

# PUBLIC DISCLOSURE STATEMENT

VICTORIAN DEPARTMENT OF EDUCATION AND TRAINING

PRODUCT CERTIFICATION CY2022

### Australian Government

# Climate Active Public Disclosure Statement







NAME OF CERTIFIED ENTITY	Victorian Department of Education and Training
REPORTING PERIOD	1 January 2022 – 31 December 2022 [arrears report]
DECLARATION	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.
	Name of signatory: Jenna Von Carate Position of signatory: Manager, Family Engagement Unit, Early Childhood Education, Department of Education Date 8 February 2024



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Version March 2023.



## 1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	254 tCO2-e
THE OFFSETS BOUGHT	100% ACCUs
RENEWABLE ELECTRICITY	18.59%
CARBON ACCOUNT	Prepared by: Ndevr
TECHNICAL ASSESSMENT	8/12/2021 Paola Martinez Ndevr Environmnental Next technical assessment 08/12/2024

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## 2. CARBON NEUTRAL INFORMATION

## **Description of certification**

This certification covers the manufacturing and distribution of 75,500 Kinder Kits, which are being produced for kindergartens across Victoria.

The kit carrycase includes both recycled and recyclable materials — designed and built for flexible, long-term use rather than as a one-off single-use container. It opens out to become a play surface with a whiteboard and markers and can be repurposed for storing kinder or childhood memories.

## **Product description**

The production of the Kinder Kit carrycase involved the review and sourcing of sustainable materials for use where possible, including polypropylene, FSC sourced internal cardboard stiffener, mixed recycled polyester, corn starch and ferrite powder / polymer resin. The materials used were printed or dyed to match branding requirements the assembly was the function of industrial sewing machinists to complete the product.

The emissions functional unit for the purposes of this assessment is kg CO2-e per kit carry case.

The certification of this product covers all kit manufactured and distributed through CY2022.

The kits have been calculated a cradle-to-gate basis, as it was not possible to assume end-of-life treatment of the kits.



## 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.



### **Inside emissions boundary**

### Quantified

Electricity (manufacturing and warehousing)

Diesel fuel (forklift)

Raw materials

Primary packaging

Secondary packaging (before delivery to final user)

Upstream Transport (Upstream road freight)

Delivery – Downstream transport

- Downstream Road Freight
- Cargo Ship Container
- Air Freight

#### Waste

- General Landfill
- Recycling

## Non-quantified

None

### **Optionally included**

None

## Outside emission boundary

### Non-attributable

Any other emission sources related to organisational operations

Waste from Product Packaging and product disposal (cradle to gate approach)



### **Product process diagram**

A cradle to gate approach has been undertaken to determine the product emissions for the kindergarten briefcase certification. A cradle to gate approach has been chosen as only cradle to gate information is available and reliable.

#### **Raw Material Sourcing**

 Sourcing of all required materials for final product: Fabric (Polypropylene), Laminate (BOPP), Internal boards, Polyester, Corn-starch, Ferrite powder, polymer resin and Inks)

## Excluded emission sources

Supplier's organisational emissions

## Upstream emissions

### **Upstream Transport**

 Transport of raw materials to manufacturing plant via road freight.

## Manufacturing

Electricity

## Production/Service delivery

**Downstream** 

emissions

#### Attributable process name

- Packaging material
- Cardboard
- Foam wrap

#### Attributable process name

- Downstream transport (manufacturing plant to Warehouse; warehouse to schools)
- Waste from primary packaging (landfill and recycling)
- Repackaging before delivery (secondary packaging)
- Electricity used in warehouse
- Diesel used in warehouse (forklift)



## Data management plan for non-quantified sources

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



## 4.EMISSIONS REDUCTIONS

## **Emissions reduction strategy**

The Victorian Government understands the need for climate action and have developed an emission reduction strategy to reduce the emissions intensity of each briefcase by 20% from a 2021 baseline by 2025. The key drivers for emission reductions are achieved through the following mechanisms:

- Increasing the portion of recycled materials within the briefcase from 27% to 30%;
- Optimising product design and minimising the use of emissions intense materials such as magnets within the briefcase whilst still maintaining product usability. Reduce magnet weight by at least 30% per unit briefcase; and
- Continue to investigate alternative low carbon materials for product design.

The Victorian Government will continue to actively engage suppliers to assess the possibilities of reducing emissions through alternative more sustainable materials and optimal briefcase design.

Details regarding the Vicorian Government's emission reduction commitments towards a more sustainable kindergarten briefcase can be viewed at the following link <a href="here">here</a>.

#### **Emissions reduction actions**

In 2022 the product was redesigned to minimise magnet material as magnet material was the most emissions intense material of the briefcase. The Magnet materials also forms a significant portion of the briefcase weight. This product design adjustment allowed for a 38% reduction in magnet use per briefcase which has the direct benefit of emission reductions from less emissions intense material being used, and the compounding impact of reduced electricity required to manufacture briefcases due to decreased briefcase mass. This product design opsimitation has allowed the Victorian Government to meet it's emission reduction target by 2022.

The Victorian Government will revise this target next year and will continue to reassess opportunities to reduce emissions by increasing the portion of recycled materials within the briefcase and continuing to investigate product design opportunities for sustainable less emissions intense outcomes.



## 5.EMISSIONS SUMMARY

## **Emissions over time**

Emissions since base year					
		Total tCO <sub>2</sub> -e	Emissions intensity of the functional unit		
Base year/Year 1	2021	371	4.36		
Year 2:	2022	254	3.36		

## Significant changes in emissions

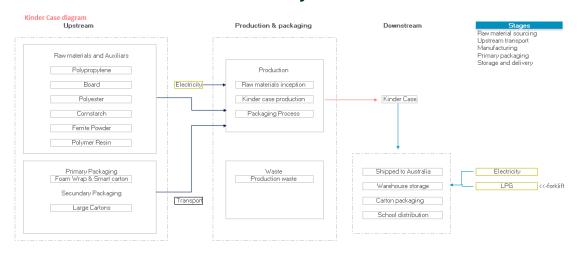
Emission source name	Current year (tCO <sub>2</sub> -e)	Previous year (tCO <sub>2</sub> -e )	Detailed reason for change
Virgin Polypropylene	17.1	15.5	This year a 75,500 unit were produced as oppossed to a 65,000 units in CY21. Emissions on a per case basis remain unchanged.
Average national electricity mix, China	74.4	78.9	This energy for manufacturing is calculated on a mass basis whereby electricity consumption is dependent on the mass of the material. There has been a change to product design whereby less magnets are being used which reduced the total weight per unit by approximaitely 10%
Ferrite Powder	81.3	113.2	There has been a significant change in the product design. Two poor quality magnets were being used but now only one high quality magnet is being used.
Paper and cardboard (not recycled)	11.5	13.3	This year a 75,500 unit basis was produced as oppossed to a 65,000 units. Emissions on a per case basis remain unchanged.



## Use of Climate Active carbon neutral products and services

N/A.

## **Product/Service emissions summary**



Stage	tCO2-e
Raw materials	112.51
Manufacturing	74.38
Storage and delivery	28.61
Upstream transport	19.21
Primary Packaging	6.48
Subtotal	241.19
5% uplift factor	12.06
Total	253.25

A 5% uplift factor has been applied to the inventory to account for the uncertianty associated with the electricity and manufacturing energy required to manufacture the product.

Emissions intensity per functional unit (including 5% uplift factor)	3.36 kgCO <sub>2</sub> /unit
Number of functional units to be offset (certified)	75,500
Total emissions to be offset (certified)	254



## **6.CARBON OFFSETS**

## Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emission to offset is 254 t CO<sub>2</sub>-e. The total number of eligible offsets used in this report is 254. Of the total eligible offsets used, 829 were previously banked and 0 were newly purchased and retired. 575 are remaining and have been banked for future use.

## **Co-benefits**



## Eligible offsets retirement summary

description	offset units		retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity (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 (%)
Tasmanian Native Forrest Protection, Australia	KACCU	ANREU	9 Nov 2021	8,330,220,286 - 8,330,221,485	2021-22	0	1,200	371	575	254	100%
							Total offsets re	etired this report	and used in this re	eport 254	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCUs)	254	100%



## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

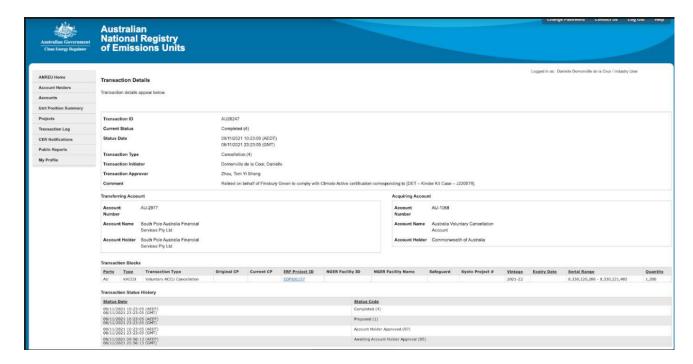
Renewable Energy Certificate (REC) Summary

NA



## APPENDIX A: ADDITIONAL INFORMATION

### **Offset Retirement**





## APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

#### Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

#### Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

For this certification, electricity emissions have been set by using the location-based approach.



Market Based Approach Summary			
Market Based Approach	Activity Data (kWh)	Emissions (kg CO2- e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	0	0	0%
LGC Purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	0	0	0%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCs surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,199	0	19%
Residual Electricity	5,236	5,000	0%
Total renewable electricity (grid + non grid)	1,199	0	19%
Total grid electricity	6,435	5,000	19%
Total electricity (grid + non grid)	6,435	5,000	19%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	5,236	5,000	
Scope 2	4,624	4,416	
Scope 3 (includes T&D emissions from consumption under operational control)	612	584	
Residual electricity consumption not under operational control	0	0	
Scope 3	0	0	

Total renewables (grid and non-grid)	
Total renewables (grid and non-grid)	18.64%
Mandatory	18.64%
Voluntary	0.00%
Behind the meter	0.00%
Residual scope 2 emissions (t CO2-e)	4.42
Residual scope 3 emissions (t CO2-e)	0.58
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	4.42
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.58
Total emissions liability (t CO2-e)	5.00
Figures may not sum due to rounding. Renewable percentage can be ab	ove 100%



Location Based Approach	Activity Data (kWh) total	Und	er operational c	Not under operational control		
Percentage of grid electricity consumption under operational control	100%	(kWh)	Scope 2 Emissions (kg CO2-e)	Scope 3 Emissions (kg CO2-e)	(kWh)	Scope 3 Emissions (kg CO2-e)
ACT	0	0	0	0	0	0
NSW	0	0	0	0	0	0
SA	0	0	0	0	0	0
VIC	6,435	6,435	5,470	450	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	0	0	0	0	0	0
TAS Grid electricity (scope 2 and 3)	0 <b>6,435</b>	0 <b>6,435</b>	0 <b>5,470</b>	0 <b>450</b>	0 <b>0</b>	0 <b>0</b>
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS Non-grid electricity (behind the	0	0	0	0		

Residual scope 2 emissions (t CO2-e)	5.47
Residual scope 3 emissions (t CO2-e)	0.45
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	5.47
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.45
Total emissions liability	5.92

Operations in Climate Active buildings and precincts

Operations in Climate Active	Electricity consumed in	Emissions		
buildings and precincts	Climate Active certified	(kg CO2-e)		
	building/precinct (kWh)	, , ,		
N/A	#N/A	0		
Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their building or precinct certification. This electricity consumption is also included				
in the market based and location based	summary tables. Any electricity that has be	een sourced as renewable electricity by		

the building/precinct under the market based method is outlined as such in the market based summary table.

Climate Active carbon neutral electricity products



Climate Active carbon neutral product used	Electricity claimed from Climate Active electricity products (kWh)	Emissions (kg CO2-e)	
N/A	#N/A	0	

Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their electricity product certification. This electricity consumption is also included in the market based and location based summary tables. Any electricity that has been sourced as renewable electricity by the electricity product under the market based method is outlined as such in the market based summary table.



## APPENDIX C: INSIDE EMISSIONS BOUNDARY

#### Non-quantified emission sources

The following emissions sources have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to <u>one</u> of the following reasons:

- 1. Immaterial <1% for individual items and no more than 5% collectively
- 2. Cost effective Quantification is not cost effective relative to the size of the emission but uplift applied.
- 3. <u>Data unavailable</u> Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
- Maintenance Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
N/A	

#### **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
N/A			

## Data management plan for non-quantified sources

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



## 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.

- <u>Size</u> The emissions from a particular source are likely to be large relative to other attributable emissions.
- Influence The responsible entity could influence emissions reduction from a particular source.
- <u>Risk</u> 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.
- 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.



## Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Electricity usage in office/general building areas	N	N	N	Υ	N	Size: e.g., The emissions source is likely to be between X and Y t-CO <sub>2</sub> e, which is not large compared to other attributable emissions (Z t-CO <sub>2</sub> e).  Influence: e.g., We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our product/service.  Risk: e.g., There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: e.g., Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product/service.  Outsourcing: e.g., We have not previously undertaken this activity within our emissions boundary and comparable products/services do not typically undertake this activity within their boundary.
Gas usage in office/general building areas	N	N	N	Y	N	Size: e.g., The emissions source is likely to be between X and Y t-CO <sub>2</sub> e, which is not large compared to other attributable emissions (Z t-CO <sub>2</sub> e).  Influence: e.g., We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our product/service.  Risk: e.g., There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.  Stakeholders: e.g., Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product/service.  Outsourcing: e.g., We have not previously undertaken this activity within our emissions boundary and comparable products/services do not typically undertake this activity within their boundary.
Any other emission sources related to organisational operations.	N	N	N	Υ	N	Size: e.g., The emissions source is likely to be between X and Y t-CO <sub>2</sub> e, which is not large compared to other attributable emissions (Z t-CO <sub>2</sub> e).  Influence: e.g., We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions



supplier for our product/service.

**Risk:** e.g., There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.

**Stakeholders:** e.g., Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product/service.

**Outsourcing:** e.g., We have not previously undertaken this activity within our emissions boundary and comparable products/services do not typically undertake this activity within their boundary.





