



# **PUBLIC DISCLOSURE STATEMENT**

**HOLCIM AUSTRALIA PTY LTD**

**CARBON NEUTRAL VIRODECS<sup>®</sup> READY-MIX  
CONCRETE (OPT-IN)**

**CY2022**

Australian Government

# Climate Active Public Disclosure Statement



NAME OF CERTIFIED ENTITY	Holcim Australia Pty Ltd
REPORTING PERIOD	1 January 2022 – 31 December 2022 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>Cyril Giraud Head of Sustainability 15 June 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	5,129 tCO <sub>2</sub> -e
THE OFFSETS USED	72% CERs and 28% VCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Edge Environment Pty Ltd
TECHNICAL ASSESSMENT	06 June 2023 Edge Environment Pty Ltd Next technical assessment due: CY 2023

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## 2. CARBON NEUTRAL INFORMATION

### Organisation Description

Holcim, a prominent supplier of construction materials in Australia, boasts a rich legacy dating back to 1901. Today, Holcim continues its legacy by providing essential construction materials, including aggregates, sand, ready-mix concrete, engineered precast concrete, and prestressed concrete solutions, to a diverse array of customers and projects across Australia.

In 2019, Holcim Australia embarked on a significant initiative by registering its first ViroDecs® EPD (Environmental Product Declaration) for its ready-mix concrete. This was the first EPD for ready-mix concrete in Australia, and a pivotal step reflecting Holcim's unwavering commitment to comprehensively analyse and communicate the embodied environmental impacts of its products. Holcim aims to ensure that all its key products are represented by an EPD in Australia. These EPDs play a crucial role in supporting designers and developers in making informed decisions regarding sustainable procurement and materials selection, thereby promoting standardisation and transparency in environmental claims and specifications.

### Description of certification

ViroDecs® represents Holcim's range of ready-mix concrete covered by an EPD. An EPD is a meticulously verified and registered document that transparently communicates comparable data about the life-cycle environmental impact of a product, including its Global Warming Potential (GWP), commonly referred to as embodied carbon.

Through Holcim's Climate Active Certification, customers have the option to opt-in for the offsetting of the GWP associated with their ready-mix concrete. This certification is managed through the EPD pathway. The carbon accounting in the EPD aligns with the Climate Active Products and Services. The carbon accounting published in the EPDs is based on data collected from across Holcim's operations and is compliant with international life cycle and EPD standards (ISO 14025 and EN 15804). Additionally, it undergoes independent review by an approved, third-party verifier under EPD Australasia.

## Product description

ViroDecs<sup>®</sup> represents Holcim's range of ready-mix concrete covered by an EPD. Through Holcim's Climate Active Certification, customers have the option to opt-in for the offsetting of the GWP associated with their ready-mix concrete

- The functional unit for this certification is 1 m3 of opt-in carbon neutral ready-mix concrete sold for the period.
- The emissions reported in this document are for calendar year 2022 (CY2022).
- The carbon account covers the cradle-to-gate (A1-A3) life cycle stages (as shown in Figure 1) of the manufacturing of ready-mix concrete. The cradle-to-gate life cycle assessment covers the impact from raw material extraction and processing (cradle / A1) for all ingredients and materials, up until the product leaving the ready-mix concrete batching plant (gate / A3).
- Life cycle stages for the construction stage (A4-A5), use stage (B1-B7), and end of life stages (C1-C4) are not included in this carbon neutral certification. The impact of downstream life cycle stages (e.g. transport to construction site, construction, use, disposal) is relatively minor compared to the cradle-to-gate emissions, but shall not be considered zero.

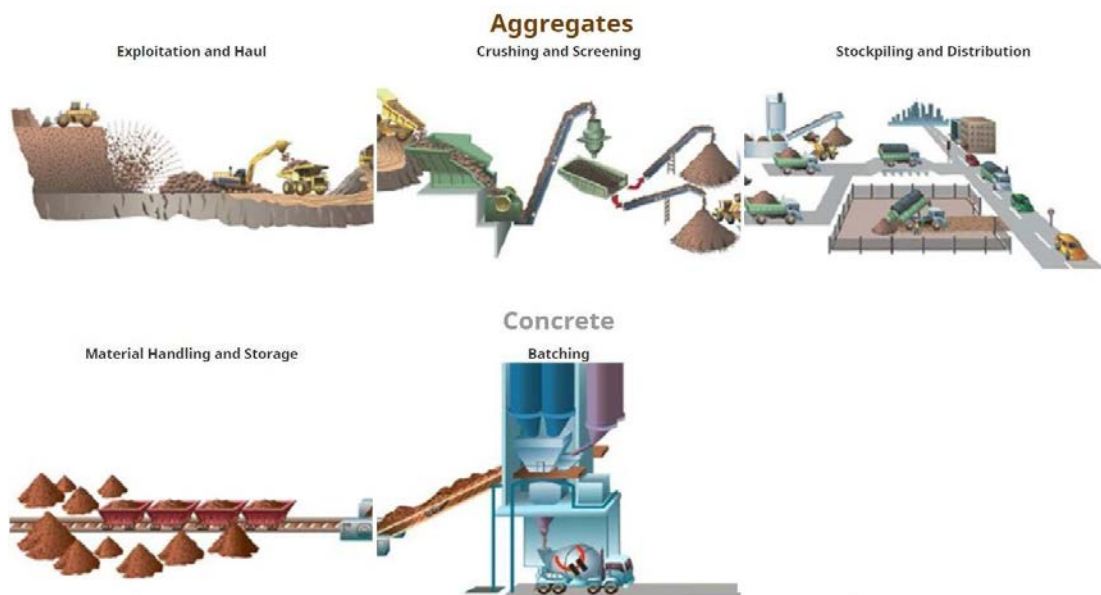


Figure 1 – Cradle-to-gate (A-A3) life cycle stages of precast concrete products

Table 1 – Features of Holcim ViroDecs® ready-mix concrete range

	ViroDecs® - Normal class concrete mixes	ViroDecs® – Special- class concrete mixes
<b>Specification</b>	<p>Typically specified by:</p> <ul style="list-style-type: none"> <li>• State</li> <li>• Strength grade</li> <li>• Blend</li> <li>• Developed for residential applications, low-rise buildings, paving and driveways, etc. Its specification and ordering have been simplified as far as practicable.</li> </ul>	<p>Typically specified by:</p> <ul style="list-style-type: none"> <li>• Project</li> <li>• Strength grade OR prescription mix</li> <li>• Prescription mixes are based on aggregate to cement ratios (with no set water to cement ratios). There is no strength guarantee for some prescription mixes.</li> <li>• High strength designations above 50 MPa are also classified as special class concrete, e.g. 65 MPa, 80 MPa and 100 MPa.</li> </ul>
<b>Geographic scope</b>	Australia-wide	Australia-wide / Project site-specific
<b>Typical function</b>	Designed for residential applications, low rise buildings, paving and driveways etc. Its specification and ordering have been simplified as far as practicable.	High strength or high-performance concrete, architectural off-form finishes and other decorative applications. Special-class concrete is designed and specified based on a wide range of technical and other requirements.

Table 2 provides a summary of the materials included in Holcim ViroDecs® ready-mix concrete range and their relative composition by weight.

Table 2 – Key materials and typical compositional breakdown for Holcim's ViroDecs® ready-mix concrete range.

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%

Concrete manufacturing is undertaken primarily at Holcim branded concrete batching plants, with some manufacturing occurring under Holcim's subsidiary brands such as Excel Concrete, Broadway and Frame Premix (i.e. Tolling). All sites regardless of the brand name are owned and operated by Holcim. Holcim ready-mix concrete is delivered in bulk to customers with no packaging.

### 3.EMISSIONS BOUNDARY

The certification boundary follows a cradle-to-gate score and encompasses the following EPD life cycle stages (Figure 2):

- Raw material supply – EPD module A1
- Transport of raw materials – EPD module A2
- Manufacturing – EPD module A3

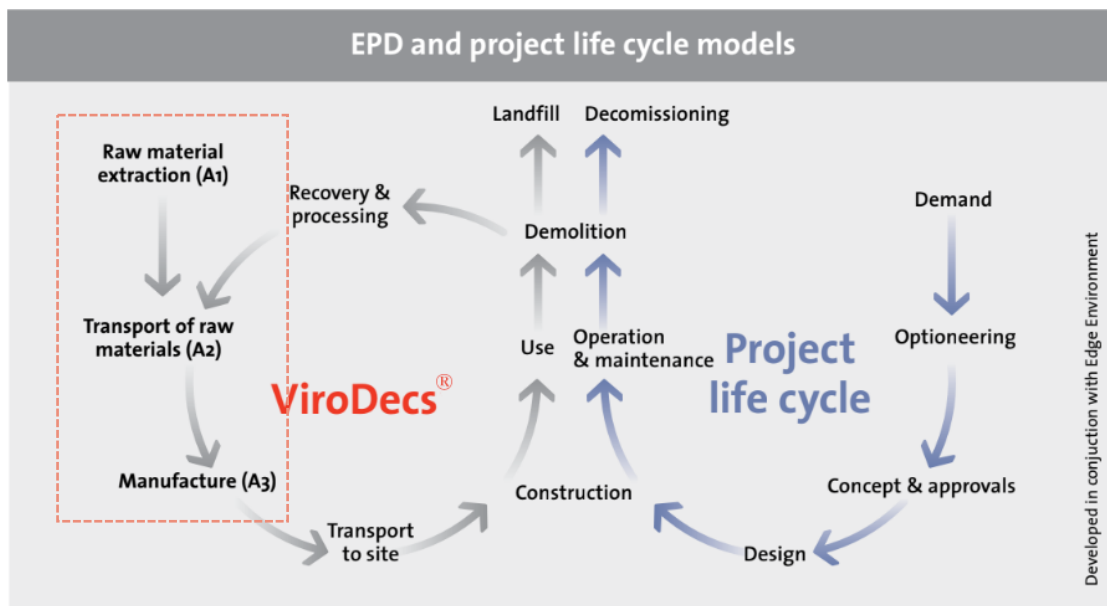


Figure 2 – Scope of this certification in the broader life cycle of construction and infrastructure projects.

The carbon account includes the following greenhouse gasses (GHGs), at minimum:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

Please note that the EPD impact assessment method that informs this carbon account (Global Warming Potential category of the CML) considers more substances than the above list.

## **Raw material supply**

This life cycle stage (EPD module A1) includes the following emission sources:

- Holcim's quarry operations for the extraction coarse aggregate, natural sand and manufactured sand;
- Production of other raw materials by third parties: cement, admixtures, fly ash, slag, reinforcing fibres and additives; and
- Direct emissions reported in the National Pollution Inventory.

Some emissions sources were modelled as co-products, in accordance with BS EN 16757:2017. These include:

- Fly ash;
- Ground granulated blast furnace slag; and
- Silica fume.

As such, the above materials are considered as co-products of their production process and the impacts for their production process are allocated according to PCR 2012:01 Construction Products and Construction Services (co-produced goods, multi-output allocation). Default background data from LCA databases was used to model the above co-products:

- Fly ash: the AusLCI process for fly ash treats it as a waste material and only includes transport impacts.
- Ground granulated blast furnace slag: the AusLCI process for slag is allocated based on economic value, as the product has significant economic value at the point of collection.
- Silica fume: the ecoinvent process for silica fume treats it as a waste material and only includes transport impacts.

## **Transport to concrete production plants**

This stage includes:

- The transport by truck of Holcim-produced raw materials to concrete batching plants; and
- The transport by ship and/or truck of other raw materials from third-party supplier locations to the concrete batching plants.



## Manufacturing

This stage includes the following emission sources:

- Electricity for all manufacturing operations;
- Diesel for manufacturing operations;
- Mains water consumption;
- Production of lubricating oil;
- Production of conveyor belts;
- Disposal of raw materials' packaging waste;
- Treatment of wastewater; and
- Direct emissions reported in the National Pollution Inventory.

## 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.

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

## Inside emissions boundary

### Quantified

#### Raw material Supply

- Quarry operations for aggregates, natural and manufactured sand
- Production of other raw materials for concrete manufacturing by third parties including, cement, admixtures, SCM
- Direct emissions reported in NPI

#### Transport of raw materials

- Holcim produced raw materials to concrete batching plants: Truck
- Third-party raw materials to concrete batching plants: Truck/ Ship

#### Manufacturing (Concrete plant resources)

- Electricity
- Diesel
- Mains water
- Lubricating oil
- Conveyor belts
- Wastewater treatment
- Direct emissions reported in NPI

### Non-quantified

n/a

### Excluded

- Personnel
- Infrastructure & capital goods
- Production equipment not directly consumed in the process

## Outside emission boundary

### Non-attributable

Downstream life cycle stages (i.e. gate to grave).

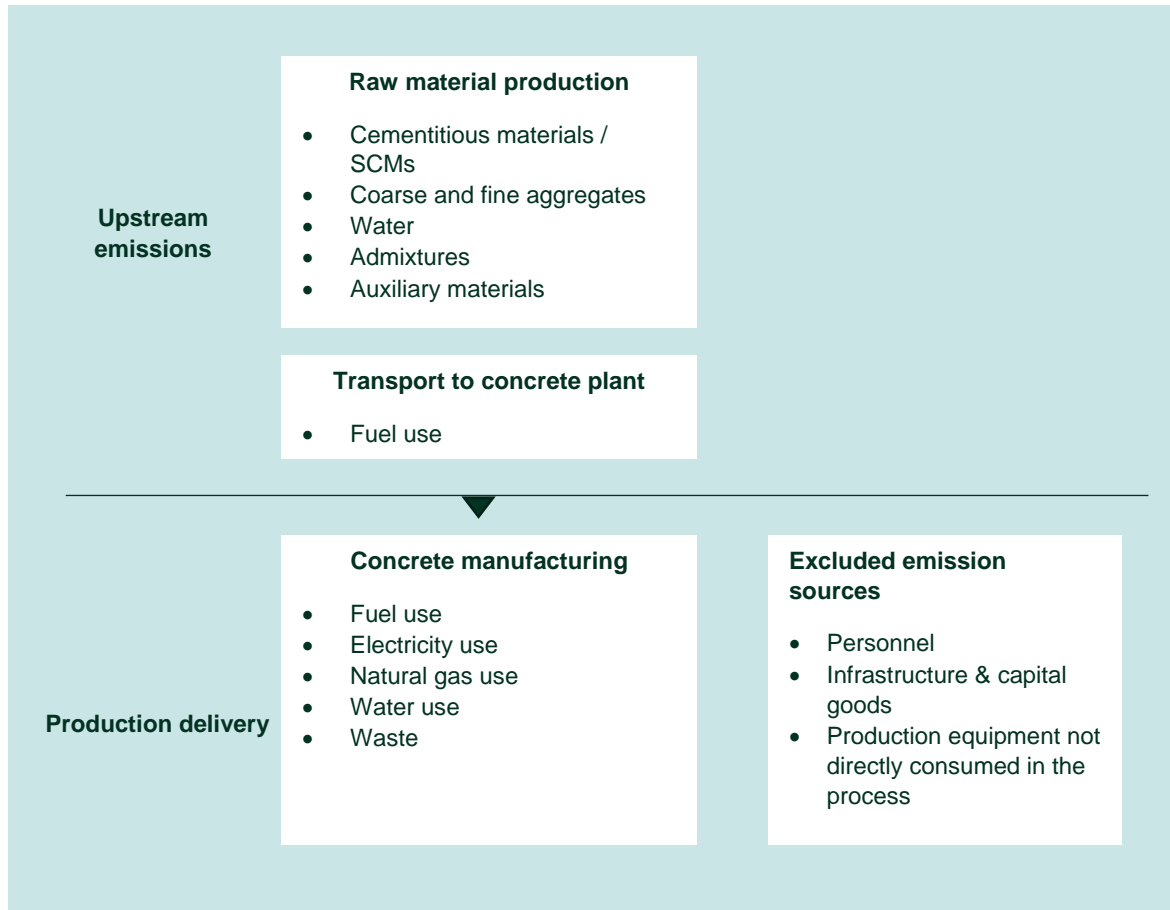
The key non attributable emission sources are:

- Transport to construction site
- Construction stage
- Maintenance and refurbishment inputs
- Carbonation of concrete leading to CO<sub>2</sub> absorption during residence time in building
- Deconstruction and disposal/recycling

Note: 1. Supplementary Cementitious Materials | 2. National Pollutant Inventory

## Product process diagram

The following diagram shows the product processes included within the scope of the footprint. The emission sources covered cover the cradle-to-gate boundary.



The contribution of personnel, infrastructure and capital goods and production equipment not directly consumed in the process are excluded in line with the Product Category Rules. These have met all three exclusion conditions as shown in Appendix C.

## 4.EMISSIONS REDUCTIONS

### Emissions reduction strategy

To avoid the most extreme impacts of climate change, the world must rapidly transition to a near net-zero economy by 2050 to limit warming to 1.5°C against pre-industrial levels. As a global leader in innovative and sustainable building solutions, Holcim is part of the solution in addressing the urgent challenge of climate change. We are putting climate action at the heart of our business strategy, to build progress for people and the planet.

At Holcim, we are taking a science-driven approach on the journey to becoming a net-zero company. Holcim was amongst the first companies worldwide to have its 2030 and 2050 CO<sub>2</sub> reduction targets validated by the Science Based Targets initiative (SBTi) as aligned with a 1.5°C scenario.

Our commitment to accelerate decarbonization across the whole building value chain is based on four key areas:

- **Decarbonizing our operations:** We are decarbonizing our energy use across our operations, from alternative fuels to renewable electricity; deploying decarbonized materials for low carbon product.
- **Building better with less:** We are decarbonizing construction with our range of low carbon materials.
- **Circular construction:** Shifting gears from a linear “take-make-dispose” approach to a circular “reduce, recycle, regenerate” economy.
- **Making buildings sustainable:** We are decarbonizing cities with our broad range of Solutions and Products, to make buildings more sustainable in use.

In 2022, Holcim updated its Global 2030 climate targets in line with the SBTi's revised 1.5°C-aligned roadmap. With these upgraded targets, we confirm our commitment to decarbonize building, leveraging the most advanced science.

- Holcim commits to Globally reduce gross scope 1 and 2 GHG emissions 25% per tonne of cementitious materials by 2030 from a 2018 base year.<sup>1</sup> Within this target, Holcim commits to reduce gross scope 1 GHG emissions 22.4% per tonne of cementitious material and scope 2 GHG emissions 65% per tonne of cementitious materials within the same timeframe.<sup>1</sup>
- Holcim commits to reduce gross scope 3 GHG emissions from purchased goods and services 25.1% per tonne of purchased clinker and cement by 2030 from a 2020 base year.
- Holcim also commits to reduce scope 3 GHG emissions from fuel and energy related activities 20% per tonne of purchased fuels by 2030 from a 2020 base year.

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<sup>1</sup> The target boundary includes land-related emissions and removals from bioenergy feedstocks

- Furthermore, Holcim commits to reduce scope 3 GHG emissions from downstream transport and distribution 24.3% per tonne of materials transported within the same timeframe.

In 2022, Holcim also updated its Global 2050 climate targets in line with the SBTi's revised 1.5°C-aligned roadmap

- We will reduce scope 1 and 2 GHG emissions by 95% per tonne of cementitious materials from a 2018 base year.<sup>2</sup>
- We will reduce absolute scope 3 GHG emissions by 90% by 2050 from a 2020 base year.<sup>3</sup>

Our second Global Climate Report shares our progress on our net-zero journeys, including our upgraded 2030 targets aligned with the 1.5°C framework and validated by the Science Based Targets initiative. Please refer to Holcim's Climate Policy<sup>4</sup>, webpage on climate action<sup>5</sup> and Global Climate Report<sup>6</sup> for further details.

## Emissions reduction actions

Holcim Australia continues to focus on reducing the embodied carbon impact of its ready-mix concrete products through a number of levers, such as design efficiency, optimizing the quantity of cement, supplementary cementitious materials (SCM), admixtures, and reducing site impacts (i.e. electricity type used, fuel usage). Holcim's Climate Active Carbon Neutral Certification allows customers to opt-in to offset the remaining embodied carbon.

As part of Holcim's ready-mix concrete emission reduction strategy it launched, its ECOPact ready-mix concrete range in April 2021. ECOPact is Holcim's new low carbon concrete backed by 3rd party verified Environmental Product Declaration data. ECOPact is low carbon concrete made easy. Combining the very best qualities of conventional concrete, it is available in a variety of strength classes and applications. With reduced embodied carbon, ECOPact is better for the environment.

With ECOPact, the carbon intensity can be reduced by 30-60% by replacing the standard cement with alternative materials. These include industrial by-products like fly ash, blast furnace slag or silica fume.

ECOPact provides designers and contractors with easy solutions to achieve lower embodied carbon outcomes in their projects.

<sup>2</sup> The target boundary includes land-related emissions and removals from bioenergy feedstocks.

<sup>3</sup> This net-zero validation was evaluated within the parameters of the Business Ambition for 1.5°C campaign and it covers categories 1, 3, 4, 6, 7 and 9 of Holcim's scope 3 emissions.

<sup>4</sup> [https://www.holcim.com/sites/holcim/files/2023-04/holcim\\_climate\\_policy.pdf](https://www.holcim.com/sites/holcim/files/2023-04/holcim_climate_policy.pdf)

<sup>5</sup> <https://www.holcim.com/sustainability/climate-action>

<sup>6</sup> <https://www.holcim.com/sites/holcim/files/2023-03/31032023-holcim-climate-report-2023-7392605829.pdf>

ECOPact comes with:

- A ViroDecs® ready-mix Environmental Product Declaration (EPD). The EPD quantifies the embodied carbon of the ready-mix concrete. EPD are publicly available life cycle assessment documents, in accordance with international life cycle standards and are 3rd party verified.
- A 30% to 60% reduction in embodied carbon in comparison to the Australian National Life Cycle Inventory Database value for Ordinary Portland Cement ready-mix concrete (i.e. 0% use of Supplementary Cementitious Materials (SCM)).
- The option of offsetting the remaining embodied carbon impact of the concrete via Holcim's opt-in Climate Active Certification service.

## 5.EMISSIONS SUMMARY

### Emissions over time

This section compares emissions over time between the base year and the current year of certification. The emissions intensity of the of the functional unit and the total emissions change each year depending on quantity and type of opt in carbon neutral products sold.

Emissions since base year			
		Total tCO <sub>2</sub> -e	Emissions intensity of the functional unit
Base year:	2019	0	0
Year 1:	2020	128	0.245
Year 2:	2021	3,420	0.275
Year 3:	2022	5,129	0.263

### Significant changes in emissions

Our products are Climate Active certified on an opt-in basis. This means we expect to see significant changes in emissions intensity and total emissions of certified products from year-to-year, depending on which ones of our thousands of products are offset in a given year.

The table below summaries the various emissions by key material for the ViroDecs® ready-mix concrete sales in current year (2022) and the previous year (2021).

Emission source name	Previous year emissions (t CO <sub>2</sub> -e)	Current year emissions (t CO <sub>2</sub> -e)	Detailed reason for change
Aggregates	409	250	Sales volume increased
General Purpose Cement	4,270	2,969	Sales volume increased
Supplementary Cementitious Materials	395	133	Sales volume increased
Admixtures	20	44	Sales volume increased and updated emissions factors decreased for all admixtures used
Concrete plant resources	35	24	Sales volume increased

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

N/A

## Emissions summary

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.

The table below shows a summary of the emissions sources for this reporting period (CY2022).

Source	tCO2-e
Aggregates	409
General Purpose Cement	4,270
Supplementary Cementitious Materials	395
Admixtures	20
Additives	0
Concrete plant resources	35
<i>Total inventory emissions</i>	5,129

Emissions intensity per functional unit	0.263 tCO2-e / m3
Number of functional units to be offset	19,524 m3
Total emissions to be offset	5,128 tCO2-e



## 6. CARBON OFFSETS

### Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emission to offset is 5,128 t CO<sub>2</sub>-e. The total number of eligible offsets used in this report is 5,128 t CO<sub>2</sub>-e. Of the total eligible offsets used, 21,452 t CO<sub>2</sub>-e were previously banked, and none were newly purchased and retired. 16,324 CO<sub>2</sub>-e are remaining and have been banked for future use.

### Co-benefits

The Bundled Wind Power Project in Tamilnadu, India involves installation of 396 Wind Turbine Generators (WTGs) with a total cumulative installed capacity of 236 MW. The wind energy project activity (Project) involves in the Enercon Wind Farms (WFs) in Karnataka Bundled Project with a total cumulative installed capacity of 73.6 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 WFs.
- Promoting infrastructural development like approach roads in the areas where the Project is located.
- 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.

## Eligible offsets retirement summary

Offsets retired 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 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 (%)
Bundled Wind Power Project in Tamilnadu, India, coordinated by Tamilnadu Spinning Mills Association (TASMA-V2)	VCUs	VERRA	22 April 2021	<a href="#">9064-65068243-65069242-VCS-VCU-508-VER-IN-1-1353-01012017-31122017-0</a>	2017		1,000	1000	0	0	0%
Bundled Wind Power Project in Tamilnadu, India, coordinated by Tamilnadu Spinning Mills Association (TASMA-V2)	VCUs	VERRA	03/05/2022	<a href="#">9064-65162471-65166470-VCS-VCU-508-VER-IN-1-1353-01012017-31122017-0</a>	2017	4,000	4,000	2,548	0	1,452	28%
CER-IND-Enercon Wind Farms Karnataka Project, India	CERs	VERRA	23 Nov 2021	<a href="#">200,764,977 -200,824,976</a>	CP2	60,000*	60,000*	0	16,324	3,676	72%
Total offsets retired this report and used in this report										5,128	
Total offsets retired this report and banked for future reports									16,324		

\*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	Eligible quantity (used for this reporting period)	Percentage of total
Certified Emissions Reductions (CERs)	3,676	72%
Verified Carbon Units (VCUs)	1,452	28%



## Australian National Registry of Emissions Units

ANREU Home

Account Holders

Accounts

Unit Position Summary

Projects

Transaction Log

CER Notifications

Public Reports

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Logged in as: Andrew Grant / Industry User

### Transaction Details

Transaction details appear below.

**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

N/A.

## APPENDIX B: ELECTRICITY SUMMARY

N/A

## APPENDIX C: INSIDE EMISSIONS BOUNDARY

### 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**).

	No actual data	No projected data	Immaterial
Capital goods	Yes	Yes	Yes
Personnel	Yes	Yes	Yes
Production equipment not directly consumed in the process	Yes	Yes	Yes

## 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.

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. The downstream emissions include:

- Transport to construction site
- Construction stage
- Maintenance and refurbishment inputs
- Carbonation of concrete leading to CO<sub>2</sub> absorption during residence time in building
- Deconstruction and disposal/recycling

In the summary table below, a written justification for all judgments made are provided to categories emissions sources against the relevance test criteria as non-attributable.



## Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Downstream stages	N	N	N	N	N	<p><b>Size:</b> The emissions from this particular source are likely to be small relative to the organisation's electricity, stationary energy and fuel emissions.</p> <p><b>Influence:</b> We do not have the potential to influence the emissions from this source</p> <p><b>Risk:</b> This emission source does not contribute to the company's risk exposure (e.g. climate change-related risks such as financial, regulatory, supply chain, product and customer, litigation and reputational risks).</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product/service.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable products/services do not typically undertake this activity within their boundary.</p>



An Australian Government Initiative

