



PUBLIC DISCLOSURE STATEMENT

MAROONDAH CITY COUNCIL

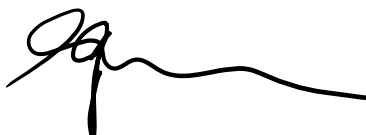
ORGANISATION CERTIFICATION

TRUE-UP: FY2023–24

PROJECTION: FY2024–25

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	Maroondah City Council
REPORTING PERIOD	True-up: 1 July 2023 – 30 June 2024 Projection: 1 July 2024 – 30 June 2025
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>Steve Kozlowski Chief Executive Officer 6 January 2025</p>



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

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Version 9.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	True-up: 7,801 tCO ₂ -e Projection: 7,801 tCO ₂ -e Total: 7,801 tCO ₂ -e
CARBON OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	94%
CARBON ACCOUNT	Prepared by: Maroondah City Council
TECHNICAL ASSESSMENT	Date: 7/1/2022 Organisation: Pangolin Associates Next technical assessment due: FY 2025/26

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2. CERTIFICATION INFORMATION

Description of organisation certification

This carbon neutral certification applies to the Maroondah City Council organisational corporate emissions. An operational control approach has been used when determining the emissions sources in the emissions boundary. This Public Disclosure Summary is a projection for the 2024/25 period including true up from the 2023/24 period.

Organisation description

The City of Maroondah covers a land area of 61.4 square kilometres in Melbourne's outer east and is located 22 kilometres from the Central Business District. The area is a developed residential municipality, with an estimated population of 117,434 residents and 44,167 households, with an average of 2.66 people per household ([Maroondah City Council Annual Report 2023-24](#))

Maroondah includes the suburbs of: Bayswater North, Croydon, Croydon Hills, Croydon North, Croydon South, Heathmont, Kilsyth South, Ringwood, Ringwood East, Ringwood North and Warranwood. The city also includes small sections of Kilsyth, Park Orchards, Vermont and Wonga Park.

Maroondah City Council (Council) (ABN 98 606 522 719) provides services to the community within the City of Maroondah. The role of a Council is defined in the Local Government Act 2020, which formalises a Council's legal status, purpose, and objectives; delegates Council with specific functions and powers; and imposes Council with various duties.

The municipality is divided into nine wards: Barnggeong, Bungalook, Jubilee, McAlpin, Tarralla, Wicklow, Wombolano, Wonga and Yarrunga. Each ward is represented by one Councillor. Councillors are responsible for the stewardship and governance of Council. The nine Councillors are the elected representatives of all residents and ratepayers across the City.

Within the framework of strong strategic leadership, the position of the Chief Executive Officer (CEO) is established by the Local Government Act 2020, to oversee the day-to-day management of Council operations.

At Maroondah City Council, the CEO, together with four Directors (Assets & Leisure, Chief Financial Officer, People & Places, Strategy & Development), form the Corporate Management Team (CMT) and lead the organisation. CMT is supported by Service Area Managers and employees with specialist skills to develop, implement, manage, and deliver the operational and administrative activities required to meet the needs, priorities and expectations of the community. There are 1,212 employees (504.53 EFT) including 15 service area Managers that work to deliver high quality outcomes that respond to the priorities of the local community. The following chart details the organisational structure of Maroondah City Council as of 30 June 2024.





Figure 1: Boundary map of the City of Maroondah

Council operates administrative functions from the following main locations:

- Realm (including Council Chambers) - 179 Maroondah Highway, Ringwood
- Operations Centre - 24-28 Lincoln Road, Croydon
- Croydon Service Centre - Croydon Library, Civic Square, Croydon

Maroondah is home to 653 hectares of open space in the form of reserves, conservation areas, regional parks, trails, sporting fields, neighbourhood parks, recreational open space and more. The city has 578 parks and reserves with 53 sporting ovals, two golf courses, 131 public playgrounds, three skate areas, and five outdoor exercise equipment locations. Over 120 different services are provided by Council including: aged and disability support services, business support, community planning and development, children and youth services, infrastructure maintenance and renewal, leisure and sporting facilities, maternal and child health, parks and reserves, planning and building, drainage, roads and footpaths, and waste and recycling.

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.

Emissions boundary for FY2023-24 (true-up)

Inside emissions boundary		Outside emission boundary
<p><u>Quantified</u></p> <ul style="list-style-type: none"> Accommodation and facilities Cleaning and Chemicals Electricity Food ICT services and equipment Professional services Office equipment and supplies Postage, courier, and freight Products Stationary energy (gaseous and liquid fuels) Transport (air) Transport (land and sea) Operational waste Water Working from home 	<p><u>Non-quantified</u></p> <ul style="list-style-type: none"> Refrigerants Contractor fuels (non- waste collection services) Asphalt <p><u>Optionally included</u></p> <ul style="list-style-type: none"> Food (dairy products, beers, non - alcoholic beverages, spirits) ICT services and equipment (Telecommunications) Products (Clothing, Signage) Professional Services (education, entertainment, subscription & periodicals) Stationary Energy (LPG) Contractor fuel (waste collection services) Operational waste (Recycling) 	<p><u>Excluded</u></p> <p>N/A</p>

Ongoing data management improvements have resulted in the identification of additional emissions sources for the 2023-24 FY true-up report. These emission sources have been included in Council's emissions boundary, as shown in the table above.

Emissions boundary for FY2024-25 (projection)

For the projected 2024-25 FY, the emissions boundary remains the same as the true-up emissions boundary provided on the previous page.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Council's Carbon Neutral Strategy sought to achieve a planned, systematic and supported approach to carbon management by fostering collaboration and ownership of its principles and actions across Council departments, and by mapping a path to carbon neutrality. The Strategy aimed to embed low carbon considerations into decision-making processes. Further it provided a process for a carbon reduction program built on continual review and improvement, following the carbon reduction hierarchy of avoid, reduce, replace and offset.

The Strategy set the following relevant targets:

- 20% emissions reduction below 2010/11 levels by 2020/21 (excluding Aquanation)
- 20% emissions reduction below 2010/11 levels by 2025/26 (all emissions)

Maroondah has been certified a "Carbon Neutral Organisation" by Climate Active, for its operations since 2019, meeting one of the outcomes proposed by Council's "Carbon Neutral Strategy and Action Plan 2014-2021".

Council now proposes to continue to reduce the carbon intensity of its services and operations. Council is currently working on a new Climate Change Plan to guide Council on its journey to carbon neutrality. The new plan will replace our existing Carbon Neutral Strategy and the Climate Change Risk and Adaptation Strategy, providing a holistic approach to both maintaining our carbon neutrality and reducing our reliance on carbon offsets, as well as managing the predicted impacts of climate change. The Climate Change Plan will provide guidance on climate adaptation and mitigation priorities and provide a roadmap to keep Council on track to carbon neutrality over the coming years, in partnership with the Maroondah community.

This commitment to act on climate change by the development and implementation of a new Climate Change Plan, aligns with the Maroondah 2040 Community Vision: Working toward a clean green and sustainable community, priorities articulated in the Council Plan 2021-2025 and Council's new Sustainability Strategy 2022-2031.

Council's Sustainability Strategy 2022-2031 details a vision for an environmentally, socially and economically sustainable Maroondah. The Strategy includes six outcome areas and associated key directions to lead Council's actions towards a more sustainable Council and Maroondah community. One of the outcome areas is Climate Change, with key directions including:

1. Undertake measures to reduce Council's carbon inventory to ensure its continued carbon neutrality status
2. Undertake advocacy and climate action through continued participation and hosting of the Eastern Alliance for Greenhouse Action (EAGA)
3. Adapt Council's practices to future climate scenarios

4. Further embed climate change thinking into Council projects, operations, planning and strategies, using climate science to act with urgency
5. Improve climate education across Council staff and the community

As part of development of the Climate Change Plan, a climate change risk assessment was completed in 2024, recognising the cross-Council impact of climate change on Council operations and services. Over the coming months, opportunities to address the risks will be identified and the actions will be included in the Plan. Council is also undertaking a technical assessment project to identify a range of opportunities to reduce Council's annual greenhouse gas emissions. The identified actions will also be included in the Climate Change Plan.

Emissions reduction actions

Council implemented the following emissions reductions actions in 2023/24 to reduce its emissions:

-The Victorian Energy Collaboration (VECO) project: Maroondah purchases electricity for small and large market sites from 100% renewable energy through VECO. This project allows Councils to source clean renewable energy generated from Victorian wind farms. VECO is the largest emissions reduction project ever undertaken by the local government sector in Australia. During this financial year, all of the Council's facilities (excluding streetlighting) have been supplied from 100% renewable energy. As part of VECO, Maroondah will retire one LGC (Large-scale Generation Certificate) for every MWh of energy consumed under the contract, including the mandatory surrendering to meet the Renewable Energy Target obligations. This commitment ensures that the electricity used by Council-owned facilities will be 100% carbon neutral under the market-based methodology.

-Solar on Council facilities: Over 1,400 kW of solar has been installed on Council facilities to supply electricity from renewable clean energy. During this reporting period, an additional 110 kW of solar capacity was installed across municipality. The Maroondah Sustainable Fund has also been used to support community solar projects and increase the uptake of solar PV on Council buildings leased by community groups.

-The Carbon Neutral Revolving Energy Fund: The Fund provides ongoing financial support for carbon reduction projects across Council. This enables Council to improve sustainability in Council's capital works. The fund provides up-front capital and will oversee the potential savings, demonstrate growth, success and long-term sustainability over time. For the last FY, the Fund has been spent on the installation of solar systems, HVAC and lighting upgrade projects across Council buildings.

-Replacement of inefficient streetlights with energy-efficient LED lighting is still in progress. This project aims to reduce carbon emissions, energy use and minimise the impacts of lighting on the environment. The majority of the Council-owned inefficient streetlights have now been replaced with LED lighting.

- Continue to implement ESD principals as outlined in the Council ESD policy, to reduce the environmental impacts throughout the planning, design, construction, operation and management of Council buildings, and infrastructure.

-Food Organics and Garden Organics service (FOGO): A range of initiatives have been undertaken as part of the Waste, Litter and Resource Recovery Strategy 2020-30, including rolling out the new FOGO service. The FOGO service successfully commenced in 2023 and will continue to reduce both the waste sent to landfill and the associated GHGs emissions.

5. EMISSIONS SUMMARY

Emissions over time

		Emissions over time	
		Total tCO ₂ -e (without uplift)	Total tCO ₂ -e (with uplift)
Base year/Year 1:	2019-20	17,968	18,866
Year 2:	2020-21	15,588	16,368
Year 3:	2021-22	15,267	16,031
Year 4:	2022-23	6,372	6,691
Year 5:	2023-24	7,214	7,575
Year 6:	2024-25	7,501	7,801

Significant changes in emissions for FY2023-24 (true-up)

N/A

Use of Climate Active carbon neutral products, services, buildings or precincts for FY2023-24 (true-up)

N/A

Emissions summary for FY2023-24 (true-up)

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

The previous report was a projection report using representative data to estimate the emissions for the reporting year. This table shows the differences between projected emissions and actual emissions.

Emission category	Projection		True-up		
	Total emissions (t CO ₂ -e)	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	1.02	0.00	0.00	2.30	2.30
Cleaning and Chemicals	132.45	0.00	0.00	133.93	133.93
Electricity	896.39	0.00	498.70	61.57	560.26
Food	274.36	0.00	0.00	239.23	239.23
ICT services and equipment	156.44	0.00	0.00	212.05	212.05
Office equipment & supplies	82.84	0.00	0.00	81.94	81.94
Postage, courier and freight	46.40	0.00	0.00	31.19	31.19
Products	0.00	0.00	0.00	15.15	15.15
Professional Services	180.36	0.00	0.00	546.53	546.53
Stationary Energy (gaseous fuels)	3,237.78	2,934.41	0.00	227.78	3,162.19
Stationary Energy (liquid fuels)	109.28	90.23	0.00	24.45	114.68
Transport (Air)	2.95	0.00	0.00	11.33	11.33
Transport (Land and Sea)	1,767.70	984.50	0.00	1,038.48	2,022.98
Waste	39.28	0.00	0.00	39.38	39.38
Water	349.47	0.00	0.00	389.80	389.80
Working from home	-62.39	0.00	0.00	-62.11	-62.11
Total projection emissions (tCO₂-e)	7,214.34				
Total true-up emissions (tCO₂-e)		4,009.13	498.70	2,993.01	7,500.83
Difference between projected and actual emissions			286.49 tCO₂-e		

Uplift factors for FY2023-24 (true-up)

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
Refrigerants	75
Contractor's fuel (non waste collection services)	150
Asphalt	75
Total of all uplift factors (tCO ₂ -e)	300
Total emissions footprint to offset (tCO₂-e) for true-up year <i>(total true-up emissions from summary table + total of all uplift factors)</i>	7,801

Emissions summary for FY2024-25 (projection)

It is assumed that emissions for the 2024/25 period will be consistent with the 2023/24 period as no significant operational changes are currently forecasted. This will be updated accordingly during 2024/25 reporting.

Uplift factors for FY2024-25 (projection)

Emissions in the next reporting period are projected to be the same as the actual (true-up) emissions from the last reporting period. It is assumed that uplift for the 2024/25 period will be consistent with the 2023/24 period.

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)	7,801	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
Wind based power generation by Panama Wind Energy Private Limited in Maharashtra, India	VCU	Verra Registry	25/11/2021	4984-206576065-206576279-VCU-029-MER-IN-1-1671-02042016-31122016-0	2016	215	0	0	215	2.76%
Vishnuprayag Hydro-electric Project (VHEP) by Jaiprakash Power Ventures Ltd.(JPVL)	VCU	Verra Registry	25/11/2021	10789-248616513-248618349-VCS-VCU-259-VER-IN-1-173-01012014-31122014-0	2014	1,837	641	0	1,196	15.33%

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
Bundled Solar Power Project by D.J. Malpani and Giriraj Enterprises	VCU	Verra Registry	25/11/2021	<u>5079-211271784-211271943-VCU-029-MER-IN-1-1670-01012017-25022017-0</u>	2017	160	0	0	160	2.05%
Wind based power generation by Panama Wind Energy Private Limited in Maharashtra, India	VCU	Verra Registry	25/11/2021	<u>4984-206576280-206576489-VCU-029-MER-IN-1-1671-02042016-31122016-0</u>	2016	210	0	0	210	2.69%
Electricity Generation through Wind Power by SRHHL	VCU	Verra Registry	16/09/2022	<u>13618-518312579-518317976-VCS-VCU-290-VER-IN-1-1217-10082016-31122016-0</u>	2016	5,398	0	0	5,398	69.20%
Electricity Generation through Wind Power by SRHHL	VCU	Verra Registry	16/09/2022	<u>13619-518317977-518324578-VCS-VCU-290-VER-IN-1-1217-01012017-31122017-0</u>	2017	6,602	0	5,980	622	7.97%

Co-benefits

Council has purchased some of its offsets from the following projects:

Renewable energy project (wind). The project will reduce GHG emissions by utilising wind to generate electricity. The project activity envisages the installation of 63 wind turbines, each with a capacity of 1.6MW, in the state of Maharashtra, India. The electricity generated by the project activity will be supplied to the regional grid. The project will also be contributing to the environmental, social and economic development of the region.

Renewable energy project (hydro-electric). This 400 MW project utilises water from the Alaknanda River, India. As the project generates electricity from renewable sources, it will reduce GHG emissions that would have been produced by supplying power to the grid using fossil fuels. It is important to note that currently, over 70% of the power in the northern grid of India is derived from fossil fuels.

Renewable energy project (solar). The purpose of this bundled project activity is to generate solar renewable energy source and to export the electricity to the regional grid system. The total installed capacity of the current project is 56.25 MW, which involves operation of solar power plants in the states of Tamil Nadu and Telangana in India. The proposed project activity will support development of renewable energy generation plants based on Solar PV technology in India and delivering electricity to the grid. The avoided GHG emissions is estimated at 93,000 t-CO₂e annually.

Renewable energy project (wind). The project involves installation of a total capacity of 4.95 MW in Tamilnadu, India. The generated renewable energy will be export to the grid and will reduce environmental impacts in this region. The project will also contribute to creating more jobs and supporting more development for the local communities.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

The following RECs have been surrendered to reduce electricity emissions under the market-based reporting method.

1. Large-scale Generation certificates (LGCs)*	6,886
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* LGCs in this table only include those surrendered voluntarily (including through PPA arrangements), and does not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

Project supported by LGC purchase	Project location	Eligible unit type	Registry	Surrender date	Accreditation code	Certificate serial number	Generation year	Fuel source	Quantity (MWh)
Murra Warra Wind Farm Stage 2	VIC, Australia	LGC	REC Registry	23 Feb 2024	WD00VC46	326853-329479	2023	Wind	2,627
Dundonnell Wind Farm	VIC, Australia	LGC	REC Registry	8 Aug 2024	WD00VC37	826914-831172	2023	Wind	4,259
Total LGCs surrendered this report and used in this report									6,886

APPENDIX A: ADDITIONAL INFORMATION

Screenshot of certificate surrender from Renewable Energy Certificate Registry

Offer ID: 8448

Surrender type: Voluntary

Number of certificates: 2,627 LGC(s)

Date of offer: 19/02/2024

Date of acceptance: 23/02/2024

Reason for voluntary surrender: Altruistic purposes

Surrender note: 2,627 LGC Certificates sourced from Murra Warra Wind Farm Stage 2 - VIC. To satisfy VECO MAROONDAH CITY COUNCIL 2023 Voluntary Requirements

Clean Energy Regulator note: Accepted

Certificates:

Accreditation code	Fuel source	Generation year	Creation year	Generator name	Generation state	Serial number range	Certificate quantity
WD00VC45	Wind	2023	2023	Murra Warra Wind Farm Stage 2 - VIC	VIC	326853-329479	2627

Screenshot of certificate surrender from Renewable Energy Certificate Registry

The Clean Energy Regulator has accepted the following voluntary surrender offer:

Account: Red Energy Pty. Limited

Offer ID: 9195

Surrender type: Voluntary

Number of certificates: 4,259 LGC(s)

Date of offer: 02/08/2024

Date of acceptance: 08/08/2024

Reason for voluntary surrender: Altruistic purposes

Surrender note: 4259 Certificates sourced from Dundonnell Wind Farm - VIC to satisfy H1 2024 voluntary requirements for VECO MAROONDAH CITY COUNCIL

Clean Energy Regulator note: Accepted 08/08/2024

Certificates:

Accreditation code	Fuel source	Generation year	Creation year	Generator name	Generation state	Serial number range	Certificate quantity
WD00VC37	Wind	2023	2023	Dundonnell Wind Farm - VIC	VIC	826914-831172	4259

Additional offsets retired for purposes other than Climate Active certification

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (tCO ₂ -e)	Purpose of retirement
LGCs surrender	CER	REC	Sep 2024	—	2024	210	Voluntary surrender for Council's large solar system



The Clean Energy Regulator has accepted the following voluntary surrender offer:

Account: Demand Manager Pty Ltd

Offer ID: 9616

Surrender type: Voluntary

Number of certificates: 210 LGC(s)

Date of offer: 18/09/2024

Date of acceptance: 26/09/2024

Reason for voluntary surrender: Altruistic purposes

Surrender note: Surrendered by Maroondah City Council for FY 2023/24

Clean Energy Regulator note: Accepted

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 the true-up reporting year, 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	1,050,477	0	10%
Total non-grid electricity	1,050,477	0	10%
LGC Purchased and retired (kWh) (including PPAs)	6,886,000	0	67%
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)	1,727,748	0	17%
Residual Electricity	615,674	560,263	0%
Total renewable electricity (grid + non grid)	9,664,224	0	94%
Total grid electricity	9,229,422	560,263	84%
Total electricity (grid + non grid)	10,279,899	560,263	94%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	615,674	560,263	
Scope 2	548,018	498,696	
Scope 3 (includes T&D emissions from consumption under operational control)	67,656	61,567	
Residual electricity consumption not under operational control	0	0	
Scope 3	0	0	

Total renewables (grid and non-grid)	94.01%
Mandatory	16.81%
Voluntary	66.99%
Behind the meter	10.22%
Residual scope 2 emissions (t CO₂-e)	498.70
Residual scope 3 emissions (t CO₂-e)	61.57
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	498.70
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO₂-e)	61.57
Total emissions liability (t CO₂-e)	560.26

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)
ACT	0	0	0	0	0	0
NSW	0	0	0	0	0	0
SA	0	0	0	0	0	0
VIC	9,229,422	9,229,422	7,291,243	646,060	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
Grid electricity (scope 2 and 3)	9,229,422	9,229,422	7,291,243	646,060	0	0
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	1,050,477	1,050,477	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	1,050,477	1,050,477	0	0		
Total electricity (grid + non grid)	10,279,899					

Residual scope 2 emissions (t CO ₂ -e)	7,291.24
Residual scope 3 emissions (t CO ₂ -e)	646.06
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	7,291.24
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e)	646.06
Total emissions liability	7,937.30

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	0	0
<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>		

Climate Active carbon neutral electricity products

Climate Active carbon neutral product used	Electricity claimed from Climate Active electricity products (kWh)	Emissions (kg CO ₂ -e)
N/A	0	0
<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>		

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	
	FY2023-24 True-up emissions boundary	FY2024-25 Projection emissions boundary
Refrigerants	Data unavailable but uplift applied	Data unavailable but uplift applied
Contractor's fuel (non-waste collection services)	Data unavailable but uplift applied	Data unavailable but uplift applied
Asphalt	Data unavailable but uplift applied	Data unavailable but uplift applied

Data management plan for non-quantified sources

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

Refrigerants: It is expected that at least a preliminary assessment of this emissions source can be undertaken to determine materiality. Further refinement of Council's Asset Management Register will allow the collection of refrigeration equipment information, including model information which currently lacking in the register for most of the equipment listed. The refrigerant type can then be assessed from manufacture's websites, and emissions factors determined.

Contractor fuel use for non-waste collection services: data for this emissions source is not yet available. To collect this data in the future, major contractors (such as the provision of horticulture, and minor works contracts) is required and will be requested to provide activity data related to annual fuel use for the provision of contract services. It may take a number of reporting periods to allow for accurate, complete emissions data from this source. These emissions will be reported as Scope 3 emissions in the future.

Asphalt: accurate data for this emissions source is not yet available. The data management plan will include assessing the materiality of the emissions source and collection of expenditure data in relation to asphalt used and consideration of the embodied emissions from these materials.

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

No emissions were excluded from Maroondah City Council's operational boundary.



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