



PUBLIC DISCLOSURE STATEMENT

KEITH TULLOCH WINE

ORGANISATION CERTIFICATION

FY2022–23

Australian Government
Climate Active
Public Disclosure Statement




KEITH TULLOCH
FAMILY OWNED — HUNTER VALLEY — FAMILY OWNED



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Keith Tulloch Wine
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> <p><i>Signature here</i></p> 
	<p>Name of signatory AUSDAIR TULLOCH Position of signatory OPERATIONS MANAGER Date 8/5/24</p>



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

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Version August 2023.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	209 tCO ₂ -e
OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Pangolin Associates
TECHNICAL ASSESSMENT	18/12/2023 Mylene Turban Pangolin Associates Next technical assessment due: FY2026

Contents

1. Certification summary	3
2. Carbon neutral information	4
3. Emissions boundary	6
4. Emissions reductions	8
5. Emissions summary	9
6. Carbon offsets	11
7. Renewable Energy Certificate (REC) Summary	13
Appendix A: Additional Information	14
Appendix B: Electricity summary	15
Appendix C: Inside emissions boundary	18
Appendix D: Outside emissions boundary	19

2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the financial year from 1 July 2022 to 30 June 2023 and covers the Australian business operations of Keith Tulloch Wine, ABN 61076486363.

The operational boundary has been defined based on an operational control test, in accordance with the principles of the National Greenhouse and Energy Reporting Act 2007. This includes the following location:

- 989 Hermitage Road Pokolbin NSW 2320

This certification only covers the Australian business operations of Keith Tulloch Wine. Wines sold to customers by Keith Tulloch Wine is covered by a separate Product Public Disclosure Statement, found [here](#).

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- Climate Active Standards
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with "Method 1" from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). These have been expressed as carbon dioxide equivalents (CO₂-e) using relative global warming potentials (GWPs).

Organisation description

Keith Tulloch Wine, ABN 61076486363, was founded in 1997 by Keith and Amanda Tulloch, who continue to own and operate the business today, along with their children Jessica and Alisdair and their loyal team members. The business encompasses grape growing, winemaking, administration, and sales.

The business of grape growing covers two sites in the central Pokolbin district of the Hunter Valley, with the 'Field of Mars' vineyard on Hermitage Road and the 'Latara' Vineyard on Deasys Road. These vineyards were established in 1968 and 1978 respectively; working with and caring for this old-vine resource requires us to work in a forward-thinking, sustainable way. Inputs and decisions may not see immediate results, and decisions are made to produce the best quality of grapes not only for the upcoming harvests, but for future generations.

The winemaking element of Keith Tulloch Wine is entirely conducted on the 'Field of Mars' property, along with the administrative and sales buildings. The winery features the capability to crush, ferment and age 150-200 tons of grapes each year, resulting in 12,000-15,000 dozen bottles. A vast majority of this is wine produced under the 'Field of Mars', 'Keith Tulloch' or 'PERDIEM' labels and sold at the tasting room or local and domestic wholesale. A small percentage of this production is for contract winemaking, where wines are produced for other local grape growers or winemakers.

The sales element is a large part of the operation, with an expansive tasting room that overlooks our vineyards on the same property. Here the wines are sampled by customers, as many as 100+ per day, and tastings are conducted with seated tastings where wines are brought to the table by tasting

Another element of sales occurs in administration, where direct sales are made via the wine club manager and her assistant. The administrative part of the business, including the wine club, events, and management. Sales are also conducted offsite with tastings for domestic and international trade, which may require travel for the presentation of samples and to secure deals.

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 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

Diesel used in company cars
LPG gas
Stationary diesel fuel
CO2 gas
Natural gas
Refrigerant gases
Business flights
Hotel accommodation
Waste
Recycling
Wastewater treatment (electricity used)
Food products
Repairs & maintenance
Equipment leasing
Postage & courier
Taxis and rideshare
Printing & stationery
Chocolate & cheese
Office equipment leasing
Cleaning services
Telephone & internet
Motor vehicle repairs & maintenance
Equipment repairs & maintenance
Wine making equipment
Staff commute
Gifts
Computer software
Marketing & Promotion
Insurance
Conferences
Tasting room and wine club events

Non-quantified

Water Use

Outside emission boundary

Excluded

Wines sold through the tasting room

Wines sold to customers in Australia or overseas

Freight distributing wines to customers

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Keith Tulloch Wine commits to reduce total scope 1 emissions from the business by 50% by 2030 compared to a 2022 baseline. This will be achieved through the following measures:

- Improve scope 1 emissions calculations by measuring the volume of fuel purchased each year instead of reporting the total expense on fuel.
- Purchasing a suitable electric tractor and car to perform site work at the winery and site visit instead of using the diesel-powered car and tractor.
- Phase out the use of LPG powered tool.

Keith Tulloch Wine commits to continue reducing their scope 3 emissions. This will be achieved through the following measures:

- Engage our service suppliers (advertising, repair, business services, IT equipment) to provide more accurate greenhouse gas emissions metrics and encourage them to provide carbon neutral services and products.
- Improve the quantification of the emissions generated by the wine show functions we organise by quantifying the quantity and type of foods consumed during those events, as well as the other material expenses.

Emissions reduction actions

None to report.

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:	2017–18	375.71	375.71
Year 2:	2019–20	156.08	156.08
Year 3:	2020–21	258.04	258.04
Year 4:	2021-22	129.02	129.02
Year 5:	2022-23	208.05	208.05

Overall emissions have increased due to business development.

Significant changes in emissions

Total emissions increased by 10% compared to FY2022. This year's inventory included a significant spent on industrial equipment, which is not a recurring year-on-year expense. There was also an increase of spent in third party service including advertising. Total diesel consumption increased significantly due to the increase of wine produced this year.

Emission source name	Previous year emissions (t CO ₂ -e)	Current year emissions (t CO ₂ -e)	Detailed reason for change
Diesel (Transport)	38.16	60.14	Increased activity due to business growth.

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

Certified brand name	Product/Service/Building/Precinct used
Powershop	Electricity

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 (tCO ₂ -e)	Sum of scope 2 (tCO ₂ -e)	Sum of scope 3 (tCO ₂ -e)	Sum of total emissions (t CO ₂ -e)
Accommodation and facilities	0.00	0.00	3.17	3.17
Cleaning and chemicals	0.00	0.00	1.64	1.64
Climate Active carbon neutral products and services	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00
Food	0.00	0.00	4.82	4.82
ICT services and equipment	0.00	0.00	3.01	3.01
Machinery and vehicles	0.00	0.00	38.49	38.49
Postage, courier and freight	0.00	0.00	1.44	1.44
Products	0.00	0.00	2.34	2.34
Professional services	0.00	0.00	10.60	10.60
Refrigerants	1.03	0.00	0.00	1.03
Stationary energy (gaseous fuels)	0.10	0.00	0.03	0.13
Transport (air)	0.00	0.00	38.58	38.58
Transport (land and sea)	51.39	0.00	40.62	92.00
Waste	0.00	0.00	6.96	6.96
Office equipment and supplies	0.00	0.00	3.82	3.82
Total emissions	52.52	0.00	155.53	208.05

Uplift factors

n/a

6. CARBON OFFSETS

Offsets retirement approach

This certification has taken in-arrears offsetting approach. The total emission to offset is 209 t CO₂-e. The total number of eligible offsets used in this report is 209. Of the total eligible offsets used, 0 were previously banked and 209 were newly purchased and retired. 0 are remaining and have been banked for future use.

Co-benefits

Allain Duhangan Hydroelectric Project (ADHP) proposed by AD Hydro Power Ltd. (ADPL) is a run-of-the-river 192 MW hydro power project at the confluence of Allain & Duhangan rivulets at Pirni village in Manali town of Kullu district in Himachal Pradesh state of India.

The project has the following co-benefits:

Social well-being:

The project is implemented in a rural area that does not have proper roads and other infrastructure facilities. The project activity would augment infrastructural development like roads etc. in the area, thus benefitting local communities. The project activity would lead to enhanced direct and indirect employment opportunities at all levels from unskilled to skilled workers.

Economic well-being:

The project activity involves capital investments, thus leading to the overall development of the region. The project activities would also lead to enhanced business opportunities for local stakeholders like consultants, suppliers, manufacturers, contractors etc. All this would lead to improved financial security and overall development of the region.

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 ₂ -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 (%)
Allain Duhangan Hydroelectric Project	VCU	Verra	11 Jan 2024	9566-108986570-108986777-VCS-VCU-997-VER-IN-1-2026-01012018-31122018-0	2018	0	208	0	0	208	99%
Allain Duhangan Hydroelectric Project	VCU	Verra	15 Jan 2024	9566-108987592-108987592-VCS-VCU-997-VER-IN-1-2026-01012018-31122018-0	2018	0	1	0	0	1	1%
Total eligible offsets retired and used for this report										209	
Total eligible offsets retired this report and banked for use in future reports										0	
Type of offset units		Eligible quantity (used for this reporting period)					Percentage of total				
Verified Carbon Units (VCUs)		209					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 (Fully carbon neutral).

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	48,424	0	32%
Total non-grid electricity	48,424	0	32%
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)	0	0	0%
Residual Electricity	102,950	98,317	0%
Total renewable electricity (grid + non grid)	48,424	0	32%
Total grid electricity	102,950	98,317	0%
Total electricity (grid + non grid)	151,374	98,317	32%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	102,950	98,317	
Scope 2	90,917	86,826	
Scope 3 (includes T&D emissions from consumption under operational control)	12,033	11,492	
Residual electricity consumption not under operational control	0	0	
Scope 3	0	0	

Total renewables (grid and non-grid)	31.99%
Mandatory	0.00%
Voluntary	0.00%
Behind the meter	31.99%
Residual scope 2 emissions (t CO₂-e)	86.83
Residual scope 3 emissions (t CO₂-e)	11.49
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	0.00
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	0.00
Total emissions liability (t CO₂-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	
		(kWh)	Scope 2 Emissions (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)	(kWh)	Scope 3 Emissions (kgCO ₂ -e)
Percentage of grid electricity consumption under operational control	100%					
NSW	102,950	102,950	75,154	6,177	0	0
Grid electricity (scope 2 and 3)	102,950	102,950	75,154	6,177	0	0
NSW	48,424	48,424	0	0		
Non-grid electricity (behind the meter)	48,424	48,424	0	0		
Total electricity (grid + non grid)	151,374					

Residual scope 2 emissions (t CO ₂ -e)	75.15
Residual scope 3 emissions (t CO ₂ -e)	6.18
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	0.00

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
<p><i>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.</i></p>		

Climate Active carbon neutral electricity products

Climate Active carbon neutral product used	Electricity claimed from Climate Active certified products (kWh)	Emissions (kg CO ₂ -e)
Powershop	102,950	0
<p><i>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.</i></p>		

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
Water use	Immaterial

Data management plan for non-quantified sources

Water used in the tasting room and in operation of the winery has been non-quantified as is has been estimated to be immaterial. However, total water use in wine production and tasting room operations has been quantified in the product carbon footprint and discussed in the public disclosure document for the Climate Active product certification.

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an 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.

Freight of product to customers, wines sold from the tasting room and to customers in Australia and overseas have been excluded. But those activities are reported as part of separate product certification and product public disclosure statement.



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