# PUBLIC DISCLOSURE STATEMENT

LIFE CYCLE STRATEGIES PTY. LTD.
(TRADING AS LIFECYCLES)

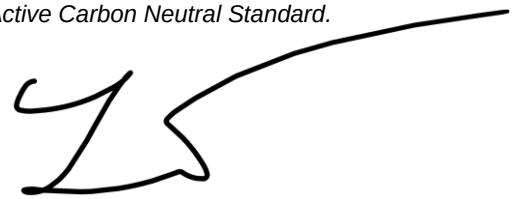
ORGANISATION CERTIFICATION

FY2023-24

Australian Government

# Climate Active
# Public Disclosure Statement

An Australian Government Initiative

| | |
|---|---|
| NAME OF CERTIFIED ENTITY | Life Cycle Strategies Pty. Ltd. (trading as Lifecycles) |
| REPORTING PERIOD | FY2023-24<br>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.*<br>  |
| | Lucille Wagner<br>Research Scientist at Lifecycles and CA certified practitioner<br>31/12/2024 |

Australian Government
Department of Climate Change, Energy, the Environment and Water



Version 9.

# 1.CERTIFICATION SUMMARY

| | |
|---|---|
| TOTAL EMISSIONS OFFSET | 167.87 $tCO_2$-e |
| CARBON OFFSETS USED | 100% VCUs |
| RENEWABLE ELECTRICITY | Total renewables: 118.72% |
| CARBON ACCOUNT | Prepared by: Life Cycle Strategies Pty. Ltd. |
| TECHNICAL ASSESSMENT | Not required as small org certification |

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# 2. CERTIFICATION INFORMATION

## Description of organisation certification

This small organisation carbon neutral certification is for the business operations of Life Cycle Strategies Pty. Ltd. (trading as Lifecycles), ABN 97 105 463 858.

This Public Disclosure Statement includes information for FY2023-24 reporting period.

## Organisation description

Lifecycles (ABN: 97 105 463 858) is Australia's most experienced specialized consultancy in Life Cycle Assessment (LCA) and the circular economy.

Our small but expanding team of 15 employees is mainly Melbourne-based, but, during the reporting period we had employees working remotely from New South Wales, Queensland and London, England. We have undertaken over 60 complete LCAs and hundreds of streamlined assessments for diverse clients across all sectors of the economy. We also develop much of Australia's Life Cycle Inventory data that is used around the world by LCA professionals and researchers.

We use life cycle approaches to enable businesses and policy makers to understand the full impact of their activities and improve their sustainability performance.

The organisation boundary approach taken follows the operational control approach. Lifecycles does not have any subsidiaries/ child companies.

# 3.EMISSIONS BOUNDARY

This is a small organisation certification, which uses the standard Climate Active small organisation 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 relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however are **optionally included**.

**Non-quantified emissions** have been assessed as relevant 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

**Excluded emissions** are those that have been assessed as not relevant to an organisation's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.

**Inside emissions boundary**

**Quantified**

- Stationary energy and fuels (N.A.)
- Accommodation and facilities
- Carbon neutral products and services (N.A.)
- Cleaning and chemicals
- Construction materials and services
- Electricity
- Employees commute (covered by other categories)
- Food
- Horticulture and Agriculture
- ICT services and equipment
- Machinery and vehicles
- Office equipment and supplies
- Postage, courier and freight
- Products
- Professional Services
- Refrigerants (N.A.)
- Transport (air)
- Transport (land and sea)
- Waste
- Water
- Working from home

**Non-quantified**

N/A

**Optionally included**

N/A

**Outside emission boundary**

**Excluded**

N/A

# 4.EMISSIONS REDUCTIONS

## Emissions reduction strategy

Lifecycles is committed to reducing their carbon footprint as much as feasible. Being a small service provider, we already have a low footprint and have limited levers on which we can pull to bring our emissions down further.

With this in mind, below are the points Lifecycles has identified and will be working on:

- Lowering our electricity consumption
  Although we are already mindful of our electricity consumption, and are using 100% Green Power and thus decreased electricity use will not show as benefits in our next Climate Active account, we will endeavor to keep minimizing electricity use as much as possible. This will be achieved by limiting our use of heating/cooling devices; buying only low energy usage light bulbs from now on; and adjusting our hot water system to cap how hot the water gets. This will be an ongoing effort and we will be reviewing our monthly electricity bills to see how we are tracking. We believe that it will enable us to lower our electricity consumption by at least 5% by the end of FY24-25.

- Waste
  Municipal waste going to landfill accounts for 3% of Lifecycles' climate change impact. The state of Victoria recently set up a four-bin system in Lifecycles' neighborhood. This allows us to easily, ongoingly, sort glass; other recyclable; organic waste and other wastes preventing FOGO ending up in landfill.

- Travel
  The vast majority of Lifecycles meetings happen online. Nevertheless, Lifecycles believes that face-to-face meetings with clients, sites visits and other conferences are incredibly valuable to the company and other stakeholders. Bearing this in mind we are trying to make the trips as efficient as possible, meeting several clients/ attending several events per trip. Lifecycles also considered offsetting all its flights when buying them but ended up deciding against it. Indeed, offsetting our flights when purchased or at the end of a year through the Climate Active program should amount to the same. Moreover, we have higher trust in the offsets we purchase from a reputable source through Climate Active when compared to any airline's unspecified offsetting program.

- Using low carbon products and services and prioritising repairs
  ICT services and equipment add up to 17% of Lifecycles carbon account. Unfortunately, our activity being based on the use of electronic tools, we can hardly stop buying computers or software. Something that Lifecycles has been doing and will continue doing is investing in more expensive but better-quality material that will last longer and/or can be repaired rather than replaced. By keeping our electronic equipment longer, we significantly lower the potential impact our electronics consumption could have. Lifecycles has also recently hired an environmentally friendly cleaning service provider. Although these steps are hard to quantify and take into account within a Climate Active account, it is important for Lifecycles to take all the steps it can to minimize its impact.

## Emissions reduction actions

- Switching to 100% Green Power

  Our first carbon account helped us realise that only part of the electricity we used to buy was renewable. We have since remedied this and subscribe to 100% Green Power. This swap led to 'carbon neutral' electricity consumption for FY2023-24, avoiding the emission and subsequent need to offset 15.95 $tCO_2eq$.

- Lowering our electricity consumption

  Although we did our best to try and decrease our electricity consumption over the last financial year, more staff meant more need and an increase in electricity consumption of 13%. The action of adjusting our hot water system to cap how hot the water gets has not yet been taken and will be actioned in FY2024-25.

- Waste

  The city of Yarra recently introduced a four-bin system in Lifecycles' neighborhood. This allows us to easily, ongoingly, sort glass; other recyclable; organic waste and other wastes preventing FOGO ending up in landfill and reducing our impact

- Travel

  Lifecycles maintained its efforts to optimize any and all travel. The increase in staff number, activity and an international LCA conference that happened in France in September 2023 and to which 5 of Lifecycles' staff member assisted meant a significant increase in impact from air travel (87.16 $tCO_2$ eq, up 78% from 49.00 $tCO_2$ eq in FY2022-23).

- Using low carbon products and services and prioritising repairs

  By investing in more expensive but better-quality material that will last longer and/or can be repaired rather than replaced, Lifecycles managed to reduce its computer and other hardware purchases related impacts by about 4% this year, in spite of the increased number of staff.

# 5.EMISSIONS SUMMARY

## Emissions over time

| Emissions since base year | | | |
|---|---|---|---|
| | | **Total $tCO_2$-e** (without uplift) | **Total $tCO_2$-e** (with uplift) |
| Base year/year 1: | FY 2022-23 | 105.29 | 110.55 |
| Year 2: | FY 2023-24 | 159.88 | 167.87 |

## Significant changes in emissions

| Significant changes in emissions | | | |
|---|---|---|---|
| **Emission source** | **Previous year emissions** (t $CO_2$-e) | **Current year emissions** (t $CO_2$-e) | **Reason for change** |
| **Long economy class flights (>3,700km)** | 36.02 | 61.23 | Staff number has increased + big bi-annual conference occurred in France in 2023 with 5 staff attending. |
| **Short economy class flights (>400km, ≤3,700km)** | 12.98 | 25.93 | Staff number has increased + one of new employees is based interstate, increase numbers of flights to and back from Melbourne. |

## Use of Climate Active carbon neutral products, services, buildings or precincts

| Certified brand name | Product/Service/Building/Precinct used |
|---|---|
| N/A | N/A |

## Emissions summary

The electricity summary is available in Appendix B. Electricity emissions were calculated using a market-based approach.

| Emission category | Scope 1 emissions ($tCO_2$-e) | Scope 2 emissions ($tCO_2$-e) | Scope 3 emissions ($tCO_2$-e) | Total emissions (t $CO_2$-e) |
|---|---|---|---|---|
| Accommodation and facilities | 0.00 | 0.00 | 5.58 | 5.58 |
| Cleaning and Chemicals | 0.00 | 0.00 | 0.99 | 0.99 |
| Climate Active carbon neutral products and services | 0.00 | 0.00 | 0.00 | 0.00 |
| Construction Materials and Services | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 |
| Food | 0.00 | 0.00 | 2.26 | 2.26 |
| Horticulture and Agriculture | 0.00 | 0.00 | 0.01 | 0.01 |
| ICT services and equipment | 0.00 | 0.00 | 27.82 | 27.82 |
| Machinery and vehicles | 0.00 | 0.00 | 0.11 | 0.11 |
| Office equipment & supplies | 0.00 | 0.00 | 3.26 | 3.26 |
| Postage, courier and freight | 0.00 | 0.00 | 0.21 | 0.21 |
| Products | 0.00 | 0.00 | 0.30 | 0.30 |
| Professional Services | 0.00 | 0.00 | 22.99 | 22.99 |
| Refrigerants | 0.00 | 0.00 | 0.00 | 0.00 |
| Roads and landscape | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Energy (gaseous fuels) | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Energy (liquid fuels) | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Energy (solid fuels) | 0.00 | 0.00 | 0.00 | 0.00 |
| Transport (Air) | 0.00 | 0.00 | 87.16 | 87.16 |
| Transport (Land and Sea) | 0.00 | 0.00 | 0.79 | 0.79 |
| Waste | 0.00 | 0.00 | 6.77 | 6.77 |
| Water | 0.00 | 0.00 | 0.27 | 0.27 |
| Working from home | 0.00 | 0.00 | 1.36 | 1.36 |
| **Total emissions ($tCO_2$-e)** | **0.00** | **0.00** | **159.88** | **159.88** |

## Uplift factors

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions that cannot be reasonably quantified or estimated. This conservative accounting approach helps ensure the integrity of the carbon neutral claim.

| **Reason for uplift factor** | **$tCO_2$-e** |
|---|---|
| Mandatory 5% uplift for small organisations | 7.99 |
| Total of all uplift factors ($tCO_2$-e) | 7.99 |
| **Total emissions footprint to offset ($tCO_2$-e)**<br>*(total emissions from summary table + total of all uplift factors)* | **167.87** |

# 6. CARBON OFFSETS

## Eligible offsets retirement summary

**Offsets retired for Climate Active certification**

| Type of offset unit | Quantity used for this reporting period | Percentage of total units used |
|---|---|---|
| Verified Carbon Units (VCUs) | 168 | 100.00% |

| Project name | Type of offset unit | Registry | Date retired | Serial number | Vintage | Total quantity retired | Quantity used in previous reporting periods | Quantity banked for future reporting periods | Quantity used for this reporting period | Percentage of total used this reporting period |
|---|---|---|---|---|---|---|---|---|---|---|
| April Salumei REDD Project | VCU | Verra Registry | 18/12/2024 | 17330-825512965-825513133-VCS-VCU-352-VER-PG-14-1122-01012014-31122014-0 | 2014 | 169 | 0 | 1 | 168 | 100.00% |

## Co-benefits

The offset project that we selected focuses on the protection of New Guinean rainforest which is a critical habitat for biodiversity. On top of reducing GHG emissions this scheme has significant positive biodiversity implications, and each carbon offset comes with a Biological Diversity Unit. Additionally social benefits are also generated from providing the indigenous landowners a form of income based on the carbon storage and ecosystem services provided by the forest, rather than through the short-term royalties that flow from logging concessions.

# 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

## Renewable Energy Certificate (REC) summary

N/A

# APPENDIX A: ADDITIONAL INFORMATION

N/A

# 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 market-based approach.

## Market-based approach summary

| Market-based approach | Activity Data (kWh) | Emissions (kg $CO_2$-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 | 21,566 | 0 | 100% |
| 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) | 4,037 | 0 | 19% |
| Residual Electricity | -4,037 | -3,674 | 0% |
| **Total renewable electricity (grid + non grid)** | **25,603** | **0** | **119%** |
| **Total grid electricity** | **21,566** | **0** | **119%** |
| **Total electricity (grid + non grid)** | **21,566** | **0** | **119%** |
| Percentage of residual electricity consumption under operational control | 100% | | |
| **Residual electricity consumption under operational control** | **-4,037** | **-3,674** | |
| Scope 2 | -3,594 | -3,270 | |
| Scope 3 (includes T&D emissions from consumption under operational control) | -444 | -404 | |
| **Residual electricity consumption not under operational control** | **0** | **0** | |
| Scope 3 | 0 | 0 | |

| | |
|---|---|
| **Total renewables (grid and non-grid)** | **118.72%** |
| **Mandatory** | **18.72%** |
| **Voluntary** | **100.00%** |
| **Behind the meter** | **0.00%** |
| **Residual scope 2 emissions (t $CO_2$-e)** | **-3.27** |
| **Residual scope 3 emissions (t $CO_2$-e)** | **-0.40** |
| **Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t $CO_2$-e)** | **0.00** |
| **Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t $CO_2$-e)** | **0.00** |
| **Total emissions liability (t $CO_2$-e)** | **0.00** |

*Figures may not sum due to rounding. Renewable percentage can be above 100%*

## Location-based approach summary

| Location-based approach | Activity Data (kWh) total | Under operational control | | | Not under operational control | |
|---|---|---|---|---|---|---|
| **Percentage of grid electricity consumption under operational control** | **100%** | **(kWh)** | **Scope 2 Emissions ($kgCO_2$-e)** | **Scope 3 Emissions ($kgCO_2$-e)** | **(kWh)** | **Scope 3 Emissions ($kgCO_2$-e)** |
| VIC | 21,566 | 21,566 | 17,037 | 1,510 | 0 | 0 |
| **Grid electricity (scope 2 and 3)** | **21,566** | **21,566** | **17,037** | **1,510** | **0** | **0** |
| VIC | 0 | 0 | 0 | 0 | | |
| **Non-grid electricity (behind the meter)** | **0** | **0** | **0** | **0** | | |
| **Total electricity (grid + non grid)** | **21,566** | | | | | |

| | |
|---|---|
| **Residual scope 2 emissions (t $CO_2$-e)** | **17.04** |
| **Residual scope 3 emissions (t $CO_2$-e)** | **1.51** |
| **Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t $CO_2$-e)** | **17.04** |
| **Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t $CO_2$-e)** | **1.51** |
| **Total emissions liability** | **18.55** |

## Operations in Climate Active buildings and precincts

| Operations in Climate Active buildings and precincts | Electricity consumed in Climate Active certified building/precinct (kWh) | Emissions (kg $CO_2$-e) |
|---|---|---|
| N/A | **N/A** | **N/A** |

*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 been 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 electricity product used | Electricity claimed from Climate Active electricity products (kWh) | Emissions (kg $CO_2$-e) |
|---|---|---|
| N/A | **N/A** | **N/A** |

*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 relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. 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 | Justification reason |
|---|---|
| N/A | 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 EMISSIONS BOUNDARY

## Excluded emission sources

The below emission sources have been assessed as not relevant to this organisation's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions.

2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.

3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.

4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.

5. **Outsourcing** 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.

## Excluded emissions sources summary

| Emission sources tested for relevance | Size | Influence | Risk | Stakeholders | Outsourcing | Justification |
|---|---|---|---|---|---|---|
| **N/A** | N/A | N/A | N/A | N/A | N/A | **Size:** N/A<br><br>**Influence:** N/A<br><br>**Risk:** N/A<br><br>**Stakeholders:** N/A<br><br>**Outsourcing:** N/A |

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