PUBLIC DISCLOSURE STATEMENT

HOLCIM

CARBON NEUTRAL PRODUCT
2020

Non attributable sources (outside certification boundary)

Downstream life cycle stages (i.e., gate to grave) were not considered in the study and the impact of these stages (e.g. construction, use, disposal) shall not be considered zero. Downstream emissions were not quantified because ready-mix concrete is an intermediate product and the final product is highly variable (e.g. can range from a building column to a pavement). The activity data for the downstream life cycle stages is therefore difficult to quantify and highly variable.

The key non-attributable emission sources are:

- Transport to site.
- Construction stage.
- Maintenance and refurbishment inputs.
- Carbonation of concrete leading to CO_2 absorption during residence time in building.
- Deconstruction and disposal/recycling.

3. EMISSIONS SUMMARY

Emissions reduction strategy

Holcim Australia, as a member of LafargeHolcim, 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.

Walking the talk on our commitment, we are:

- Setting ourselves ambitious 2030 climate targets that are validated by the Science-Based Targets initiative
- Accelerating our reduction in CO2 intensity to exceed 20% (compared to our 2018 baseline)
- Partnering with SBTi looking beyond 2030, to support the development of the first climate targets for a 1.5°C future in the cement sector

Supply of low-carbon materials and solutions is key to reducing the carbon intensity of the ready-mix concrete. Holcim Australia's carbon reduction strategy aims to increase the replacement of general-purpose cement with supplementary cementitious materials (SCM) such as fly ash, slag and silica fume. The strategy involves:

- Increasing the sale of ready-mix concrete with higher SCM replacement.
- Promoting the specification of higher SCM replacement (or lower CO_2-e concrete) on Infrastructure Sustainability (IS) or Green Star rated projects.
- Improving internal systems and processes for product development to drive innovation and customised design of mixes.

Holcim's ViroDecs™ EPD supports the strategy by providing:

- Better communication of its environmental performance.
- 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.

Emissions over time

Table 2: Emissions over time.

Emissions since base year		
	Base year: 2019	Year 1 (Current year) : 2020
Emissions per functional unit (tCO_2-e)	0.245	0.245

Emissions reduction actions

The previous application (2019) was done to initiate Holcim's carbon neutral certification. There was no carbon neutral concrete sold in 2019 and hence no emissions were offset during that period. The emissions provided in 2019 PDS were an estimate based on a hypothetical small-scale project. 2020 is the first year of selling the carbon neutral concrete. In case of Holcim's Climate Active certification, the emissions per year depend on the amount of carbon neutral concrete sold. Although the total emissions may increase year-on-year depending on the sales, it also means that an equivalent quantity of emissions will be offset. Additionally, Holcim's Emissions Reduction Strategy (see above) outlines key measures implemented by

Holcim to further reduce the carbon footprint of for all concrete mixes, which can result in reduced emissions per functional unit.

Functional units

Table 3: Functional units sold and forward offset.

	Number of functional units
a) Number of functional units sold this period	520
b) Number of functional units to be forward offset demonstrating commitment to carbon neutrality (true-up to be conducted at the end of the reporting period)	3,559

Emissions summary (inventory)

Holcim's ViroDecs™ ready-mix concrete is sold as a carbon neutral product on an 'opt-in' basis. This means that customers can elect to purchase any ViroDecs™ ready-mix concrete from Holcim as a carbon neutral product. Table 4 provides a summary of the materials included in Holcim ViroDecs™ ready-mix concrete and their relative composition by weight.

Table 4 – Key materials and typical compositional breakdown for Holcim's ViroDecs™ ready-mix concrete.

Materials	Typical % (by weight)
General purpose cement	5 - 21%
Aggregate	67 - 84%
Supplementary cementitious materials	0 - 11%
Water	11.6 - 12%
Admixtures	0.01 - 0.02%

The emissions summary below pertains to 520 m^3 of ViroDecs™ ready-mix concrete sold in 2019.

Table 5 – Emissions summary

Emission source category	tonnes CO_2-e
Aggregates	10.6
General Purpose Cement	111
Supplementary Cementitious Materials	2.91
Admixtures	1.85
Additives	-
Manufacturing (Concrete plant resources)	0.874
1. Total inventory emissions	128
a. Number of functional units represented by the inventory emissions	520
2. Emissions per functional unit (based on the number of functional units represented by the inventory)	0.245

	Total tCO2-e divided by the number of functional units in 1a.	
3.	*Carbon footprint* *(Emissions per functional unit (2)* number of functional units (a or b from table 2))*	128

Carbon neutral products

No carbon neutral products used.

4. CARBON OFFSETS

Offsets strategy

Table 6 – Offset strategy

Offset purchasing strategy: Forward purchasing on yearly basis	
1. Total offsets previously forward purchased and banked for this report	*zero*
2. Total emissions liability to offset for this report	*128 t CO_2-e*
3. Net offset balance for this reporting period	*zero*
4. Total offsets to be forward purchased to offset the next reporting period	*872 t CO_2-e*
5. Total offsets required for this report	*128 t CO_2-e*

Offsets summary

Proof of cancellation of offset units

Table 7 – Offset 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**	**Eligible Quantity (TCO2-e)**	**Quantity used for previous reporting periods**	**Quantity banked for future reporting periods**	**Quantity used for this reporting period claim**	**Percentage of total (%)**
Bundled Wind Power Project in Tamilnadu, India, co-ordinated by Tamilnadu Spinning Mills Association (TASMA-V2)	VCUs	VERRA	22 April 2021	9064-65068243-65069242-VCS-VCU-508-VER-IN-1-1353-01012017-31122017-0	2017	1000	0	872	128	12.8%
								Total offsets retired this report and used in this report	128	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total
Verified Carbon Units (VCUs)	128	12.8%

Co-benefits

The wind energy project activity (Project) involves installation of 396 Wind Turbine Generators (WTGs) with a total cumulative installed capacity of 236 MW. Apart from generation of renewable electricity and associated environmental benefits, the project has also been conceived to contribute towards sustainable development of the region - socially, technologically, and economically. The participants' view on the contribution of this Project towards sustainable development follows these indicators:

Social well-being:

- Improves electricity availability in the region and reduces electricity deficit situation in the local region.
- Creation of employment opportunities for the local people during the erection and commissioning of the WTGs.
- Promoting infrastructural development like approach roads in the areas where the Project is located.

Technological well-being:

- Increased investment in wind energy projects will further push R&D efforts by technology providers to develop more efficient and better machinery in future.

Economic well-being:

- The project activity results in generation of additional employment opportunities directly and indirectly which helps improve the standard of living of the people in and around the project activity location.
- The generation of the offsets provides financial incentives, which encourage channelling more investment into cleaner energy projects and also result in improved returns to the project stakeholders.
- Promotes industrial growth by catering to the energy needs arising out of the supply-demand gap of electricity.
- Infrastructural development from implementation of project activity leads to the economic development of the local people.

5. USE OF TRADE MARK

Table 8 – Use of trademark

Description where trademark used	Logo type
Sustainability reports	Certified carbon neutral product
Website	Certified carbon neutral product
Media reports	Certified carbon neutral product
Conferences and presentations	Certified carbon neutral product

APPENDIX 1

Non-attributable emissions for products and services

This carbon neutral certification is based on Holcim's ViroDecs™ EPD range with a cradle to gate scope that excludes all downstream life cycle stages (i.e., gate to grave) from the certification boundary.

To be deemed attributable an emission must meet two of the five relevance criteria. Non-attributable emissions are detailed below against each of the five criteria.

Table 8

Relevance test					
Non-attributable emission	*The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions*	*The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.*	*Key stakeholders deem the emissions from a particular source are relevant.*	*The responsible entity has the potential to influence the reduction of emissions from a particular source.*	*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.*
Downstream life cycle stages (i.e., gate to grave).	No	No	Yes	No	No

APPENDIX 2

Non-quantified emissions for products/services

Not applicable for this certification.