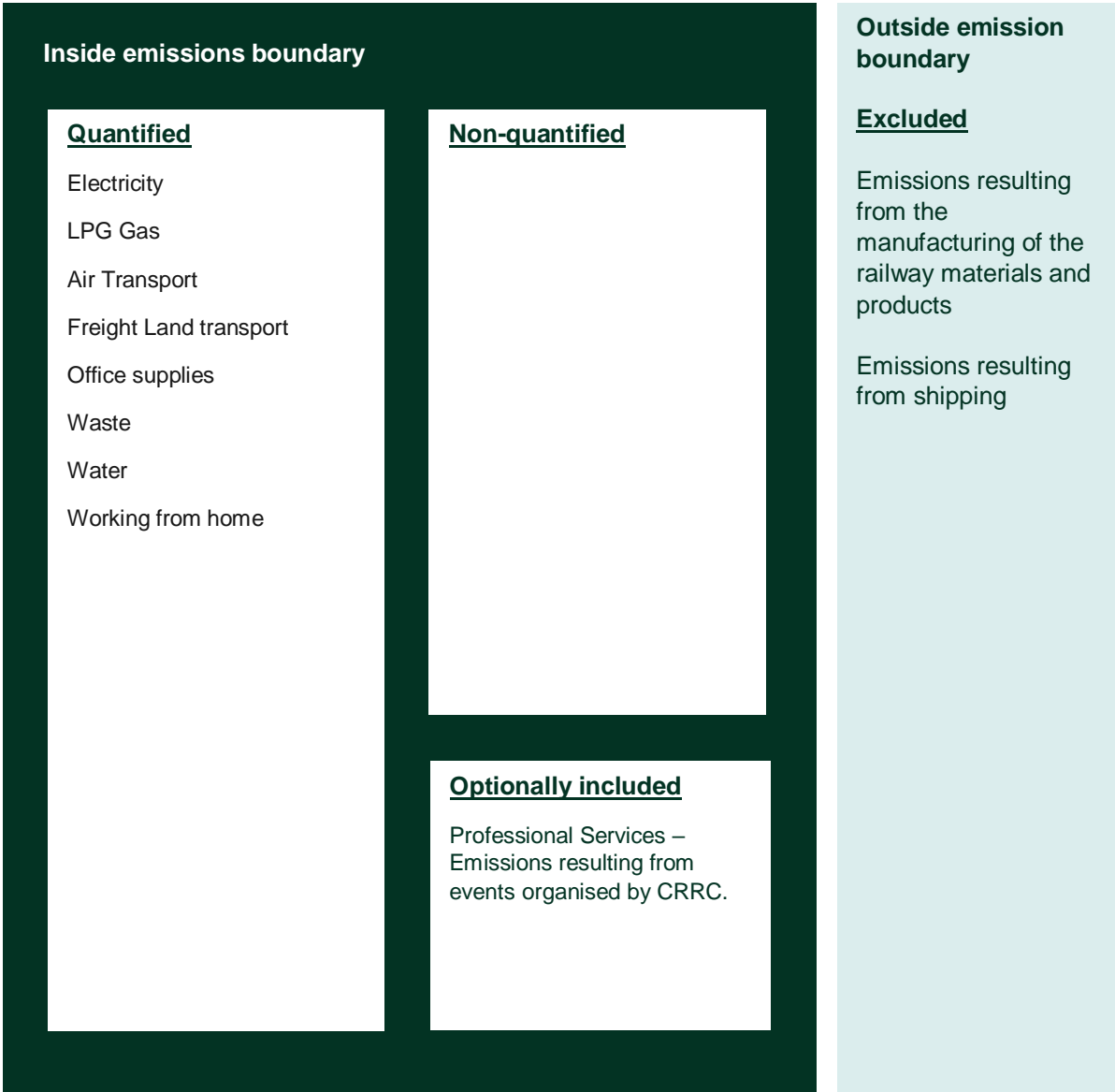
All emission sources listed in the emissions boundary are part of the carbon neutral claim.

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 or precinct'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.



Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.



4. EMISSIONS REDUCTIONS

Emissions reduction strategy

CTEA Emissions Reduction Strategy

Introduction

CRRC Times Electric Australia (CTEA) is committed to reducing their emissions over the next 10 years. The incentive to rate their organization as Carbon Neutral is the first step undertaken by the authority to place an emissions benchmark on themselves, and to work towards reducing those emissions year on year.

Public Statement

Please refer to the public statement by CTEA in the 2021 sustainability report.

In Australia and New Zealand, CTEA regards eco-friendly development and environmental protection as the bottom-line principle in our local production and operations. We are committed to providing environment-friendly products and services to our customers, positively reducing energy consumption and greenhouse gas emissions during our production and operations, and working with our Australian partners to continuously build a sound environmental management system and contribute to the protection of the common global home of mankind.

Initiatives

There are several initiatives that can be implemented on site:

By 2032, there will be a commitment to reduce emissions by 30% from the base year of CY2021. These include direct reductions in scope 1 and 2 emissions from energy as well as scope 3 emissions from both energy and waste.

The following initiatives are to be discussed and implemented on site where possible:

- 1) Engaging with the waste contractors to weigh in the bins as these are allocated full default bin size amounts in the carbon inventory
- 2) Conducting a waste audit to minimise the amount of waste sent to landfill
- 3) Investigating the possibility of installing Solar Panelling on the roof of the factory at Morwell to meet demand
- 4) Installing LED lighting across all offices and facilities owned and operated by CRRC Times Electric.
- 5) Installing lighting control sensors in the warehouse
- 6) Working with the suppliers to improve any inefficiencies in the supply chain and parts transfers.

Targets and Missions:

- 1) July 2022: Conduct lighting upgrades by installing LED lighting and sensors in the Melbourne Office (Scope 2 emissions)
- 2) July 2023: Complete a waste audit on the Morwell Site in Victoria (Scope 3 emissions)
- 3) July 2024: Engage with waste contractors to weigh in waste collected for better accountability (Scope 3 emissions)
- 4) July 2026: Install lighting control sensors at the Morwell Plant (Scope 2 Emissions)
- 5) July 2027: Conduct a feasibility study on the installation of Solar on the roof of the Morwell plant (Scope 2 and 3 emissions)
- 6) July 2022-28: Ongoing, working with suppliers to improve and reduce inefficiencies in the supply chain (Scope 3 Emissions)
- 7) July 2022-32: Conducting a feasibility study for the purchase of electrical forklifts for the Morwell plant (Scope 1 and 2 emissions)

5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

No Carbon Neutral products used

Organisation 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 (tCO ₂ -e)	Sum of Scope 2 (tCO ₂ -e)	Sum of Scope 3 (tCO ₂ -e)	Sum of total emissions (tCO ₂ -e)
Accommodation and facilities	0.00	0.00	0.51	0.51
Bespoke	0.00	0.00	0.00	0.00
Cleaning and Chemicals	0.00	0.00	0.00	0.00
Climate Active Carbon Neutral Products and Services	0.00	0.00	0.00	0.00
Construction Materials and Services	0.00	0.00	0.00	0.00
Electricity	0.00	44.10	0.00	44.10
Food	0.00	0.00	0.00	0.00
Horticulture and Agriculture	0.00	0.00	0.00	0.00
ICT services and equipment	0.00	0.00	0.00	0.00
Machinery and vehicles	0.00	0.00	0.00	0.00
Office equipment & supplies	0.00	0.00	0.68	0.68
Postage, courier and freight	0.00	0.00	15.27	15.27
Products	0.00	0.00	0.00	0.00
Professional Services	0.00	0.00	3.30	3.30
Refrigerants	0.00	0.00	0.00	0.00
Roads and landscape	0.00	0.00	0.00	0.00
Stationary Energy (gaseous fuels)	0.41	0.00	0.03	0.44
Stationary Energy (liquid fuels)	0.00	0.00	0.00	0.00
Stationary Energy (solid fuels)	0.00	0.00	0.00	0.00
Transport (Air)	0.00	0.00	3.38	3.38
Transport (Land and Sea)	0.00	0.00	5.40	5.40
use for duplicates	0.00	0.00	0.00	0.00
Waste	0.00	0.00	194.18	194.18
Water	0.00	0.00	0.35	0.35
Working from home	0.00	0.00	3.04	3.04
Grand Total	0.41	44.10	226.36	270.64
Water	0.00	0.00	0.35	0.35
Grand Total with Uplift	0.41	44.10	307.18	270.99

Uplift factors

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

Reason for uplift factor	tCO ₂ -e
Uplift to account for water usage in the Melbourne office (not separately metered)	0.35
Total of all uplift factors	0.35
Total footprint to offset <i>(total net emissions from summary table + total uplifts)</i>	270.99

6. CARBON OFFSETS

Offsets retirement approach

In arrears

1. Total emissions footprint to offset for this report	271
2. Total eligible offsets purchased and retired for this report	280
3. Total eligible offsets banked to use toward next year's report	9

Co-benefits

The project activity is being implemented in the Sangrur district in Punjab at the textile unit of Gillanders Arbuthnot & Co. Ltd (hereafter known as GACL). The proposed project activity involves installation of a cogeneration plant comprising of one rice husk fired AFBC boiler with steam generation capacity of 34 TPH at 66 kg/cm² (g) pressure and 495° C temperature and a 6.5 MW multistage extraction cum condensing steam turbine generator. The project activity has been commissioned on 30th March, 2009 and is expected to produce 41.769 GWh of net electrical output per annum.

As per the Glossary of CDM Terms, as per point no. 4 of definition of Renewable Biomass (page 26 of Glossary of CDM terms Version 05) and annex 18, EB 23 the rice husk are considered as renewable biomass. The design of the project equipments allows using following fuels:

1. Rice husk (to the extent of 100%)
2. Sub bituminous coal in case of exigencies (to the extent of 100%)

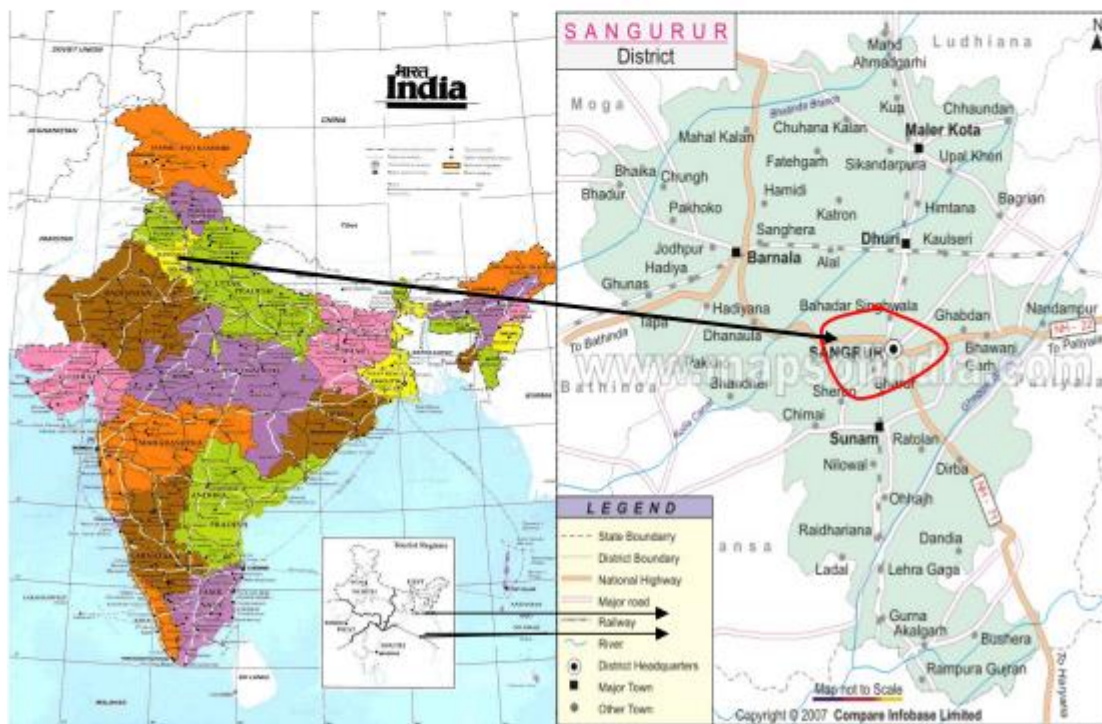
Rice Husk is an agro waste generated from local rice mills and hence identified as Renewable Biomass. The project was conceived considering usage of 100% rice husk as fuel and emission reduction is estimated considering the same.

In the pre project scenario, heat requirement of the textile unit was met by a 3 TPH rice husk fired low pressure boiler and the electricity requirement was met by importing from NEWNE grid which is dominated by fossil fuel fired thermal power plants. Hence the baseline scenario for the project activity is as per para 15 (e) of the AMS I.C, version 18 which states *“Electricity is imported from the grid and/or produced in an on-site captive power plant (with a possibility of export to the grid); steam/heat is produced from renewable biomass”*. Also in line with para 28 of the methodology, which states *emissions Reductions from heat generation are not eligible*” emission reductions for heat are not being claimed. The electricity generated by the cogeneration unit is not exported to the grid but only used for captive consumption of the textile unit. The rice husk based 6.5 MW cogeneration plant (project activity plant i.e. power producer) and the textile VCS Project Description Template 5 unit (power consumer) are both the part of the GACL unit. Hence emission reductions only on account of net electricity supplied to the textile unit for captive consumption are being claimed for the project activity which is in line with the applied methodology.

The project utilizes biomass (rice husk) which is carbon neutral fuel, to generate electricity and steam for captive consumption in a co-generation unit. The project activity therefore, reduces the emissions of GHG from the fossil fuel based power plants connected to the regional electricity grid and contributes in reducing global warming.

Description	Details
Location	Village – Akbarpur PO Box – 1, Ahmedgarh District – Sangrur, Punjab – 148021
Latitude	31° 30' 0" N
Longitude	75° 22' 0" E
Nearest Airport	Amritsar is the nearest airport from Akbarpur which is 110 km from the project site.

The geographical location of the project activity is shown in the map given as follows:



Eligible offsets retirement summary

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	Stapled quantity	Eligible quantity (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 (%)
6.5 MW cogeneration project in Akbarpur, Punjab	VCUs	Verra	02/06/2022	10776-247227855-247228018-VCS-VCU-290-VER-IN-1-1160-01012015-31122015-0	01/01/2015 – 31/12/2015		164	0	0	164	60.5%
6.5 MW cogeneration project in Akbarpur, Punjab	VCUs	Verra	02/06/2022	10776-247232962-247233077-VCS-VCU-290-VER-IN-1-1160-01012015-31122015-0	01/01/2015 – 31/12/2015		116	0	9	107	39.5%
Total offsets retired this report and used in this report										271	
Total offsets retired this report and banked for future reports									9		
Type of offset units		Quantity (used for this reporting period claim)				Percentage of total					
Verified Carbon Units (VCUs)		271				100%					

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

This section is Not Applicable.

APPENDIX A: ADDITIONAL INFORMATION

This section is Not Applicable, no additional information

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a market-based approach

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.

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 & Precinct LGCs)	0	0	0%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	10,093	0	19%
Residual Electricity	44,347	44,096	0%
Total grid electricity	54,440	44,096	19%
Total Electricity Consumed (grid + non grid)	54,440	44,096	19%
Electricity renewables	10,093	0	
Residual Electricity	44,347	44,096	
Exported on-site generated electricity	0	0	
Emissions (kgCO ₂ e)		44,096	
Total renewables (grid and non-grid)	18.54%		
Mandatory	18.54%		
Voluntary	0.00%		
Behind the meter	0.00%		
Residual Electricity Emission Footprint (TCO₂e)	44		

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	54,440	49,540	5,444
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Grid electricity (scope 2 and 3)	54,440	49,540	5,444
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Non-grid electricity (Behind the meter)	0	0	0
Total Electricity Consumed	54,440	49,540	5,444

Emission Footprint (TCO2e)	55
Scope 2 Emissions (TCO2e)	50
Scope 3 Emissions (TCO2e)	5

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
Enter product name/s here	0	0

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their Product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

There are no emission sources non-quantified

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct'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.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
Railway product / stock	Yes	No	No	No	No	No
Shipping transport services	Yes	No	No	No	No	No



An Australian Government Initiative

