



# **PUBLIC DISCLOSURE STATEMENT**

**BOORTMALT ASIA PACIFIC PTY LTD**


**PRODUCT CERTIFICATION  
FY2023–24 (PROJECTION)**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	BOORTMALT ASIA PACIFIC PTY LTD
REPORTING PERIOD	1 July 2023 – 30 June 2024 Projection 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>Liam Moltoni Malt Barley Merchant 30/06/2023</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	355 tCO <sub>2</sub> -e
CARBON OFFSETS USED	100% ACCUs
RENEWABLE ELECTRICITY	99.98%
CARBON ACCOUNT	Prepared by: BOORTMALT ASIA PACIFIC PTY LTD
TECHNICAL ASSESSMENT	26 May 2023 KPMG Australia Next technical assessment due: FY2026-27 report
THIRD PARTY VALIDATION	Type 3 8 August 2023 Blue Environment Pty Ltd (Victoria)

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## 2. CARBON NEUTRAL INFORMATION

### Description of certification

The certification is a product certification for the entire “West Coast Pale Malt” range by Boortmalt Asia Pacific Pty Ltd (Boortmalt) on a full coverage basis. The certified product exclusively sources barley from Western Australia. This inventory assessment is a projection for the FY 2023/24 emissions associated with the West Coast Pale Malt range. The projection is based on the inventory for the FY 2021/22, using the assumption the entire range will be sold.

### Product description

Boortmalt is Australia’s largest malt producer and exporter and is a market leader in sustainability practices. Boortmalt has an evolving portfolio of products for both craft and large-scale breweries and distilleries. The West Coast Pale Malt will be an addition to the existing portfolio in FY 23/24.

This is a product certification, for all malt in the West Coast Pale Malt range. The functional unit is metric ton of malt produced.

This is a cradle-to-gate assessment. Given the broad range of destinations, customer types, packaging types and sales terms, Boortmalt has no control over – or way of determining – the emissions from downstream use including disposal of malt waste products.

## 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 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

**Non-quantified** emissions have been assessed as attributable 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

**Non-attributable** emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

**Inside emissions boundary**

**Quantified**

Raw materials, including fertilisers, pesticides, and residues.

Rail freight

Road freight

Storage and handling

Electricity

Natural Gas

Water

Wastewater

Waste Products

**Non-quantified**

None

**Outside emission boundary**

**Non-attributable**

Animal feed, biofuel, and fertiliser from barley waste

Organisational emissions

All emissions after the 'gate' stage.

## Product process diagram

Malting is a very simple process. Barley is cleaned and then hydrated with pure water, in what is known as the steeping process. The wet barley is then left to germinate for 3 to 5 days. Once the barley has germinated, it's warmed and dried, to leave a crunchy, sweet grain product which is then used in beer, spirits, and food products.

Barley is transported to the Perth-based Boortmalt facility from the neighbouring CBH site via an electric conveyor belt. Once processed, the malt is subsequently shipped in trucks and containers to customers all over Australia and the world.

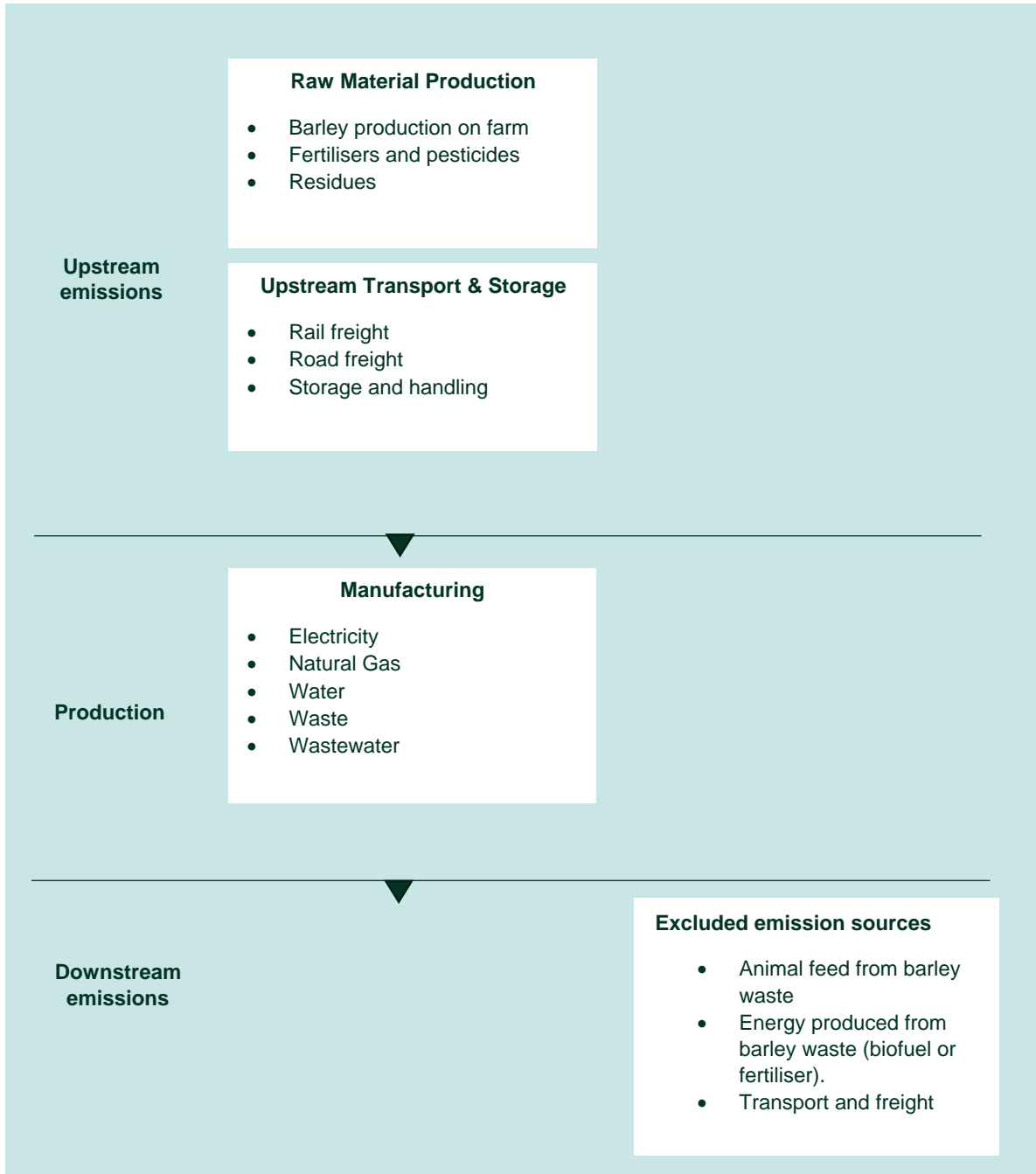
The four main inputs required for the process are:

1. Barley
2. Water to steep the barley
3. Electricity to power the plant and operate the machinery
4. Gas for the kiln to dry the barley

No packaging is used in the Perth plant, and all waste products from the process are fed to animals or used to create bioenergy.

## Product process diagram

The boundary for this product is cradle-to-gate.





## 4. EMISSIONS REDUCTIONS

### Emissions reduction strategy

Boortmalt's global carbon emission reduction goals are:

- 50% reduction of carbon emissions per metric tonne of malt produced by 2030
- 42% reduction in absolute scope 1 and scope 2 emissions by 2030
- 100% of electricity used to be procured from renewable sources by 2030

Boortmalt's emissions reduction strategy is a key part of our commitment to sustainable practices, as we strive to reduce our carbon footprint by 50% from our global baseline of 157kg CO<sub>2</sub>-e per metric ton of malt (baseline year FY2020/2021, scope1+2 market-based approach) to 79kg CO<sub>2</sub>-e per metric ton of malt. Our approach consists of two key goals: increasing energy efficiency and transitioning from fossil fuel energy to renewable sources.

An important aspect of our emissions reduction strategy is the opening of an onsite combined heat and power (CHP) plant in Perth in 2023. This CHP plant will reduce our emissions at the plant by approximately 22% by 2030 on the FY 2022/2023 baseline estimate.

To achieve our energy efficiency goal, we prioritise reducing the energy needed to make a tonne of malt by using more efficient equipment, optimizing production schedules, and eliminating all energy waste from the process. We are proud to be industry leaders in energy efficiency, regularly placing in the top three of industry energy-efficiency benchmarking studies. We were also the first international malting group to achieve ISO 50001 certification for our energy management system on a global level.

Each plant has an Energy Roadmap, which is used by teams in the plant to identify and implement energy-saving initiatives as part of the site's allocated maintenance and capex budgets. Our continuous improvement initiatives include the replacement of old equipment with more energy-efficient assets and optimisation and adaptation of production processes using AI applications to track data accurately and to maximise throughput. Within Boortmalt, the relative energy consumption per metric ton of malt in APAC has fallen more than 5% since FY21, thanks to the implementation of Boortmalt's best operational practice excellence principles (BOPEX).

We have identified optimal pathways for each plant and are now putting these plans into place throughout our global operations. Projects, implemented during the last fiscal year or approved for commissioning before 2025 (WAVE 1), will contribute to projected Scope 1 and 2 CO<sub>2</sub> savings of over 60,000 tonnes per year, putting us well on track to reach our intermediate milestone in 2025. A second wave of projects is under development for implementation by 2027, targeting CO<sub>2</sub> savings of another 15%. The last batch, targeting an additional 20% savings, has been identified and planned for rollout in 2027-2029.

In addition to improving energy efficiency, we aim to transition from mostly fossil-fuel energy to energy from renewable sources. Our approach to energy transition includes two key goals: reducing our dependence on natural gas by using more sustainable forms of heating such as waste heat, solar thermal or biogas, and by electrifying our plants to produce heat from electricity, and shifting to procuring and generating 100% renewable electricity, with solar photovoltaic power and wind energy where possible, through on-site or off-site power purchase agreements.

We are committed to implementing these initiatives and achieving our global goal of reducing our carbon footprint by 50%, contributing to a more sustainable future for all.

For further information, please see the Boortmalt global sustainability report, for 2022:

<https://www.boortmalt.com/sustainability-report-2022>

## 5. EMISSIONS SUMMARY

### Use of Climate Active carbon neutral products and services

All upstream scope 3 emissions are associated with the production of barley and transport to the malting plant. CBH Group are providing the barley to Boortmalt in Perth as a carbon neutral product. Barley is transported from the neighbouring CBH plant to Boortmalt Perth's facility via an electric conveyor belt, and the emissions associated with this transportation have been taken into account through CBH Group and Boortmalt's electricity use.

Certified brand name	Product used
CBH Group	Barley

### Emissions summary

Life cycle stage	tCO <sub>2</sub> -e	Emissions to offset in this report
Barley production	699.55	0 <sup>1</sup>
Upstream transport and storage	24.83	0 <sup>2</sup>
Malt manufacturing	354.25	354.25

Emissions intensity per functional unit	0.1417 t CO <sub>2</sub> -e/t barley <sup>3</sup>
Number of functional units to be offset	2500
Total emissions to be offset	354.25 tCO <sub>2</sub> -e

<sup>1</sup> These attributable emissions have already been offset as part of CBH Group's Climate Active barley product certification. See <https://www.climateactive.org.au/buy-climate-active/certified-members/cbh-grain> for more information.

<sup>2</sup> As above.

<sup>3</sup> This calculated emissions intensity excludes physical emissions from barley production and upstream transport and storage, as these have already been offset as part of CBH Group's product certification. If these physical emissions are included, the emissions intensity is 0.431 tCO<sub>2</sub>-e/metric tonne of malt produced.

## 6. CARBON OFFSETS

### Offsets retirement approach

This certification has taken a forward offsetting approach. The total emissions to offset are 355 tCO<sub>2</sub>-e. The total number of eligible offsets used in this report is 355. Of the total eligible offsets used, 0 were previously banked and 366 were newly purchased and retired. 11 are remaining and have been banked for future use.

### Co-benefits

#### **Project Type: Human-Induced Regeneration of Native Forest**

Two centuries of sheep and goat grazing has led to the Tallering station becoming degraded and, suffering from high rates of mature Acacia death on the property. In response a human-induced project began in 2017, to revitalise over 75,000ha of land.

Boortmalt has chosen to invest in Tallering station. The station is located near the small town of Mullewa, in WA. This town is in the northern Wheatbelt of WA. This region is a crucial area in the Australian barley community. Reinvesting in local grain growing regions is key to ensuring longevity and prosperity to the people that are relied so heavily upon to supply our malt plants with barley.

Along with the carbon sequestration service that it provides, the Tallering project will regenerate the native habitat to support endangered species, promote biodiversity in the region, deliver important ecosystem services for the local area, support feral animal population management, and deliver strong investment to the local community situated in the Australian Wheatbelt.

## Eligible offsets retirement summary

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 <sub>2</sub> -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 (%)
Talling Station Human Induced Regeneration Project	ACCU	ANREU	04/08/2023	8,340,623,494 – 8,340,623,693	2021-22	-	200	0	0	200	56.34%
Moolakar Human-Induced Regeneration Project	ACCU	ANREU	04/08/2023	8,336,241,088 – 8,336,241,253	2021-22	-	166	0	11	155	43.66%
<b>Total offsets retired this report and used in this report</b>										<b>355</b>	
<b>Total offsets retired this report and banked for future reports</b>										<b>11</b>	

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Credit Units (ACCU)	355	100%

## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

### Renewable Energy Certificate (REC) Summary

The following RECs have been surrendered to reduce electricity emissions under the market-based reporting method.

1. Large-scale Generation certificates (LGCs)*	28
2. Other RECs	0

\* LGCs in this table only include those surrendered voluntarily (including through PPA arrangements), and does not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

Project supported by LGC purchase	Project location	Eligible unit type	Registry	Surrender date	Accreditation code	Certificate serial number	Generation year	Fuel source	Quantity (MWh)
SCV Canning Vale 0.25MW - Solar WA	Western Australia	LGC	REC Registry	18/8/2023	SRPVWA65	107-134	2022	Solar	28
<b>Total LGCs surrendered this report and used in this report</b>									<b>28</b>

# APPENDIX A: ADDITIONAL INFORMATION

**Evidence of Renewable Electricity Certificates (RECs):**

**CONTRACT FOR SPOT PURCHASE/SALE OF ENVIRONMENTAL PRODUCTS  
CONTRACT DETAILS**

1 Seller:	ACT Solutions APAC Pte. Ltd.
2 Buyer:	BOORTMALT ASIA PACIFIC PTY LTD;
3 Commodity:	LGCs
4 Quantity:	28
5 Unit Price:	62USD
6 Creation Period:	LGCs Created before the end of 2023
7 Payment Date:	2 Business Days before the Transfer Date.
8 Transfer Date:	11 August 2023 and if this date is not a Business Day the next Business Day after that date.
9 Retirement statement:	Retired on behalf of BOORTMALT ASIA PACIFIC PTY LTD for FY2023-24 Climate Active carbon neutral claim

**Evidence of retired Australian Carbon Credit Units (ACCUs):**

Transaction ID	AU28948
Current Status	Completed (4)
Status Date	04/08/2023 16:23:27 (AEST) 04/08/2023 06:23:27 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	Cayzer, Nicholas
Transaction Approver	Cayzer, Nicholas
Comment	Voluntary retirement on behalf of BOORTMALT ASIA PACIFIC PTY LTD (ABN: 62 004 287 352)

<b>Transferring Account</b>		<b>Acquiring Account</b>	
Account Number	AU-3287	Account Number	AU-1068
Account Name	GAIA INVESTMENTS (AUST) PTY LTD	Account Name	Australia Voluntary Cancellation Account
Account Holder	GAIA INVESTMENTS (AUST) PTY LTD	Account Holder	Commonwealth of Australia

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
AU	KRACCU	Voluntary ACCU Cancellation			EEF121770					2021-22		8,340,623,494 - 8,340,623,693	200
AU	KRACCU	Voluntary ACCU Cancellation			EEF104278					2021-22		8,336,241,088 - 8,336,241,253	166

Status Date	Status Code
04/08/2023 16:23:27 (AEST)	Completed (4)
04/08/2023 06:23:27 (GMT)	
04/08/2023 16:23:27 (AEST)	Proposed (1)
04/08/2023 06:23:27 (GMT)	
04/08/2023 16:23:26 (AEST)	Account Holder Approved (97)
04/08/2023 06:23:26 (GMT)	
04/08/2023 16:22:13 (AEST)	Awaiting Account Holder Approval (95)
04/08/2023 06:22:13 (GMT)	



## 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 <sub>2</sub> -e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	195,623	0	85%
<b>Total non-grid electricity</b>	<b>195,623</b>	<b>0</b>	<b>85%</b>
LGC Purchased and retired (kWh) (including PPAs)	28,000	0	12%
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)	6,492	0	3%
Residual Electricity	39	38	0%
<b>Total renewable electricity (grid + non grid)</b>	<b>230,115</b>	<b>0</b>	<b>100%</b>
<b>Total grid electricity</b>	<b>34,531</b>	<b>38</b>	<b>15%</b>
<b>Total electricity (grid + non grid)</b>	<b>230,155</b>	<b>38</b>	<b>100%</b>
Percentage of residual electricity consumption under operational control	100%		
<b>Residual electricity consumption under operational control</b>	<b>39</b>	<b>38</b>	
Scope 2	35	33	
Scope 3 (includes T&D emissions from consumption under operational control)	5	4	
<b>Residual electricity consumption not under operational control</b>	<b>0</b>	<b>0</b>	
Scope 3	0	0	

<b>Total renewables (grid and non-grid)</b>	<b>99.98%</b>
<b>Mandatory</b>	<b>2.82%</b>
<b>Voluntary</b>	<b>12.17%</b>
<b>Behind the meter</b>	<b>85.00%</b>
<b>Residual scope 2 emissions (t CO<sub>2</sub>-e)</b>	<b>0.03</b>
<b>Residual scope 3 emissions (t CO<sub>2</sub>-e)</b>	<b>0.00</b>
<b>Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO<sub>2</sub>-e)</b>	<b>0.03</b>
<b>Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO<sub>2</sub>-e)</b>	<b>0.00</b>
<b>Total emissions liability (t CO<sub>2</sub>-e)</b>	<b>0.04</b>

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



## 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.

N/A no attributable sources non-quantified in this report.

### 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**.

N/A no attributable sources for this product that met all 3 exclusion criteria in this report.

## 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

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Animal feed, biofuel and fertiliser from barley waste	N	N	N	N	N	<p><b>Size:</b> The waste from the barley cleaning process is typically reused in some other sustainable form such as fertiliser or animal feed. This results in very few emissions.</p> <p><b>Influence:</b> The customer using the waste product will have full influence over the destination, and it will vary considerably.</p> <p><b>Risk:</b> There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.</p> <p><b>Stakeholders:</b> The public, breweries, distilleries, and regulators are unlikely to see this as an important source of emissions.</p> <p><b>Outsourcing:</b> The emissions created by this product are downstream and never inside the emissions boundary previously, falling outside of our cradle-to-gate boundary.</p>
Organisational Emissions	N	Y	N	N	N	<p><b>Size:</b> Relative to our major emissions sources, the organisational emissions are marginal.</p> <p><b>Influence:</b> Emissions from this is within our influence.</p> <p><b>Risk:</b> Laws and regulations do not cover the particulars of this emissions factor.</p> <p><b>Stakeholders:</b> Stakeholders are unlikely to see these as relevant emissions factors.</p> <p><b>Outsourcing:</b> These activities have never been inside the boundary.</p>



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