



PUBLIC DISCLOSURE STATEMENT


HOLCIM (AUSTRALIA) PTY LTD

**HUMES CARBON NEUTRAL PRECAST
CONCRETE PRODUCTS (OPT-IN)**

CY 2021

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	HOLCIM (AUSTRALIA) PTY LTD
REPORTING PERIOD	1 January 2021 – 31 December 2021 True-up 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>Cyril Giraud Head of Sustainability 25 May 2022</p>



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

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Version September 2021. To be used for FY20/21 reporting onwards.



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	0 tCO2-e
THE OFFSETS BOUGHT	n/a
RENEWABLE ELECTRICITY	n/a
TECHNICAL ASSESSMENT	Date: 1 July 2021 Name: Rob Rouwette Organisation: start2see Next technical assessment due: 30 April 2023

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2. CARBON NEUTRAL INFORMATION

Description of certification

Holcim (Australia) Pty Ltd is certified for its opt-in precast and prestressed concrete products. Holcim is a leading supplier of construction materials in Australia, dating back to 1901. Today Holcim continues to supply essential construction materials including aggregates, sand, ready-mix concrete, engineered precast concrete and prestressed concrete solutions to a range of customers and projects throughout Australia.

Holcim operates right across the Australian continent supplying concrete from a network of concrete plants, quarries, precast and concrete pipe places, and mobile and on-site project facilities.

Sustainability is at the core of our strategy, with our industry's first 2050 net-zero targets, endorsed by the Science Based Targets initiative (SBTi).

Globally, Holcim is 70,000 people around the world who are passionate about building progress for people and the planet through four business segments: Cement, Ready-Mix Concrete, Aggregates and Solutions & Products. As a global leader in innovative and sustainable building solutions, Holcim is enabling greener cities, smarter infrastructure and improving living standards around the world. With sustainability at the core of its strategy, Holcim is becoming a net zero company, with its people and communities at the heart of its success. The company is driving circular construction as a world leader in recycling to build more with less.

Published in December 2020, the Humes precast and prestressed concrete for infrastructure applications Environmental Product Declaration (EPD) is part of Holcim's drive to comprehensively analyse and communicate to customers the embodied environmental impacts of Holcim's precast concrete products. The development of a precast and prestressed concrete EPD is a further step to having all of our key infrastructure and building products represented by an EPD in Australia following Holcim's development of ready-mix concrete and concrete pipe EPD's. Its publication supports designers and developers to drive improved sustainable procurement and materials selection. Holcim's multiple EPD's also have the potential to challenge common beliefs of environmental sustainability, by supporting the standardisation and transparency of environmental claims.

The carbon accounting published in the EPDs is based on data collected from across Holcim's precast and prestressed concrete and concrete pipe manufacturing facilities trading under the Humes brand. The resulting life cycle assessment (LCA) is compliant with ISO 14025 and EN 15804 and has been independently reviewed by an approved, third-party verifier under EPD Australasia. As such the carbon accounting in the EPD aligns with the Climate Active Products and Services Standard as well as the provisions in section 4.a of the Carbon Neutral Certification and Environmental Product Declaration product guidance.

“Together with our customers and partners, we are creating a greener, smarter world – because the future’s not written, it’s built.”

Product description

Carbon neutral products are available to Humes' customers on an opt-in basis. This will allow carbon neutral certification to be applied on a project and/or client basis. The type and quantity of concrete products supplied to a project and/or client will be different for each project and/or client, with carbon offset requirements determined using the EPDs. The total carbon emissions inventory to be offset will be assessed annually based on the quantity of carbon neutral certified products sold.

The baseline emissions reported in this document are for calendar year 2021 (CY2021), which is the first year of certification. This is our CY2021 true-up report.

The functional unit is defined as 1 tonne of precast concrete product manufactured by Humes in Australia.

The carbon account covers the cradle-to-gate life cycle stages (as shown in figure 1) of the vast majority of precast and prestressed concrete products, including reinforced concrete pipes, manufactured by Humes in Australia. Downstream life cycle stages are not included as the concrete products can be used for a large number of potential applications in infrastructure projects or industrial, commercial and residential building projects. Furthermore, full life cycle LCAs show that downstream stages typically contribute only marginally to pre-mix concrete's GHG emissions.¹

Only certain specialty products are not covered by the two underlying EPDs, which cover all of our standard precast and prestressed concrete products and pipe products.



Figure 1 – Cradle-to-gate life cycle stages of precast concrete products

¹ For example, see figure 2 in: R Frischknecht et al 2019 IOP Conf. Ser.: Earth Environ. Sci. 323 012037

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' that become the product, make the product and carry the product through its life cycle. These have been quantified in the carbon inventory.

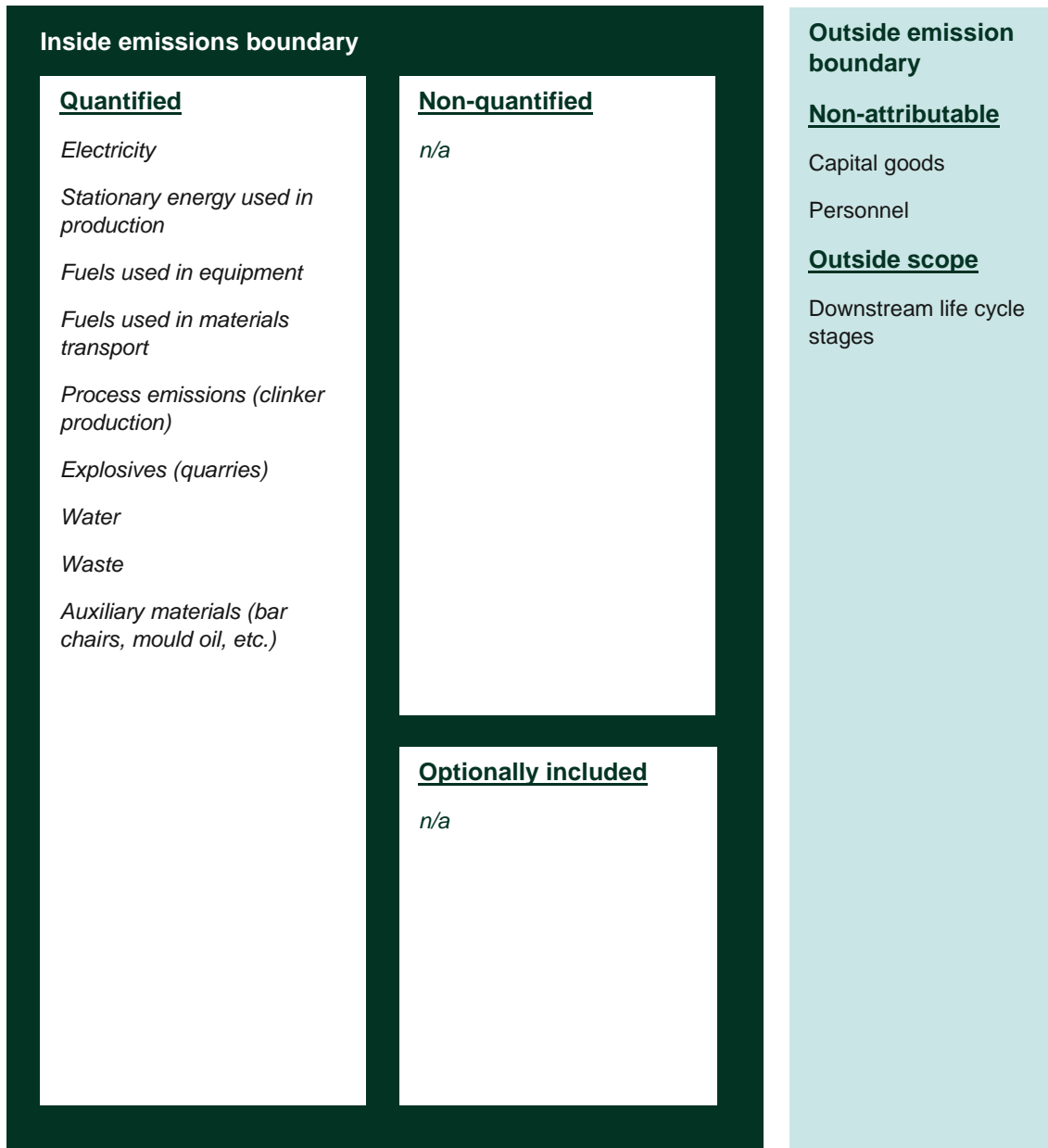
Non-quantified emissions have been assessed as attributable and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

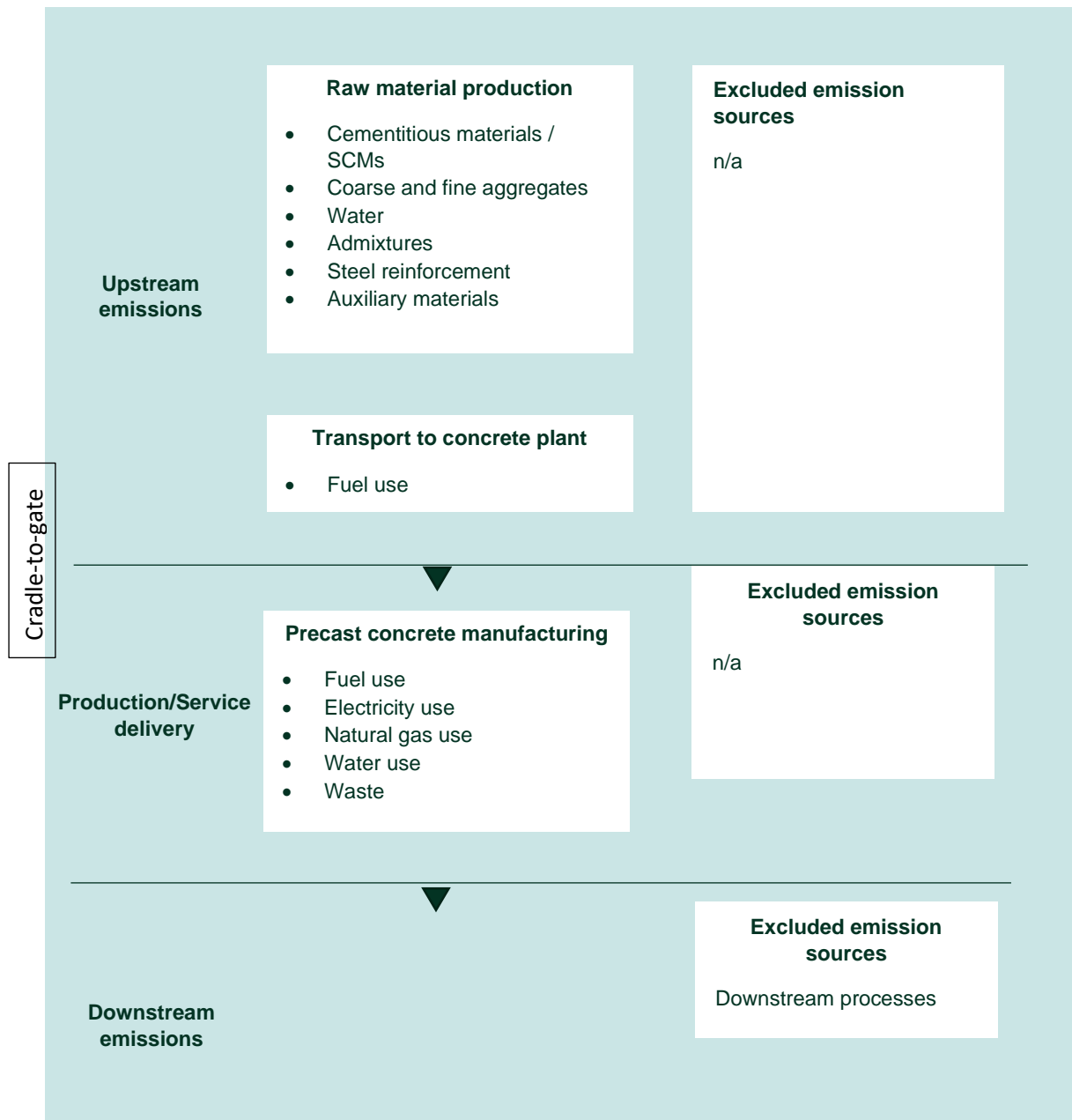
Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim).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

The emission sources in the boundary diagram below are as per the emissions categories in the emission summary table (in section 4).

Diagram of the certification boundary



Product process diagram



The contribution of capital goods (production equipment and infrastructure) and personnel is outside the scope of the LCA, in line with the Product Category Rules.²

Data management plan for non-quantified sources

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

² International EPD System PCR2012:01 (version 2.33), Product category rules according to ISO 14025 and EN 15804, Combined PCR and PCR Basic Module for Construction products and Construction services, registration number 2012:01, published on 18 September 2020.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Globally Holcim, is reinventing how the world builds for people and the planet. On our way to becoming a net zero company, we are accelerating green construction by joining the net zero pledge with science-based targets.

With “Strategy 2025 – Accelerating Green Growth,” Holcim will become the global leader in innovative and sustainable building solutions, following the overachievement of “Strategy 2022” one year in advance. With “Accelerating Green Growth,” Holcim will achieve profitable growth across all our businesses, fueled by sustainability and innovation. We will accelerate the expansion of our Solutions & Products business to reach 30% of Group sales, positioning our company in the most attractive segments of the construction value chain with new technologies.

Sustainability is at the core of our strategy, with our industry’s first 2050 net-zero targets, endorsed by the Science Based Targets initiative (SBTi). Holcim will remain at the forefront of green building solutions, with at least 25% of ready-mix net sales coming from ECOPact, ranging from 30% to 100% lower CO2 footprint.

Leading the circular economy, we will recycle 75 million tons of materials across our business including 10 million tons of construction & demolition waste by 2025.

The strategy includes ambitious 2025 sustainability targets in line with our net-zero roadmap, validated by the SBTi:

- 25% of ready-mix sales from ECOPact, with 30% to 100% lower CO2 footprint
- 10 million tons of construction & demolition waste recycled in its products and 75 million tons of recycled materials overall
- Green CAPEX of CHF 500 million
- >40% of financing agreements linked to sustainability goals

Walking the talk on our commitment, we are:

- We are setting ourselves ambitious near term and long term climate targets that are validated by the Science-Based Targets initiative (SBTi)
- Until 2030, we are accelerating our reduction in CO2 intensity to exceed 20% (compared to our 2018 baseline)
- We partnered with SBTi looking beyond 2030, and established the first climate targets for a 1.5°C future in the cement sector
- By 2050, we commit to long term targets for the full scope of our emissions. We complement our net zero target for Scope 1+2 emissions with a 90%* reduction target for our Scope 3 emissions
*vs 2020 on 90% of total absolute emissions, as per SBTi Net Zero requirements

Humes EPD product range supports this strategy by providing:

- Better communication of environmental performance of our products.
- Alignment with relevant industry rating schemes (the Infrastructure Sustainability rating and the Green Star rating).
- Detailed information regarding emissions hotspots.

For more information on our Emissions Reduction plan, please refer to this [link](#).

5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

Holcim does not claim to have used any Climate Active certified carbon neutral products in the reporting period.

Product emissions summary

Humes produces thousands of different precast and prestressed concrete product variations, as well as thousands of different concrete pipe product variations, across Australia. Our EPDs allow the quantification of cradle-to-gate emissions for each of these products based on key characteristics. Under our opt-in carbon neutral scheme, Humes will determine the GHG intensity of each product sold as carbon neutral and establish the total footprint to be offset accordingly.

The values in the table below are based on a typical set of precast concrete products for rail and road applications for the P2N section of the Inland Rail project. The cradle-to-gate emission factors are expressed per tonne of average precast product (as supplied to this project).

Note: in line with our NGER reporting, we have applied a location-based approach to electricity in the LCA. As the breakdown below shows, electricity use in concrete production makes up only 4% of the GHG emissions of precast concrete. The vast majority of emissions are coming from the raw materials (especially cement and steel) used to make reinforced precast concrete.

Table 2

Emission source category	tonnes CO ₂ -e *
Concrete (raw materials plus transport to plant)	~52%
Steel Reinforcement (raw materials plus transport to plant)	~38%
Production Process	~10%
<i>Production Process breakdown: Electricity</i>	~3.9%
<i>Production Process breakdown: Natural Gas</i>	~2.5%
<i>Production Process breakdown: Diesel</i>	~1.7%
<i>Production Process breakdown: Miscellaneous and overhead</i>	~1.8%

* The contribution of emission sources is an estimate only based on the carbon neutral products supplied to the Parkes to Narromine (P2N) section of the Inland Rail project in 2020 (which are covered by a separate PDS). The actual values will depend on the volume and type of reinforced precast concrete sold within the reporting period.

No uplift factors have been applied.

Emissions intensity per functional unit	0.320 t CO ₂ e *
Number of functional units to be offset	0
Total emissions to be offset	0

* 0.320 t CO₂e/m³ is an estimate across our range of products based on the carbon neutral products supplied to the Parkes to Narromine (P2N) section of the Inland Rail project (which are covered by a separate PDS). The actual footprint will be based on type of reinforced precast concrete products sold as carbon neutral.

6. CARBON OFFSETS

Offsets retirement approach

In arrears	
1. Total number of eligible offsets banked from last year's report	680 t CO ₂ -e
2. Total emissions footprint to offset for this report	0 t CO ₂ -e
3. Total eligible offsets required for this report	-680 t CO ₂ -e
4. Total eligible offsets purchased and retired for this report	60,000t CO ₂ -e (of which 40,000t for Holcim's Humes Precast concrete (opt-in) future sales / 20,000t for Holcim's ViroDecs ready-mix concrete (opt-in) future sales)
5. Total eligible offsets banked to use toward next year's report	40,680t CO ₂ -e (for Holcim's Humes Precast concrete (opt-in))

Co-benefits

Across India, wind farms introduce clean energy to the grid, which would otherwise be generated by coal-fired power stations. Wind power is clean in two ways: it produces no emissions and also avoids the local air pollutants associated with fossil fuels. Electricity availability in the regions have been improved, reducing the occurrence of blackouts across the area.

The projects support national energy security and strengthen rural electrification coverage. In constructing the turbines new roads were built, improving accessibility for locals. The boost in local employment by people engaged as engineers, maintenance technicians, 24-hour on-site operators and security guards also boosts local economies and village services.

Offsets summary

Proof of cancellation of offset units

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 (%)
Renewable Power Project by Axis Wind Farms (MPR Dam) Private Limited	VCUs	VERRA	1 July 2021	8556-30354050-30354729-VCS-VCU-997-VER-IN-1-1790-02082018-31122018-0	2018		680	0	680	0	0%
CER-IND-Enercon Wind Farms Karnataka Project, India	CERs	VERRA	23 Nov 2021	200,764,977 - 200,824,976	CP2		60,000	0	40,000*	0	0%
<i>Total offsets retired this report and used in this report</i>										0	
<i>Total offsets retired this report and banked for future reports</i>									40,680		

*40,000t for Holcim's Humes Precast concrete (opt-in) future sales / 20,000t for Holcim's ViroDecs ready-mix concrete (opt-in) future sales

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Carbon Units (VCUs)	0	0%
Certified emission reductions (CERs)	0	0%

- ANREU Home
- Account Holders
- Accounts
- Unit Position Summary
- Projects
- Transaction Log
- CER Notifications
- Public Reports
- My Profile

Transaction Details

Transaction details appear below.

i Transaction Successfully Approved

Transaction ID AU20415
Current Status Sending (91)
Status Date 23/11/2021 17:33:06 (AEDT)
 23/11/2021 06:33:06 (GMT)
Transaction Type Cancellation (4)
Transaction Initiator Grant, Andrew William Thorold
Transaction Approver Grant, Andrew William Thorold
Comment Retired on behalf of Holcim (Australia) Pty Ltd to for Climate Active Certification for the period FY21-FY23.

Transferring Account

Account Number AU-2734
Account Name Tasman Environmental Markets Pty Ltd
Account Holder Tasman Environmental Markets Pty Ltd

Acquiring Account

Account Number AU-2764
Account Name Voluntary Cancellation – CP2
Account Holder Commonwealth of Australia

Transaction Blocks

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
IN	CER	Kyoto Voluntary Cancellation	2	2					IN-1286			200,764,977 - 200,824,976	60,000

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

Not applicable for this certification.

APPENDIX B: ELECTRICITY SUMMARY

Not applicable for this certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Not applicable for this certification.

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.

Relevance test					
Non-attributable emission	<i>The emissions from a particular source are likely to be large relative to the product's electricity, stationary energy and fuel emissions</i>	<i>The emissions from a particular source contribute to the product's greenhouse gas risk exposure.</i>	<i>Key stakeholders deem the emissions from a particular source are relevant.</i>	<i>The responsible entity has the potential to influence the reduction of emissions from a particular source.</i>	<i>The emissions are from outsourced activities previously undertaken within the product's boundary, or from outsourced activities typically undertaken within the boundary for comparable products.</i>
Capital goods	No	No	No	No	No
Personnel	No	No	No	No	No
Downstream stages	No	No	No	No	No





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