



# **PUBLIC DISCLOSURE STATEMENT**

**23 DEGREES COFFEE ROASTERS**

**ORGANISATION CERTIFICATION**


**FY2022–2023**

Australian Government  
**Climate Active  
Public Disclosure Statement**



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Melbourne Coffee Investments Pty Ltd t/a 23 Degrees Coffee Roasters
REPORTING PERIOD	1 July 2022 – 30 June 2023 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> 
	Tina Wendel Director 31/10/2023



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

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Version August 2023.



# 1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	20 tCO <sub>2</sub> -e
OFFSETS USED	100% VERs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Melbourne Coffee Investments Pty Ltd
TECHNICAL ASSESSMENT	N/A for small organisation certification

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## 2. CARBON NEUTRAL INFORMATION

### Description of certification

This carbon neutral certification is for the business operations of Melbourne Coffee Investments Pty Ltd t/a 23 Degrees Coffee Roasters, ABN 38 616 220 396.

### Organisation description

23 Degrees is a local coffee roaster in Melbourne's Bayside. We challenge ourselves daily to find new and more meaningful and sustainable ways of doing business. We are proud of the authentic relationships, we have with our remarkable coffee growers. As coffee roasters and stakeholders in the coffee supply chain, we are increasingly concerned about climate change and its impact on our coffee-growing communities.

Limiting climate change demands substantial and sustained reductions in greenhouse gas emissions from our human activities. And we at 23 Degrees recognise that we all have a role to play, a responsibility we take seriously.

Certified entity: Melbourne Coffee Investments Pty Ltd

ABN of certified entity: 38 616 220 396

Trading names: 23 Degrees Coffee Roasters

23 Degrees is located at 1 Belrose Avenue, Cheltenham, Victoria, 3192

## 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
- Electricity
- Accommodation
- Carbon neutral products and services
- Cleaning and chemicals
- Food
- ICT services and equipment
- Professional services
- Land and sea transport
- Office equipment and supplies
- Postage, courier and freight
- Refrigerants
- Transport (air)
- Transport (land and sea)
- Waste
- Water

### Non-quantified

### Optionally included

## Outside emission boundary

### Excluded

Purchased products:

- Raw materials (green coffee)
- Packaging (coffee bags, labels, boxes)
- Wholesale brewing equipment

Capital goods (vehicle, roastery/production equipment)

Maintenance and repairs

Transportation of received goods

Consumption stage:

- Brewing of coffee (energy and water)
- Waste (spent coffee grounds, packaging)

## 4. EMISSIONS REDUCTIONS

### Emissions reduction strategy

We commit to

- Goal 1: Zero organic waste to landfill (chaff and disposed roasted beans)
- Goal 2: Install energy efficient equipment
- Goal 3: Utilise more solar power

### Emissions reduction actions

23 Degrees moved throughout December 2022 and January 2023 from a shared premise to a new (non-shared) premise.

#### **Goal 1: Zero organic waste to landfill (chaff and disposed roasted beans)**

We've implemented actions to divert organic waste from landfill to zero. All our chaff, which is a byproduct from roasting, is used in local gardens where it is used as mulch. Excess coffee beans we donate to local food organisations.

Timeframe: This is an ongoing initiative which we commenced in 2022.

#### **Goal 2: Install energy-efficient equipment**

As part of the moving to our new roasting premise, we've installed new energy-efficient roasting equipment that recirculates and reuses heated air, reduces in-between batch times and warm-up time, and has an integrated afterburner.

We've also invested in new energy-efficient coffee equipment which utilises an instant heating system with a unique insulation mechanism, that reduces energy consumption.

Timeframe: The move to more energy-efficient equipment coincided with the move into our new premise in 2022/2023.

#### **Goal 3: Use solar power**

As a first step toward using more solar power, we converted to a solar-powered hot water system and a solar-powered ventilation of the roastery.

Timeframe: We are reviewing our energy consumption throughout 2023/2024 to verify what further steps can be taken.

#### **Additional actions we took:**

1. Circular economy: Our green coffee arrive in our roastery packed in an inside liner that is made of plastic and

an outside bag made of hessian. The liners and the bags are re-used by a local horticulture and landscape business.

2. Refill option: We now invite customers to purchase coffee directly from the roastery. As part of our sustainability efforts, we are offering a discount to those customer who bring their used coffee bags for a refill or their own coffee container. This initiative aims to reduce packaging and waste, and we hope to encourage more people to adopt eco-friendly practices.



## 5. EMISSIONS SUMMARY

### Emissions over time

		Emissions since base year	
		Total tCO <sub>2</sub> -e (without uplift)	Total tCO <sub>2</sub> -e (with uplift)
Base year/Year 1:	2021–2022	18.44	19.36
Year 2:	2022–2023	18.23	19.14

### Significant changes in emissions

Emission source name	Previous year emissions (t CO <sub>2</sub> -e)	Current year emissions (t CO <sub>2</sub> -e)	Detailed reason for change
Electricity	1.2	1.87	Note A
Postage, Courier and Freight	5.2	4.04	Note B
Stationary energy (gaseous fuel)	1.57	2	Note C
ICT	1.07	1.9	Note D

#### Note A

Despite installing a new energy efficient coffee roaster, and a solar powered hot water system and solar powered ventilation, our emission for electricity increased from 2021/2022 to FY2022/2023 due to the following business reasons:

- After COVID, staff hours shifted from working from home to the roastery.
- We relocated the roastery from a shared premise to a new premise which is not shared.
- We included a retail space in our new roastery with additional floor space and additional opening hours.
- We are offering new services (Coffee tasting and Barista classes).
- We automated our packaging process which increased productivity.

#### Note B

Change in how Climate Active splits courier and postal services in inventory to calculate emissions.

#### Note C

We installed new roasting equipment that includes an integrated afterburner all operated from a single burner (using gas). Roasting coffee produces exhaust with an unpleasant aroma as a byproduct. An afterburner burns off that air and minimises odour.

Note D

In FY2022/2023 we migrated our eCommerce store to a new platform and engaged an external agency for support. The additional costs are reflected in the increased emissions attributed to the ICT category. We expect these emissions to reduce in FY 2023/2024.

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

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

## Emissions summary

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

Emission category	Sum of Scope 1 (t CO2-e)	Sum of Scope 2 (t CO2-e)	Sum of Scope 3 (t CO2-e)	Sum of Total Emissions (t CO2-e)
Accommodation and facilities	0.00	0.00	0.00	0.00
Cleaning and chemicals	0.00	0.00	0.04	0.04
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	1.72	0.14	1.87
Food	0.00	0.00	0.00	0.00
Horticulture and agriculture	0.00	0.00	0.00	0.00
ICT services and equipment	0.00	0.00	1.90	1.90
Machinery and vehicles	0.00	0.00	0.00	0.00
Postage, courier and freight	0.00	0.00	4.04	4.04
Products	0.00	0.00	0.00	0.00
Professional services	0.00	0.00	0.26	0.26
Refrigerants	0.00	0.00	0.00	0.00
Roads and landscape	0.00	0.00	0.00	0.00
Stationary energy (gaseous fuels)	1.86	0.00	0.14	2.00
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	0.00	0.00
Transport (land and sea)	5.71	0.00	1.45	7.16
Waste	0.00	0.00	0.11	0.11
Water	0.00	0.00	0.02	0.02
Working from home	0.00	0.00	0.20	0.20
Office equipment and supplies	0.00	0.00	0.63	0.63
<b>Total</b>	<b>7.56</b>	<b>1.72</b>	<b>8.94</b>	<b>18.23</b>

## 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 <sub>2</sub> -e
Compulsory additional 5% of the total to be added for small organisations	
Total of all uplift factors	0.91
<b>Total emissions footprint to offset</b> <i>(total emissions from summary table + total of all uplift factors)</i>	<b>19.14</b>

## 6. CARBON OFFSETS

### Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emission to offset is 19.4 t CO<sub>2</sub>-e. The total number of eligible offsets used in this report is 20. Of the total eligible offsets used, 20 were previously banked and 0 were newly purchased and retired. 9 are remaining and have been banked for future use.

### Co-benefits

We have chosen to offset the carbon emissions we can not reduce through the Kenya Biogas program:

Domestic biodigesters provide a way for households with livestock to reduce their dependence on polluting firewood and expensive fossil fuels. Cooking on biogas is fast and smokeless, improving family health, especially among women and children. Leftover slurry from the biogas process is an excellent organic fertilizer that improves crop yields – and having more vegetables to sell, provides families with extra income.

## Eligible offsets retirement summary

Offsets retired for Climate Active carbon neutral certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (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 (%)
African Biogas Carbon Programme (ABC) - Kenya - VPA001	VER	GSF Registry	07/10/2022	GS1-1-KE-GS5801-4-2019-18942-848-877 <a href="https://goldstandard.org">GSF Registry (goldstandard.org)</a>	2019		30	1	9	20	100%
<b>Total eligible offsets retired and used for this report</b>										20	
<b>Total eligible offsets retired this report and banked for use in future reports</b>										9	

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Emissions Reductions (VERs)	20	100%

## 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 **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%
<b>Total non-grid electricity</b>	<b>0</b>	<b>0</b>	<b>0%</b>
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)	381	0	19%
Residual Electricity	1,648	1,573	0%
<b>Total renewable electricity (grid + non grid)</b>	<b>381</b>	<b>0</b>	<b>19%</b>
<b>Total grid electricity</b>	<b>2,029</b>	<b>1,573</b>	<b>19%</b>
<b>Total electricity (grid + non grid)</b>	<b>2,029</b>	<b>1,573</b>	<b>19%</b>
Percentage of residual electricity consumption under operational control	100%		
<b>Residual electricity consumption under operational control</b>	<b>1,648</b>	<b>1,573</b>	
Scope 2	1,455	1,390	
Scope 3 (includes T&D emissions from consumption under operational control)	193	184	
<b>Residual electricity consumption not under operational control</b>	<b>0</b>	<b>0</b>	
Scope 3	0	0	

<b>Total renewables (grid and non-grid)</b>	<b>18.80%</b>
<b>Mandatory</b>	<b>18.80%</b>
<b>Voluntary</b>	<b>0.00%</b>
<b>Behind the meter</b>	<b>0.00%</b>
<b>Residual scope 2 emissions (t CO2-e)</b>	<b>1.39</b>
<b>Residual scope 3 emissions (t CO2-e)</b>	<b>0.18</b>
<b>Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)</b>	<b>1.39</b>
<b>Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)</b>	<b>0.18</b>
<b>Total emissions liability (t CO2-e)</b>	<b>1.57</b>

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 (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	2,029	2,029	1,725	142	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	0	0	0	0	0	0
TAS	0	0	0	0	0	0
<b>Grid electricity (scope 2 and 3)</b>	<b>2,029</b>	<b>2,029</b>	<b>1,725</b>	<b>142</b>	<b>0</b>	<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	0	0	0	0		
<b>Non-grid electricity (behind the meter)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Total electricity (grid + non grid)</b>	<b>2,029</b>					

Residual scope 2 emissions (t CO2-e)	1.72
Residual scope 3 emissions (t CO2-e)	0.14
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	1.72
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.14
<b>Total emissions liability (t CO2-e)</b>	<b>1.87</b>

# 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
None	

# 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.

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Purchased products (raw material - green coffee)	Y	N	N	N	N	<p><b>Size:</b> Large emission in the life cycle assessment from cradle to grave.</p> <p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
Purchased products (product packaging)	N	N	N	N	N	<p><b>Size:</b> Not significant</p> <p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
Capital goods (roasting equipment, vehicles)	N	N	N	N	N	<p><b>Size:</b> Not significant. Once off.</p> <p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p>

						<p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
						<p><b>Size:</b> Not significant.</p>
Repairs and maintenance	N	N	N	N	N	<p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
						<p><b>Size:</b> Not significant.</p>
Upstream transportation and distribution	N	N	N	N	N	<p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
						<p><b>Size:</b> Large emission in the life cycle assessment from cradle to grave.</p>
Use of sold products (brewing of coffee)	Y	N	N	N	N	<p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p> <p><b>Risk:</b> 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.</p> <p><b>Stakeholders:</b> Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.</p> <p><b>Outsourcing:</b> We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.</p>
						<p><b>Size:</b> Not significant.</p>
End-of-life treatment of sold products (spent)	N	N	N	N	N	<p><b>Influence:</b> We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our business.</p>

coffee grounds,  
packaging)

**Risk:** 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:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business.

**Outsourcing:** We have not previously undertaken this activity within our emissions boundary and comparable organisations do not typically undertake this activity within their boundary.



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