

Australian Government

Carbon Neutral Program

Public Disclosure Statement



THIS DOCUMENT WILL BE MADE PUBLICLY AVAILABLE

Certification Summary

Responsible Entity name: Mirvac Industrial Developments Pty Ltd

Building / Project Name: Aspect Estate Warehouse 2

Project Address: Lots 54-58 Mamre Road, Kemps Creek, NSW, 2178

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

This project Aspect Estate Warehouse 2 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	7,312 tCO2-e
Offsets bought	100% Verified Carbon Units (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

In addition to achieving 5 Star Green Star, Mirvac has a mandate for their buildings to achieve the Climate Active Upfront Carbon Neutral certification.

Project description

The Aspect Estate Lot 2 is a warehouse development within the Aspect industrial estate in Kemps Creek, NSW, with a site area of 40,242.49sqm, and a gross floor area of 26,527 sqm. This site is located approximately 40km west of the Sydney CBD. The development has consists of one tenancy containing:

- A 21,695sqm warehouse: includes one recessed loading dock with 7 dock levellers
- Two double storey main office (1,512sqm): includes open plan office areas, meeting rooms, lunch room, outdoor area, associated kitchenette, as well as female, male and disabled amenities on both level.
- Two dock offices (202sqm): consists of an open office, associated kitchenette, female and male amenities.

The building is registered with the GBCA to achieve either:	Green Star – Homes rating	☐
	Green Star rating (Legacy tools) [Design & As Built v1.3]	☒
	Green Star Buildings rating	☐
The Responsible Entity has achieved either	Green Star Homes rating and • Green Star Buildings - Life Cycle Impacts	☐
	Green Star – Design & As-Built rating and • Credit 15 – Greenhouse Gas Emissions • Credit 19A - Life Cycle Assessment	☒

Green Star Buildings rating and
all the below *Green Star Buildings* credits



- Upfront Carbon Emissions – Minimum Expectations
 - Energy Use - Minimum Expectations
 - Energy Source – Exceptional Performance
 - Other Carbon Emissions – Exceptional Performance
-

Date of practical completion.

28/06/2025

Emissions Boundary

Inside the emissions boundary

- Embodied emissions in construction materials incorporated into the structure (A1-A3)
- Embodied emissions in materials used during construction (e.g. permanent formwork) (A1-A3)
- Transport of materials to the construction site (A4)
- Construction energy, including electricity, diesel, petroleum (A5)
- Construction waste (A5)

Outside the emissions boundary

- Tenancy fitout
- Base buildings operations (B6)
- Tenancy operations (B6)
- Building refurbishment or maintenance during operational lifetime (B1-B7)
- Demolition at end of life (C1-C4)

The certification is for a new development incorporating the base building of offices and a warehouse. Future emissions, including by occupants in the use phase are excluded.

Inside emissions boundary

Quantified

- Embodied emissions in construction materials incorporated into the structure (A1-A3)
- Embodied emissions in materials used during construction (e.g. permanent formwork) (A1-A3)
- Transport of materials to the construction site (A4)
- Construction energy, including electricity, diesel, petroleum (A5)
- Construction waste (A5)

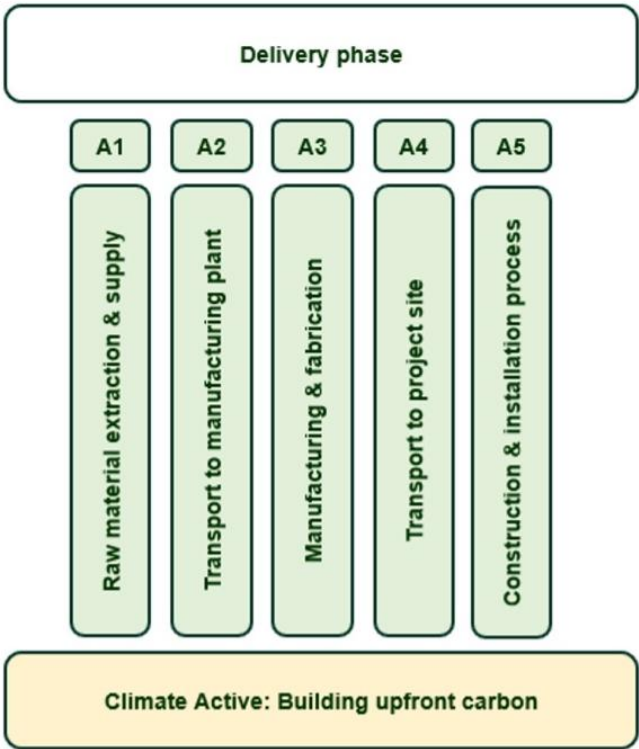
Non-quantified

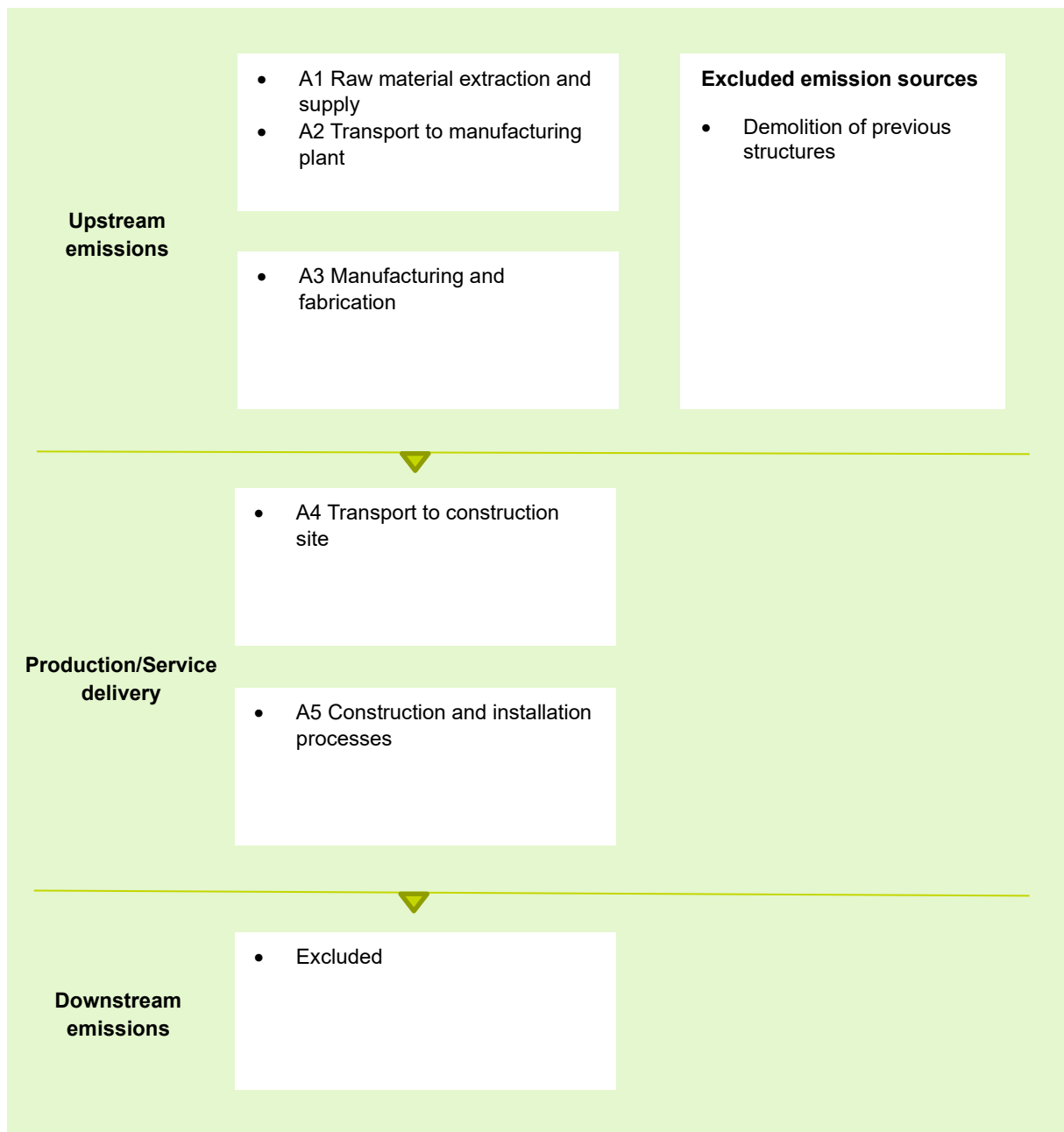
Outside emissions boundary

- Tenancy fitout
- Base buildings operations (B6)
- Tenancy operations (B6)
- Building refurbishment or maintenance during operational lifetime (B1-B7)
- Demolition at end of life (C1-C4)

The certification is for a new development incorporating the base building of offices and a warehouse. Future emissions, including by occupants in the use phase are excluded.

Product Process Diagram





Data Management plan for non-quantified sources

N/A

Emissions Reductions

Emissions Reduction Strategy

Firstly, upfront emissions (Modules A1-A5) were reduced through improved material selection and optimisation of the building design. Particular focus was given to concrete and steel uses, recycled crushed rocks, as well as construction waste.

Secondly, offsets were purchased in order to cover the remaining emissions associated with the construction of the project.

Energy Efficiency

The project is targeting a 5 Star Green Star rating under the Green Star Design & As Built v1.3.

In order to achieve this rating (particularly as it relates to energy efficiency performance), a number of initiatives have been included in order to demonstrate a set improvement on a standard practice building using the reference building pathway. The set initiatives are outlined below.

- HVAC and HWS energy consumption reduction: this includes the energy improvements from the building systems as modelled for Credit 15 Greenhouse Gas Emissions
- Lighting reductions: this includes a reduction in LPD against the NCC, as modelled for Credit 15.
- Solar PV: a 198.95kW system with 575W Panels was installed across the development. The renewable energy supplied by this has been included, as modelled for Credit 15.
- Water efficient fittings and fixtures: higher WELS rating fixtures and fittings have been installed in the development. The water use reduction has been included as per the Potable Water Calculator in Credit 18 Potable Water.
- Improved Landscape Irrigation: the species selections for the site have lower average crop coefficients than standard practice, which leads to a lower irrigation requirement. The water use reduction has been included as per the Potable Water Calculator in Credit 18.
- A 160kL Rainwater Tank has been installed. The amount of rainwater that is used has been included plus the embodied impacts of installing rainwater tanks and pumps.
- Proposed refrigerants: The office split system unit has had it's refrigerant changed from the reference R410A to R32 (a more energy efficient option). The VRF units remain the same between base and proposed designs with R410A refrigerant.

Upfront Carbon

- Portland cement reduction: all in-situ concrete elements throughout the development have included varying proportions of Fly Ash, in order to reduce the amount of Portland cement. Other measures including thickness reduction, steel reinforcement and concrete strength grade change in comparison to the reference building design have also been modelled

where applicable. These elements include all ground-bearing and suspended slabs, hardstands and footings.

- Colorbond (EPD): The BlueScope Colorbond Environmental Product Declaration (EPD) was applied to the project's walls and roofs.
- Crushed Rock: 100% recycled crushed rock
- Construction waste diversion: the waste contractor has provided waste reports, showing that significant amounts of waste have been diverted from landfill, as per Credit 22.

Climate Active carbon neutral products and services

N/A

Emissions Summary

Summary

Stage	At Practical Completion (t CO2-e)
<i>A1-A3: Product Stage</i>	5,552.52
<i>A4: Transport of Equipment and Materials</i>	996.41
<i>A5: Construction</i>	763.03
Total Emissions	7,312
Functional units offset	100% (26,527 out of 26,527)
Emissions intensity per functional unit	0.28
Any uplift factors that were included in the emissions total	N/A

The functional unit is sqm of GFA. The project has a GFA of 26,527 sqm.

Carbon Offsets Summary

Co-benefits

Mirvac Industrial Developments Pty Ltd has offset 18,476 tonnes of CO2-e stapled with Greenfleet offsets to support a net positive embodied carbon position for Warehouse 9, Aspect Industrial Estate, Kemps Creek.

Project description	Type of offset units	Registry	Date retired	Serial Numbers / hyperlink*	Stapled quantity	Vintage	Quantity	Eligible Quantity (tCO2 -e) (total quantity retired)	Eligible Quantity used in previous reporting periods	Eligible Quantity used for this reporting claim	Percentage of total (%)
The Kasigau Corridor REDD Project - Phase II The Community Ranches	Verified Carbon Units (VCUs)	VERRA	22/03/2026	12137-387512137-387512706-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	570	31/12/2020	570	570	0	570	8%
The Kasigau Corridor REDD Project - Phase II The Community Ranches	Verified Carbon Units (VCUs)	VERRA	22/03/2026	12137-388990296-388990495-VCS-VCU-259-VER-KE-14-612-	200	31/12/2020	200	200	0	200	3%

01012020-31122020-1										
The Kasigau Corridor REDD Project - Phase II The Community Ranches	Verified Carbon Units (VCUs)	VERRA	22/03/2026	12137-387530713-387537109-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	6397	31/12/2020	6397	6397	6397	87%
The Kasigau Corridor REDD Project - Phase II The Community Ranches	Verified Carbon Units (VCUs)	VERRA	22/03/2026	12137-388989696-388989840-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	145	31/12/2020	145	145	145	2%
Total offsets retired this report and used in this report									7,312	
Total offsets banked for use future years: (if any)									0	

* Refer to Appendix for Climate Active screenshots of retirement.

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Carbon Units (VCUs)	7,312	100%

Table 7. Additional offsets cancelled for purposes other than Climate Active Carbon Neutral Certification (N/A if not required)

Project description	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							

Renewable Energy Certificate (REC) summary

Not Applicable. No renewable electricity was purchased for the construction of this building.

Appendix A: Offsets Retirement

VERRA Registry - 1

 Standards for a Sustainable Future																
Home																
RETIRED UNITS																
From Vintage	To Vintage	Serial Number	Quantity of Units	Unit Type	Project ID	Project Name	Project Type	Additional Issuance Certifications	Origination Program	Project Site State/Province	Project Country/Area	Account Holder	Retirement Reason	Beneficial Owner	Retirement Reason Details	Date of Retirement
01/01/2020	31/12/2020	12137-387512137-387512706-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	670	VCU	612	The Kasigau Corridor REDD Project - Phase II The Community Ranches	Agriculture Forestry and Other Land Use	CCB-Biodiversity Gold, CCB-Climate Gold		Coast Province	Kenya (KE)	Pangolin Associates Pty Ltd	Retirement for Person or Organization	Greenfleet	Mirvac Industrial Developments Pty Ltd has offset 7,312T CO2-e with Greenfleet to support a net positive embodied carbon position for Mirvac Aspect Warehouse 2 Industrial Development, Western Sydney	22/03/2026
1 - 1 : 1 First Prev Next Last																

VERRA Registry - 2

 Standards for a Sustainable Future																
Home																
RETIRED UNITS																
From Vintage	To Vintage	Serial Number	Quantity of Units	Unit Type	Project ID	Project Name	Project Type	Additional Issuance Certifications	Origination Program	Project Site State/Province	Project Country/Area	Account Holder	Retirement Reason	Beneficial Owner	Retirement Reason Details	Date of Retirement
01/01/2020	31/12/2020	12137-388990298-388990495-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	200	VCU	612	The Kasigau Corridor REDD Project - Phase II The Community Ranches	Agriculture Forestry and Other Land Use	CCB-Biodiversity Gold, CCB-Climate Gold		Coast Province	Kenya (KE)	Pangolin Associates Pty Ltd	Retirement for Person or Organization	Greenfleet	Mirvac Industrial Developments Pty Ltd has offset 7,312T CO2-e with Greenfleet to support a net positive embodied carbon position for Mirvac Aspect Warehouse 2 Industrial Development, Western Sydney	22/03/2026
1 - 1 : 1 First Prev Next Last																

VERRA Registry – 3

 Standards for a Sustainable Future																
Home																
RETIRED UNITS																
From Vintage	To Vintage	Serial Number	Quantity of Units	Unit Type	Project ID	Project Name	Project Type	Additional Issuance Certifications	Origination Program	Project Site State/Province	Project Country/Area	Account Holder	Retirement Reason	Beneficial Owner	Retirement Reason Details	Date of Retirement
01/01/2020	31/12/2020	12137-387530713-387537109-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	6397	VCU	612	The Kasigau Corridor REDD Project - Phase II The Community Ranches	Agriculture Forestry and Other Land Use	CCB-Biodiversity Gold, CCB-Climate Gold		Coast Province	Kenya (KE)	Pangolin Associates Pty Ltd	Retirement for Person or Organization	Greenfleet	Mirvac Industrial Developments Pty Ltd has offset 7 312T CO2-e with Greenfleet to support a net positive embodied carbon position for Mirvac Aspect Warehouse 2 Industrial Development, Western Sydney	22/03/2026
1 - 1 : 1 First Previous Go To Next Last																

VERRA Registry - 4

 Standards for a Sustainable Future																
Home																
RETIRED UNITS																
From Vintage	To Vintage	Serial Number	Quantity of Units	Unit Type	Project ID	Project Name	Project Type	Additional Issuance Certifications	Origination Program	Project Site State/Province	Project Country/Area	Account Holder	Retirement Reason	Beneficial Owner	Retirement Reason Details	Date of Retirement
01/01/2020	31/12/2020	12137-388989696-388989840-VCS-VCU-259-VER-KE-14-612-01012020-31122020-1	145	VCU	612	The Kasigau Corridor REDD Project - Phase II The Community Ranches	Agriculture Forestry and Other Land Use	CCB-Biodiversity Gold, CCB-Climate Gold		Coast Province	Kenya (KE)	Pangolin Associates Pty Ltd	Retirement for Person or Organization	Greenfleet	Mirvac Industrial Developments Pty Ltd has offset 7 312T CO2-e with Greenfleet to support a net positive embodied carbon position for Mirvac Aspect Warehouse 2 Industrial Development, Western Sydney	22/03/2026
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Greenfleet Offset Certificate



— Report end —