Australian Government Carbon Neutral Program Public Disclosure Statement



THIS DOCUMENT WILL BE MADE PUBLICLY AVAILABLE

Certification Summary

Responsible Entity name: Tallina Pty Ltd as trustee for Amaroo Estate Trust

Building / Project Name: Amaroo Business Park - Amazon

Building Owner: Tallina Pty Ltd as trustee for Amaroo Estate Trust

Project Address: 4-6 Callister Place Craigieburn, Victoria 3064

Certification Type: Certified carbon neutral for the upfront carbon emissions of the delivery phase of a building.

This Amaroo Business Park – Amazon project has been certified carbon neutral for the upfront carbon emissions of the delivery phase of the building by the GBCA against the Climate Active Guideline: Upfront Carbon for Buildings under the Climate Active Carbon Neutral Standard for Products and Services (the Standard).

Total emissions offset	11,395 tCO2-е
Offsets bought	100% VCUs
Renewable electricity used in the construction of the building	0%
Technical Assessment	Completed
Third Party Validation	Completed



Carbon Neutral Information

Description of the certification

Goodman Group (ASX: GMG) is an integrated property group with operations throughout Australia, New Zealand, Asia, Europe, the United Kingdom, North America and Brazil. Goodman Group, comprised of the stapled entities Goodman Limited, Goodman Industrial Trust and Goodman Logistics (HK) Limited, is the largest industrial property group listed on the Australian Securities Exchange and one of the largest listed specialist investment managers of industrial property and business space globally. Tallina Pty Ltd is a Goodman owned entity.

Goodman's global property expertise, integrated own+develop+manage customer service offering and significant investment management platform ensures it creates innovative property solutions that meet the individual requirements of its customers, while seeking to deliver long term returns for investors.

Sustainability is an integral part of Goodman's business strategy and this includes actions to reduce carbon emissions across it's operations. As part of FY25 strategy, a carbon budget has been assigned per new development project, with the aim of reducing, measuring and offsetting all upfront embodied carbon emissions going forward. In line with our strategy, Goodman is targeting carbon neutral development for it's new project at Craigieburn in Victoria.

Project description

The object of the assessment is the MEL8, located at 4-6 Callister Place, Craigieburn VIC 3064. It is a one tenancy development containing a warehouse, a single story office, and an inbound and outbound guardhouse. The development is located within an industrial estate in Craigieburn, VIC approximately 42km North of the Melbourne CBD. New industrial warehouse project at Amaroo Business Park.

- 15,600 sqm gross lettable area of office space
- 1,574 sqm of office space
- 256 car parking spaces
- Total gross floor area (GFA) of 17,464 sqm

The functional unit for the project is sqm of Gross Floor Area (GFA) and the emissions intensity (emissions per functional unit) for this development is 0.652 tonnes CO2 - e/sqm.

The Upfront Carbon for Building Guideline provides coverage for all construction emissions treating the completed building as the product and the emissions boundary encompassing cradle to gate, where the gate is the delivery of the completed base building. The carbon inventory includes emissions calculated for stages A1 - A5 of the base building.

The project has achieved 5 stars Green Star under Design & As Built v1.3 with the Green Building Council of Australia. The project is also targeting Zero Carbon International Living Future Institute (ILFI) certification.



	Green Star – Homes rating			
The building is registered with the GBCA to	Green Star rating (Legacy tools)	\boxtimes		
achieve either:	Green Star Design & As Built			
	Green Star Buildings rating			
	 Green Star Homes rating and Green Star Buildings - Life Cycle Impacts 			
	Green Star – Design & As-Built rating and	\boxtimes		
	 Credit 15 – Greenhouse Gas Emissions Credit 19A - Life Cycle Assessment 			
The Responsible Entity has achieved either	Green Star Buildings rating and all the below <i>Green Star Buildings</i> credits			
	 Upfront Carbon Emissions – Minimum Expectations Energy Use - Minimum Expectations Energy Source – Exceptional Performance Other Carbon Emissions – Exceptional Performance 			
Date of practical completion.	18/05/2023			



Emissions Boundary

Inside the emissions boundary

The emissions boundary includes product stages A1 to A5 as per EN15804. Where possible, the emissions boundary can be (best practice) expanded to include A0 emissions.

Quantified emissions have been deemed as 'attributable processes' that become the product or service, make the product or service, and carry the product or service through its life cycle. These have been quantified in the carbon inventory.

Non-quantified emissions have been deemed as attributable and are captured within the emissions boundary but are not measured (quantified) in the carbon inventory.

Outside the emissions boundary

Non-attributable emissions have been deemed as not attributable to a product or service. They can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim).

This certification covers all construction emissions treating the completed building as the product and the emissions boundary encompassing cradle to gate, where the gate is the delivery of the completed base building. The carbon inventory includes emissions calculated for stages A1 - A5 of the base building.



Inside emissions boundary

Quantified

- Embodied emissions in construction materials incorporated into the structure (A1-3)

- Embodied emissions in materials used during construction (for example: permanent formwork)

- Transport of materials to the construction site (A4)

- Construction energy (A5), including electricity, diesel, petroleum

- Construction waste (A5)

Non-quantified

- Tenancy fitout

- Base building operations (B6)

Tenancy operations (B6)Building refurbishment or maintenance during

operational lifetime (B1-7) - Demolition at end of life

(C1-4)

This certification is for a new development incorporating the base building of an office building as previously described. Emissions associated with future management of the building and use of the building by future occupants are excluded. Outside emissions boundary

N/A



Product Process Diagram





	 A1 Raw material extraction and supply A2 Transport to manufacturing plant 	 Excluded emission sources Demolition of previous structures
Upstream		
emissions	A3 Manufacturing and fabrication	
	A4 Transport to construction site	
Production/Service		
delivery	A5 Construction and installation processes	
Downstream emissions	Excluded	

Data Management plan for non-quantified sources

N/A



Emissions Reductions

Emissions Reduction Strategy

The project has achieved a 5 Star rating under Green Star - Design & As Built v1.3, using the reference building pathway, meaning that the project must demonstrate a set improvement on a standard practice building from the NCC to achieve the 5 star rating. The project is also targeting Zero Carbon International Living Future Institute (ILFI) certification. Once operational, the project will be also target a Green Star Performance rating.

The operational emissions reduction strategies include:

- 1400 kW Solar PV system
- Low GWP refrigerant R32 in HVAC systems and R134A in HWS system
- No provisions for gas on site. This include no gas for cooking, space heating, or hot water
- 310L Heat pump systems for hot water using R134a refrigerant
- Best practice building envelope, including double glazed windows, to improve heating/cooling efficiencies
- Environmental performance targets and metering and monitoring systems as per Green Star requirements to ensure the building continues to operate efficiently
- 6 EV chargers for reducing operational emission of customers
- LED lighting and motion sensors for low energy consumption
- 20 kL rainwater tank installed on site for recycling waste water and use for
- Improve landscape irrigation by use of hardy native plants that require less water for irrigation
- Installed water efficient fixtures and fittings with higher WELS rating.
- Reduction in water use

The upfront emissions reductions strategies include:

- Dematerialisation by optimising structural and façade elements
- Prioritising lower carbon emissions materials (i.e., low emission concrete mixes), renewable materials, recycled materials
- Requiring EPD's for all major building elements (BlueScope ColourBOND roof on warehouse)
- Modularising elements of construction to reduce waste and transport emissions (precast concrete in walls)
- Targeted the construction and demolition waste credit under Green Star, diverting 90% of construction waste from landfill
- Completed a full life cycle assessment, demonstrating a 22% reduction for modules A1-A5.
- Use of Blast Furnace Slag 18% as SCM in concrete slabs on ground, hardstand, kerbs and retaining walls.
- Use of fibre reinforced warehouse slab to allow reduction in thickness of slab



Climate Active carbon neutral products and services

N/A

Emissions Summary

Summary

Stage	Estimated at Design Stage (t CO2-e)	At Practical Completion (t CO2-e)		
A1-A3: Product Stage	12,416	9,466.51 1,080.52		
A4: Transport of Equipment and Materials	1,205.48			
A5: Construction	988.40	847.38		
Total Emissions	14,609.64372	11,394.405		
Emissions intensity per functional unit	0.836557703	0.652451042		
Please outline if any uplift factors were included in the emissions total	N/A	N/A		
Number of functional units offset	N/A	17,464 (100% of 17,464)		
Total emissions offset	N/A	11,395		

The functional unit for the project is sqm of Gross Floor Area (GFA, and the total Gross Floor Area of the project is 17,464 sqm. The emissions intensity (emissions per functional unit) for this development is 0.652 tonnes CO2 - e/sqm.



Carbon Offsets Summary

Co-benefits

The project looks to protect the old-growth rainforest on the land, alleviating pressures on the forests through the support of governance capacity (including individual property titling, land-use planning, and conservation zone demarcation), the generation of alternative economic activities and income sources, and through capacity building in administration and management. By creating these alternative avenues and having the communities directly own and govern the project, the project looks to reduce illegal harvesting.

This project will provide value chain infrastructure, technical training, and access to financial capital to support the sustainable extraction of non-timber forest products such as açai. Agricultural products on already converted lands such as cocoa, will be further developed and commercialized. The development of value chains provides income to farming families as well as community councils. Since the project's inception, local communities have actively participated. Community support has culminated in the project creation of Community Councils with legal representatives as well as a wide-reaching General Assembly which votes for representatives to ensure community governance.



Offsets retired

Project description	Type of offset units	Registry	Date retired	Serial Numbers / hyperlink*	Stapled quantity	Vintage	Eligible Quantity (tCO2 –e) (total quantity retired)	Eligible Quantity used in previous reporting periods	Eligible Quantity used for this reporting claim	Percentage of total (%)
Agriculture Forestry and Other Land Use Project, Colombia	Verified Carbon Units (VCUs)	VCS	18/04/20 23	"10819- 250384294- 250395687- VCS-VCU- 261-VER-CO- 14-1389- 01012018- 31122018-1 https://registry. verra.org/myM odule/rpt/myrp t.asp?r=206&h =185465		2018	11394	0	11394	100%
Agriculture Forestry and Other Land	Verified Carbon Units (VCUs)	VCS	17/08/20 23	10819- 250395688- 250395688- VCS-VCU- 261-VER-CO- 14-1389-		2018	1	0	1	0%



		01012018- 31122018-1 <u>https://registry. verra.org/myM</u> <u>odule/rpt/myrp</u> <u>t.asp?r=206&h</u> <u>=185465</u>					
s report and	used in this	report				11,395	
Type of offset units			is reporting period cla	Percentag	Percentage of total		
Verified Carbon Units (VCUs) 113				100%	00%		
sets cancelle	d for purpos	ses other than Cli	mate Active Carbon N	leutral Certif	ication (N/A if	not required)	
Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (tCO2-e)	Purpose of cancellation	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	CUs) CUs) Sets cancelle Type of offset units	Is report and used in this Qua CUs) 1139 Sets cancelled for purpos Type of offset units N/A N/A	01012018-3 31122018-1 https://registry. verra.org/myM odule/rpt/myrp t.asp?r=206&h =185465 A report and used in this report Quantity (used for th 'CUs) 11395 sets cancelled for purposes other than Cli Type of offset units Registry Date retired N/A N/A	01012018- 31122018-1 https://registry. verra.org/myM odule/rpt/myrp t.asp?r=206&h =185465 is report and used in this report Quantity (used for this reporting period classical cl	01012018- 31122018-1 https://registry. verra.org/myM odule/rpt/myrp t.asp?r=206&h =185465 is report and used in this report Quantity (used for this reporting period claim) CUs) 11395 Sets cancelled for purposes other than Climate Active Carbon Neutral Certif Type of offset units Registry Date retired units Serial number (and hyperlink to registry transaction record) Vintage N/A N/A N/A	01012018-3 31122018-1 https://registry. verra.org/myM odule/rpt/myrp t.asp?r=206&h =185465 is report and used in this report Quantity (used for this reporting period claim) Percentage CUs) 11395 11395 100% sets cancelled for purposes other than Climate Active Carbon Neutral Certification (N/A if offset units Type of offset units Registry Date retired Serial number (and hyperlink to registry transaction record) N/A N/A N/A N/A	



Renewable Energy Certificate (REC) summary

N/A

----- Report end -----

