



# **PUBLIC DISCLOSURE STATEMENT**

**BIOPAK PTY LTD**


**PRODUCT CERTIFICATION  
CY2021**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	BioPak Pty Ltd (ABN: 48 119 998 711)
REPORTING PERIOD	1 January 2021 – 31 December 2021 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>Name of signatory: Lea Maguero Position of signatory: Head of Sustainability Date: 26/09/2022</p>



**Australian Government**  
**Department of Industry, Science,  
Energy and Resources**

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Version March 2022. To be used for FY20/21/CY2021 reporting onwards.



# 1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	104,030 tCO <sub>2</sub> -e
THE OFFSETS BOUGHT	4.8% VCU, 95.2% CERs
RENEWABLE ELECTRICITY	53.46%
TECHNICAL ASSESSMENT	20/04/2021 James Endean Pangolin Associates Next technical assessment due: 20/04/2024

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## 2. CARBON NEUTRAL INFORMATION

### Description of certification

This inventory has been prepared for the calendar year from 1 January 2021 to 31 December 2021 and covers the sale and use of BioPak products in Australia and internationally.

The Australian business operations of BioPak, ABN: 48 119 998 711, are included within this certification boundary and are also certified as carbon neutral by Climate Active.

Considering the large variety of products sold to customers, it was not practical or cost effective to carry out separate Life Cycle Assessments (LCAs) for each type of product. The approach taken was to categorise the BioPak product range into 24 product categories based on the product type and material of construction. Total emissions for each of these categories were calculated and the emissions per product item estimated based on the total number of units sold.

### Functional unit

The functional unit in the product LCA is a single BioPak item (i.e. one coffee cup, one food container etc.) sold and used in Australia and internationally.

### Product/Service description

BioPak is a supplier of a range of foodservice disposable items such as coffee cups, takeaway containers, plates and produce trays. BioPak is focused on replacing fossil fuel-based plastics used in food services wares by offering compostable alternatives made from rapidly renewable sustainably sourced materials.

BioPak has been certified carbon neutral for its international business operations (organisation) and its entire product range sold within Australia (carbon neutral products), New Zealand, Singapore and the UK.

*“BioPak has always relied on trusted certifications to demonstrate its environmental claims. Climate Active provides a transparent process and a credible stamp to certify that both our Organisation and our products are carbon neutral.”*

## 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

#### **Products**

*Materials*

*Manufacturing*

*Packaging*

*Freight*

*Disposal*

#### **Organisation**

*Accommodation and facilities*

*Air Transport*

*Cleaning and Chemicals*

*Electricity*

*Food*

*ICT services and equipment*

*Land and Sea Transport*

*Machinery and vehicles*

*Office equipment & supplies*

*Postage, courier and freight*

*Professional Services*

*Taxi*

*Waste*

*Employee commute*

*Working from home*

### Non-quantified

#### **Products**

*Third party warehousing*

#### **Organisation**

*Refrigerants*

*Water*

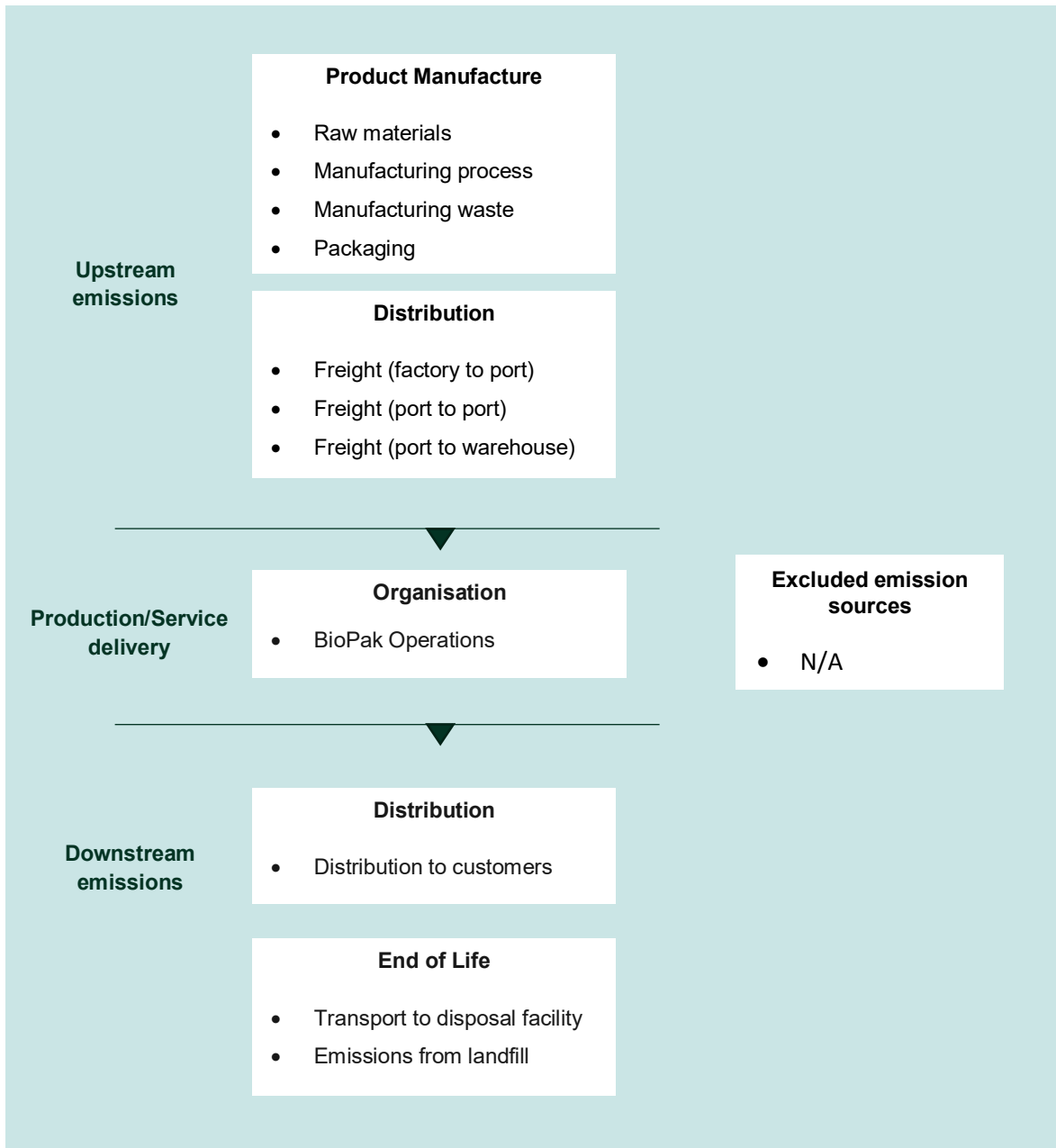
## Outside emission boundary

### Non-attributable

N/A

## Product/service process diagram

The following diagram is cradle to grave.



## **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

Biopak is planning to reduce its products' emissions by 20% in the next five years against the Calendar Year 2020 baseline.

To achieve this, we will:

- Replace our PLA cutlery with wood cutlery in AU and NZ. As wooden cutlery can act as a carbon sink, the estimated impact of this replacement corresponds to a 2% reduction of our product footprint. This replacement has already been initiated and will be accelerated by the implementation of Single Use Plastic Bans across Australia and New Zealand
- Replace our PS lids with CPLA lids. CPLA is less emissions intensive and the estimated impact of this replacement correspond to a 1.5% reduction in our product footprint
- Use more recycled materials, like recycled paperboard.
- Manufacture locally (we have already started sourcing some of our cardboard containers from a local supplier and are investigation bagasse production in Queensland)
- Work with our manufacturing partners to implement renewable energy use wherever possible.
- Increase the amount of compostable packaging and food waste we enable via our Product Stewardship Scheme [Compost Connect](#). We estimate that to cover the equivalent of 20% of our product footprint, we would need to get about 5,250 cafes or small restaurants to compost their food waste and packaging

Progress will be tracked during our annual carbon footprint assessment and will be shared publicly via our annual Sustainability Report, available [here](#).

### Emissions reduction actions

During this reporting period, we have:

- Worked with our 3PL (warehousing) in New Zealand to start using renewable energy at their two sites
- Started a switch from CPLA (bioplastic) to wood for our cutlery. Wood has a negative carbon footprint
- Started a switch from PS (plastic) to CPLA for our some of our lids. CPLA has a lower carbon footprint than PS
- Created Compost Connect (<https://www.compostconnect.org/>), a product stewardship scheme partially funded by the Government to divert more compostable packaging and food waste from the food service industry from landfill
- Purchased some electric vehicles for our UK site
- Donated 1% of our profits to Rainforest Rescue, Greenfleet and Ecologi to regrow and protect forests in Australia, New Zealand and the UK respectively

## 5. EMISSIONS SUMMARY

### Emissions over time

Emissions since base year		Total tCO <sub>2</sub> -e	Emissions intensity of the functional unit (gCO <sub>2</sub> -e/unit sold)
Base year:	2018	34,190	25.4
Year 2:	2019	51,824	27.8
Year 3:	2020	80,159	33.0
Year 3:	2021	104,030	29.1

### 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
<b>Material &amp; Manufacturing Emissions</b>	30,478.676	16,877.580	The increase in emissions across the product categories is mainly due to an increase in product sales in Australia and overseas.
<b>Packaging Emissions</b>	5,241.370	3,686.523	
<b>Freight Emissions</b>	8,350.597	6,462.559	
<b>Disposal Emissions</b>	59,580.877	52,818.419	

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

BioPak use COS certified carbon neutral paper.

This emissions assessment and Climate Active submission were conducted with the assistance of [Pangolin Associates](#) and these services are also carbon neutral.

### Product/Service emissions summary

Stage	tCO <sub>2</sub> -e
<b>Material &amp; Manufacturing Emissions</b>	30,478.676
<b>Packaging Emissions</b>	5,241.370
<b>Organisation Emissions</b>	377.608
<b>Freight Emissions</b>	8,350.597
<b>Disposal Emissions</b>	59,580.877

<b>Emissions intensity per functional unit</b>	29.1 g CO <sub>2</sub> -e
<b>Number of functional units to be offset</b>	3,570,654,826.40
<b>Total emissions to be offset</b>	104,029.128

## 6. CARBON OFFSETS

The details of offsets relating to this certification are the same as those in the BioPak Organisation PDS, found [here](#).

## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

N/A

## APPENDIX A: ADDITIONAL INFORMATION

N/A.

## APPENDIX B: ELECTRICITY SUMMARY

N/A

# APPENDIX C: INSIDE EMISSIONS BOUNDARY

## Non-quantified emission sources

The following sources emissions 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 one 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. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Third party warehousing	Yes	No	No	No
Refrigerants	Yes	No	No	No
Water	Yes	No	No	No

## 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	n/a	n/a	n/a

## 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.

Relevance test					
Non-attributable emission	<i>The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions</i>	<i>The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.</i>	<i>Key stakeholders deem the emissions from a particular source are relevant.</i>	<i>The responsible entity has the potential to influence the reduction of emissions from a particular source.</i>	<i>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.</i>
N/A	N/A	N/A	N/A	N/A	N/A





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