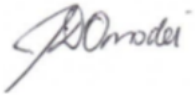
PUBLIC DISCLOSURE STATEMENT

CARBON NEUTRAL AVOCADOS
(TRADING AS ECOAVO)
PRODUCT CERTIFICATION
FY2023–24

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Carbon Neutral Avocados (Trading as EcoAvo)
REPORTING PERIOD	Financial Year 1 July 2023 – 30 June 2024 Arrears 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.*  Justin Omodei Proprietor 29/10/2024

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

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Version 9.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	1,144 tCO_2-e
CARBON OFFSETS USED	VCU's 88% CER's 12%
RENEWABLE ELECTRICITY	0%
CARBON ACCOUNT	Prepared by: Everclime
TECHNICAL ASSESSMENT	29/10/2024 Everclime Next technical assessment due: FY2027

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2. CERTIFICATION INFORMATION

Description of product certification

This Public Disclosure Statement provides details of the carbon neutral product certification for Carbon Neutral Avocados, ABN 14 613 279 718, part of the EcoAvo brand in partnership with Bendotti & Co.

It covers the carbon neutral product line of avocados produced, packed and distributed from the farm until point of retail within the financial year (1 July 2022 – 30 June 2023). The functional unit is one kilogram (kg) of avocados produced, packed, and distributed from the farm to the retailer. The full coverage product assessment encompasses cradle-to-gate emissions, this includes the Scope 1, 2 and 3 emissions associated with the life cycle of the avocado fruit, including the upstream emissions, organisation emissions, and downstream emissions until the point of retail. Uplift factors have been applied to account for the end-of-life emissions of the avocados by the end customer.

The carbon inventory for the third year of certification is the actual data from FY23-24.

The emissions associated with the disposal or use by consumers is not included in this assessment.

Cradle to grave certification was not used due to the data gap that exists relating to the volumes of avocado waste and method of disposal by retailers and the consumer.

Description of business

Carbon Neutral Avocados is owned and operated by Posciavo Holdings Pty Ltd ATF The Justin & Jodie Omodei Family Trust ABN 14 613 279 718, Pemberton, Western Australia. We are a small sized, nimble, hands-on avocado growing business that supplies the highest quality avocados to our local accredited packing and distribution facility. The path towards carbon neutrality has provided our business with the levers to continue to reduce and neutralise our carbon emissions.

Our certified product will be sold & marketed under the EcoAvo Brand. The EcoAvo trademark is to ensure all produce sold using this brand is Carbon Neutral certified. All emissions relating to the packaging process of EcoAvo has been captured and included within the Joe Bendotti & CO Emission scope.

3. EMISSIONS BOUNDARY

Inside the emissions boundary

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

Quantified: Total net electricity emissions (location-based), Vegetable and fruit growing, hay, plant nurseries, flowers, Hay, Diesel oil post-2004 & Petrol, Gasoline post-2004, Road freight (Average HGV), Rail or train freight, Marine freight, Chemicals & fertilisers, Pesticides, General waste (municipal waste), Packaging plastic, Cardboard (paper products), Labels, Machinery and equipment repairs and maintenance services.

Non-quantified: Refrigerants, electricity, and chemicals associated with wholesaler storage and ripening; Emissions associated with disposal of fruit until point of retail.

All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Non-attributable N/A

Inside emissions boundary

Quantified

Total net electricity emissions (Location based)

Vegetable and fruit growing, hay, plant nurseries, flowers (N/A)

Diesel oil post-2004

Petrol Gasoline post-2004

Road freight (Average HGV)

Rail or train freight

Marine freight

Chemicals & fertilisers

Pesticides

General waste (municipal waste)

Packaging materials and supplies

Machinery and equipment repairs and maintenance services

Industrial and agricultural machinery embodied emissions

Non-quantified

Refrigerants, electricity, and chemicals associated with wholesaler storage and ripening

Emissions associated with disposal of fruit until point of retail

Excluded

Refrigerants used in packing facility.

Outside emission boundary

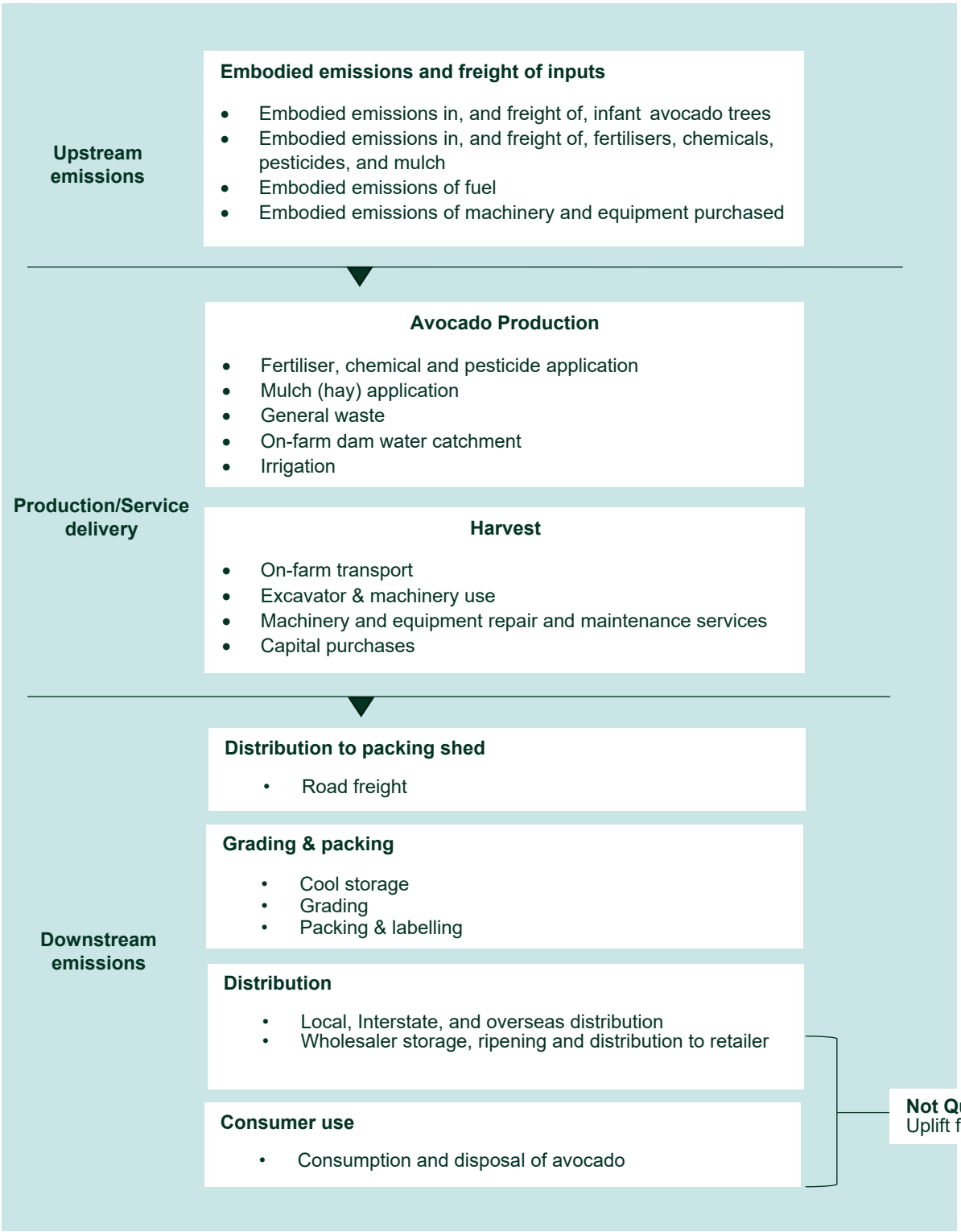
Non-attributable

Not Applicable

Product / Service process diagram

The following diagram provides an overview of the life cycle of Carbon Neutral Avocado's avocado product, including upstream emissions generated from the production and transport of inputs, organisational emissions from onsite production processes, and downstream emissions from distribution, storage and disposal until point of retail.

The below Diagram describes a Cradle to point of retail certification period. Cradle to grave certification was not used due to the data gap that exists relating to the volumes of avocado waste and method of disposal by retailers and the consumer.



4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Accurately recognising the sources of our emissions was the first step in formulating a plan to reduce them. As part of our emissions reduction strategy to minimise carbon emissions per tonne of production, we are exploring several opportunities as outlined in Reduction Actions.

Reduction Goal: A 35% reduction in actual emissions from the 2021-22 baseline by 2030 (0.475kgCO2e/kg Avocados) (measured at 607t total emissions for Carbon Neutral Avocados as part of the EcoAvo product line).

Note: FY23-24 experienced a reductions in emissions per functional unit due to variability in avocado crop yields. Slower crop years (like FY22-23) allowed for increased capital investment in preparation for larger future crops. FY24 has been a strong production year. This growth resulted in a drop in emissions per functional unit due to the higher volume of avocados produced, by achieving economies of scale.

Emissions reduction actions

Completed Actions (FY2023–24):

- **Growing our own fodder for mulching** instead of purchasing hay/straw
  Result: Reduced transport emissions and hay external inputs.
- **Trialling Stabilised Amine Nitrogen under orchard netting**, resulting in reduced nitrogen application per hectare without a yield penalty
  Result: Trial completed in FY24; full implementation planned for FY25.
- **Use of P100 XAG drone for biostimulant application**, supporting improved pollination and overall tree health
  Result: Ongoing deployment; effectiveness data being collected in FY24.

Ongoing / In Progress:

- **Exploration of biodiesel from green waste**
  Update: This remains under investigation. Initial feasibility and supply chain assessments were undertaken in FY24. A pilot-scale test is being considered for FY25, pending alignment with operational needs and economic viability.
- **Trialling ammonium phosphonate** applications for Phytophthora root rot suppression
  Status: Trials scheduled for FY25.

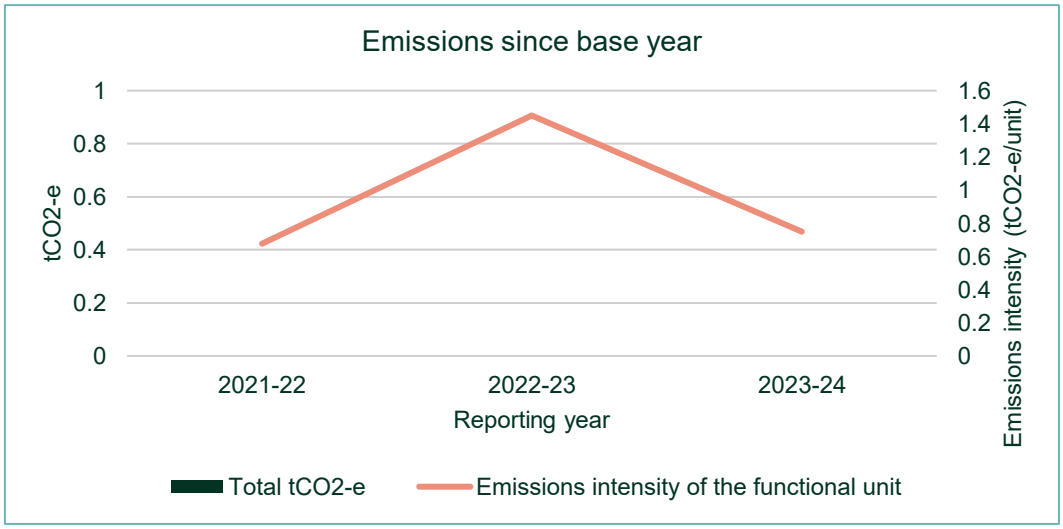
Planned / Future Strategies:

- **Installation of a 35kW photovoltaic/battery system for irrigation power**
  Planned installation in FY25.
- **Reduction of fuel use in orchard operations**
  Review of equipment and practices underway.
- **Freight and logistics optimisation through local supply**
  Modelling and partner engagement ongoing to identify feasible reductions.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year			
		Total tCO_2-e	Emissions intensity of the functional unit
Base year:	2021-22	607t	0.0006777 tCO2/kg avocado
Year 1:	2022-23	307t	0.001449 tCO2/kg avocado
Year 2:	2023-24	1,144t	0.000841869 tCO2/kg avocado



Significant changes in emissions

Significant changes in emissions			
Attributable process	**Previous year emissions** ($t CO_2$-e)	**Current year emissions** ($t CO_2$-e)	**Reason for change**
Chemical fertilisers	75.24	158.60	Increase in crop lead to higher chemical & fertiliser use. Actions in place to reduce emissions
Rail or train freight	23.35	136.89	Increase in crop yield led to more transport over east compared with last year low crop season.
Paper containers	0.19	259.60	Substantial increase in crop for packaging and distribution. Miscalculation in total cost of packaging from previous year meant packing was under-reported.
Diesel oil post-2004	136.10	153.37	Increase in diesel efficiency per functional unit, part of the economies of scale. However overall increase in 5kL of diesel resulting from higher crop and more energy required for maintenance and harvest.

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

N/A

Emissions summary

Life cycle stage / Attributable process / Emission source	tCO_2-e
Electricity (location-based method, scope 2)	72.14
Electricity (location-based method, scope 3)	5.44
Chemical fertilisers	158.59
Business machines and equipment repair and services	1.47
Pumps	1.41
Agricultural tractors	15.09
Road freight ($)	2.77
Rail or train freight	136.89
Road Freight (Average HGV):	10.57
Signage	86.31
Plastic packaging	53.29
Paper containers	259.59
Diesel oil post-2004	153.36
Petrol / Gasoline post-2004	12.36
Downstream - Road freight (Average HGV):	12.05
Attributable emissions (tCO_2-e)	**981.33**

Product / Service offset liability	
Emissions intensity per functional unit (tCO_2-e/unit)	0.000722634
Emissions intensity per functional unit including uplift factors	0.000841869
Number of functional units covered by the certification	1358063.00

Total emissions (tCO_2-e) to be offset	**1,144 tCO2e**

Reason for uplift factor	**tCO_2-e**
Disposal of fruit by retailer and consumer	29.44
Downstream storage, ripening and retail of avocados	9.81
12.5% Uplift to compensate for packaging under reporting for FY23	122.67
Total of all uplift factors (tCO_2-e)	161.92
Total emissions footprint to offset (tCO_2-e) *(total emissions from summary table + total of all uplift factors)*	**1,144**

6. CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Verified Carbon Units (VCUs)	1021	88%
Certified Emissions Reductions (CERs)	123	12%

Project name	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
4 MW Kirloskar Wind Farms in Maharashtra	VCU	Verra	28/10/2024	16922-800334011-800335031-VCS-VCU-1491-VER-IN-1-510-01022017-31122017-0	2017	1021	0	0	1021	88%
9.5 MW wind energy based power generation by Interocean Group	CER	UNFCCC	26/10/2023	IN-5-314337771-2-2-0-10262 - IN-5-314338077-2-2-0-10262	CP2	307	183	1	123	12%

Co-benefits

N/A

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 **location-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)	25,482	0	19%
Residual Electricity	110,641	100,684	0%
Total renewable electricity (grid + non grid)	**25,482**	**0**	**19%**
Total grid electricity	**136,124**	**100,684**	**19%**
Total electricity (grid + non grid)	**136,124**	**100,684**	**19%**
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	**110,641**	**100,684**	
Scope 2	98,483	89,619	
Scope 3 (includes T&D emissions from consumption under operational control)	12,158	11,064	
Residual electricity consumption not under operational control	**0**	**0**	
Scope 3	0	0	

Total renewables (grid and non-grid)	**18.72%**
Mandatory	**18.72%**
Voluntary	**0.00%**
Behind the meter	**0.00%**
Residual scope 2 emissions (t CO_2-e)	**89.62**
Residual scope 3 emissions (t CO_2-e)	**11.06**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**89.62**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**0.00**
Total emissions liability (t CO_2-e)	**0.00**

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	0	0	0	0	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	136,124	136,124	72,146	5,445	0	0
TAS	0	0	0	0	0	0
Grid electricity (scope 2 and 3)	**136,124**	**136,124**	**72,146**	**5,445**	**0**	**0**
WA	136,124	136,124	72,146	5,445		
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)	**136,124**					

Residual scope 2 emissions (t CO_2-e)	**72.15**
Residual scope 3 emissions (t CO_2-e)	**5.44**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**72.15**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**5.44**
Total emissions liability	**77.59**

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as attributable, 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.
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
Refrigerants, electricity, and chemicals associated with wholesaler storage and ripening	Not cost effective to collect data, but uplift applied.
Emissions associated with disposal of fruit until point of retail	Not cost effective to collect data, but uplift applied.

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected **(no actual data).**
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

Emissions Source	No actual data	No projected data	Immaterial
Packing shed Refrigerants	Yes	Yes	Yes

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 EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.

2. **Influence** The responsible entity could influence emissions reduction from a particular source.

3. **Risk** The emissions from a particular source contribute to the responsible entity'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 by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.

Non-attributable emissions sources summary

N/A - no non-attributable processes have been identified as part of this product certification in this reporting period.

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