



PUBLIC DISCLOSURE STATEMENT

CITY OF YARRA

ORGANISATION CERTIFICATION

FY2020–21

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	City of Yarra
REPORTING PERIOD	1 July 2020 – 30 June 2021 and 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>Michael Oke</i></p> <hr/> <p>Michael Oke Sustainability Unit Manager 11/10/21</p>



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

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Version September 2021. To be used for FY20/21 reporting onwards.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	4,635 tCO ₂ -e
OFFSETS BOUGHT	100% VCUs
RENEWABLE ELECTRICITY	100%
TECHNICAL ASSESSMENT	25 October 2021 Ajit Padbidri - Senior Manager, Climate Strategies South Pole Next technical assessment due: 2023/24

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2. CARBON NEUTRAL INFORMATION

Description of certification

The Australian business operations of Yarra City Council (ABN 98 394 086 520) is the subject of this carbon neutral certification as defined by the Organisational and Operational boundaries detailed on the following pages and reflected in the graphic titled Diagram of Certification Boundary (**Figure 1**).

Organisation description

The City of Yarra (ABN 98 394 086 520) - an inner metropolitan municipality of Melbourne, Victoria, was originally formed in June 1994 and is home to a diverse community of approximately 100,000 people. The municipality is 19.5 square kilometres.

As an organisation, Yarra City Council has a total capital and operating budget of \$197.36 million, which is used to deliver a wide range of community services and maintain essential community infrastructure.

Council's service delivery includes:

- Care for aged residents and/or residents with a disability
- Meal on Wheels
- Collection of domestic rubbish and recycling
- Footpath and road resurfacing
- Operation of 5 libraries, 3 leisure centres and a golf course
- Family and Children Services
- Maintenance of parks and gardens and street trees
- Construction of new community assets and redevelopment and maintenance of existing community assets

“Responding effectively to the climate emergency requires a collective effort across all levels of government, businesses and the community. As a council one of the key roles we play is operating as a carbon neutral organisation, rapidly reducing carbon emissions from our own operations prior to purchasing carbon offsets.”

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 or precinct'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.



Figure 1: City of Yarra’s Certification Boundary

Data management plan for non-quantified sources

The data management plan below in **Table 3** outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

Table 3		
Non quantified emission sources	Data management plan to quantify these sources	To be completed by the required reporting year
Oils and Lubricants purchased via third parties (Contractors)	Seek to expand data collected from relevant contractors (currently only fuels) to determine quantities of oil and lubricants which can be attributed to Yarra Council activities.	2021/22
Contractor electricity and gas	Seek to expand data collected from relevant contractors (currently only fuels) to determine quantities of electricity and gas which can be attributed to Yarra Council activities.	2021/22
Roadworks materials (i.e. concrete)	Seek to identify if there are any roadwork materials (i.e. concrete) which could be a material emissions source. Seek to quantify any relevant emissions sources.	2021/22
Non-contestable electricity accounts (i.e. not billed based on consumption)	Seek to quantify electricity usage from accounts which are not based on utility usage. These include a small number of ‘non-contestable’ security area lights in public spaces and some irrigation accounts.	2021/22
Employee commuting (except those commuting in a fleet vehicle)	Seek to collect data on staff commute profile.	2022/23

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Climate Emergency Plan (endorsed) and Carbon and Energy Management Plan (draft)

Yarra City Council is one of the first Council's in Australia to endorse a [Climate Emergency Plan](#) (CEP) (2020), the second of its kind in Australia. The plan provides the overall strategic direction for reducing Yarra Council's reliance on fossil fuels and supporting the local community to take climate action.

Yarra's Climate Emergency Plan also aspires to achieve zero-net emissions across the entire Yarra community by 2030, while also ensuring the city is resilient to future pressures, such as those caused by extreme weather events.

Whilst the Climate Emergency Plan focuses on the whole municipality, including Council operations, we are currently developing the more-detailed 'Organisation zero by 2030 Roadmap' which focuses only on Council operations and builds on the commitments in the Climate Emergency Plan – with the key objective to work towards zero gross organisational emissions by 2030.

Some of the key actions which Council will take to reduce emissions are;

- Continue purchasing 100% renewable electricity through our award-winning [Melbourne Renewable Energy Project](#) 10-year power purchase agreement;
- Upgrade air-conditioning plant with higher efficiency units. This has reduced energy consumption as well as reducing fugitive emissions from older, leaky, appliances.
- Significant work to transition of buildings off gas to all-electric, including aquatic centres – powered by Council's 100% renewable energy;
- Working towards transitioning our entire vehicle fleet to zero emissions vehicles by 2025, noting we already have several electric passenger vehicles and leading in the space of electric trucks;
- Working with our contractors who deliver our kerbside waste collections (heavy vehicles) to transition to zero emissions vehicles before 2030;
- Maximising solar installations on our buildings, including those used by community groups;
- Assessing, and implementing where valuable, innovative and cutting-edge building automation including artificial intelligence software to optimise energy efficiency;
- Upgrading all our streetlights to high efficiency LED, with smart controls included on main roads. Although this will not directly reduce emissions, as our electricity is 100% renewable, this is an essential project to balance our electricity demand against the underlying increased demand from the electrification of our buildings and vehicle fleet. This one project is projected to result in a 25% reduction in our overall electricity consumption.

Emissions reduction actions

All the below projects and actions from City of Yarra's Climate Emergency Plan (CEP) were in progress during the 2020/21 reporting year.

CEP Action Number	Project Title	Action
2.3.3	PPA for large energy users	Supporting large energy using businesses to purchase renewable electricity including the potential for group Power Purchasing Agreements (PPA)
2.3.5	100% Renewable Yarra campaign	Including businesses in the '100% Renewable Yarra' campaign to promote and educate businesses about renewable electricity options
2.4.1	Solar on community buildings	Facilitating solar installations and the upgrade of buildings used by community groups, including assisting with access to financial support, such as government grants
2.6.1a	Get all buildings off gas - small sites	Progressively transitioning facilities off gas, focusing on: All sites with relatively simple gas systems (i.e. hot water systems and domestic-type heating) being transitioned off gas by the end of 2022 (30 of 38 sites)
2.6.1b	Get all buildings off gas - large sites	Sites with highly complex, building integrated gas systems (i.e. leisure centres and town halls) to be off gas by 2030 where feasible
2.6.2	Maximise solar installations	Ensuring all Council buildings' roof space is maximised with solar panels by the of end 2022, including: Provision for solar capacity beyond site electricity usage (where roof space allows) to feed additional renewable electricity into the grid Use of integrated battery storage where daytime electricity usage is low Investigating the use of micro-grids or other innovative technologies Provision of solar panels on community-used Council facilities
2.6.3	Energy efficiency and building optimisation	Implementing best-practice energy efficiency and building optimisation by: Utilising smart control and monitoring technologies to operate buildings at the highest possible energy and building performance standards

		Identifying and investing in priority building energy efficiency upgrades, and ensure energy efficiency outcomes are factored into all building project works
2.7.1	Main road light upgrades	Upgrading all main road lights to smart LED
2.7.3	Residential streetlights to upgrade	Reviewing residential streetlights to upgrade from T5 to LED when appropriate, based on emerging technology and management practices
4.4.1	Public-use electric vehicle charge points	Working with potential sites and providers to support the roll out of public-use electric vehicle charge points.
4.5	Electric and low emissions vehicles	Support the transition of Yarra Council's fleet to zero emission vehicles and low emissions vehicles including:
4.5.1	Switch vehicle fleet to EVs	Converting Council's entire fleet to zero emissions by 2025, subject to availability of suitable vehicles and charging infrastructure/capability
4.5.2	Switch diesel fleet to EVs	Converting Council's diesel fleet (i.e. tipper trucks) to electric as soon as possible
4.5.3	Switch bus fleet to EVs	Converting Council bus fleet to electric by 2023

5. EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO ₂ -e
Year 1 (Base year):	2011/12	14,462.0
Year 2:	2012/13	13,923.0
Year 3:	2013/14	13,947.0
Year 4:	2014/15	13,123.9
Year 5:	2015/16	12,787.2
Year 6:	2016/17	12,396.2
Year 7:	2017/18	11,988.0

Year 8:	2018/19	7,852.5
Year 9:	2019/20	5,147.3
Year 10:	2020/21	4,634.9

Significant changes in emissions

Emission source name	Current year (activity data)	Previous year (activity data)	Detailed reason for change
Diesel oil post-2004	553.64	611.89	COVID shutdown impacting both fleet consumption and contractor consumption.
Petrol / Gasoline post-2004	200.02	233.46	COVID shutdown impacting both fleet consumption and contractor consumption.
Natural Gas VIC (metro) (GJ)	32,440.21	33,830.31	Closure of co-generation plant plus COVID shutdown impacting corporate gas consumption, most significantly at our three leisure centres.
Water supply and wastewater treatment - Melbourne	165,312.60	169,620.04	COVID shutdown impacting corporate water consumption across large office sites and three leisure centres.

Use of Climate Active carbon neutral products and services

Council has contracted to purchase 100% of its electricity from renewable sources via our award-winning 10-year power purchase agreement (PPA) with Tango Energy and Pacific Hydro; the Melbourne Renewable Energy Project. 2019 was Council's first full year under this contract. We estimate that this saves approximately 6,500 tonnes of CO₂-e each year.

Council purchased 5,197.7 kg of the below certified carbon neutral paper products:

Paper Product	Total Weight (kg)

Australian Office Carbon Neutral 100% Recycled Copy Paper A4 80gsm White Carton 5 Reams	1,109.8
Officemax Copy Paper Carbon Neutral 100% Recycled 80 GSM A3 Ream 500 Box 3	359.3
Reflex Carbon Neutral 100% Recycled Copy Paper A3 80gsm White Carton 3 Reams	74.8
Reflex Carbon Neutral 100% Recycled Copy Paper A3 80gsm White Ream 500	29.9
Reflex Ultra White Carbon Neutral Copy Paper A4 80gsm White Carton 5 Reams	12.5
Tjindgami Carbon Neutral 100% Recycled Copy Paper A4 80gsm White Carton 5 Reams	24.9
Winc Carbon Neutral 100% Recycled Copy Paper A4 80gsm White Carton 5 Reams	3,404.3
Winc Carbon Neutral Copy Paper A3 80gsm White Carton 3 Reams	44.9
Winc Carbon Neutral Copy Paper A4 80gsm White Carton 5 Reams	137.2
Grand Total	5,197.7

Organisation emissions summary

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

Row Labels	Sum of Scope 1 (TCO2e)	Sum of Scope 2 (TCO2e)	Sum of Scope 3 (TCO2e)	Sum of Total Emissions (TCO2e)
Accommodation and facilities	-	-	0.17	0.17
Air Transport (fuel)	-	-	-	-
Air Transport (km)	-	-	0.17	0.17
E-waste / batteries	-	-	0.09	0.09
Carbon neutral products and services	-	-	-	-
Cleaning and Chemicals	-	-	-	-
Construction Materials and Services	-	-	194.38	194.38
Electricity	-	-	-	-
Food	-	-	-	-
Horticulture and Agriculture	-	-	-	-
ICT services and equipment	-	-	-	-
Land and Sea Transport (fuel)	1,985.49	-	102.64	2,088.13
Land and Sea Transport (km)	-	-	5.48	5.48
Machinery and vehicles	-	-	-	-
Office equipment & supplies	-	-	68.18	68.18

Postage, courier and freight	-	-	-	-
Products	-	-	-	-
Professional Services	-	-	-	-
Refrigerants	-	-	45.23	45.23
Roads and landscape	-	-	-	-
Stationary Energy	1,671.64	-	129.76	1,801.41
Waste	-	-	15.06	15.06
Water	-	-	416.61	416.61
Grand Total	3,657.13	-	977.76	4,634.89

6. CARBON OFFSETS

Offsets strategy

Offset purchasing strategy: In arrears

1. Total offsets previously forward purchased and banked for this report	0
2. Total emissions liability to offset for this report	4,634.89
3. Net offset balance for this reporting period	4,634.89
4. Total offsets to be forward purchased to offset the next reporting period	0
5. Total offsets required for this report	4,635

Co-benefits

100% of the offsets purchased relate to the installation of a waste biomass to energy cogeneration system at the textile unit of Gillanders Arbuthnot & Co. Ltd (GACL), Punjab, India.

The project involves the installation of a cogeneration plant comprising of one rice husk fired AFBC boiler with steam generation capacity of 34 TPH and a 6.5 MW multistage extraction-cum-condensing steam turbine generator. The project produces over 40 GWh of net electrical output per year, replacing electricity with an emissions intensity of 0.839 tCO₂e/ MWh.

Rice husk is renewable biomass as it is agricultural waste generated from local rice mills. The project and emission reductions are based on using 100% rice husk as a fuel.

Before the project, the textile unit's process steam requirements were met by a 3 TPH rice husk fired low pressure boiler and the electricity requirement was met by importing from the Indian electricity grid which is dominated by fossil fuel fired thermal power plants. The electricity generated by the cogeneration unit is not exported to the grid but only used for captive consumption of the textile unit. Emission reductions are only calculated based on the net electricity supplied to the textile unit and excludes any steam/ heat produced.

The project has opened business opportunities for direct and indirect businesses for technology provider, consultants, labour contractors, biomass suppliers, farmers and local villagers.

The project has generated employment for skilled and unskilled labourers to operate the power plant. It has also enhanced employment relating to the collection and transportation of biomass. It has also

provided farmers with an additional source of revenue.

The project has helped in the promotion of biomass cogeneration technology in the textile sector as well as enhancing the skill sets of people involved in the operation and maintenance of the plant.

The use of waste biomass instead of high carbon intensive fossil fuels contributes to a reduction of GHG emissions as well as helping reduce the SOX and NOx emissions associated with fossil fuel consumption for power generation.

Offsets summary

Proof of cancellation of offset units

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible quantity (tCO ₂ -e)	Quantity used for previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period claim	Percentage of total (%)
6.5 MW cogeneration project in Akbarpur, Punjab	VCU	Verra	8 October 2021	10775-247183177-247187811-VCS-VCU-290-VER-IN-1-1160-01012014-31122014-0	2014	4,635	0	0	4635	100%
Total offsets retired this report and used in this report									4635	
Total offsets retired this report and banked for future reports								0		
Type of offset units				Quantity (used for this reporting period claim)			Percentage of total			
Verified Carbon Units (VCUs)				4635			100%			

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)*	4,429
2. Other RECs	

* 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	Eligible units	Registry	Surrender date	Accreditation code (LGCs)	Certificate Tag	Certificate serial number	Generation year	Quantity (MWh)	Fuel source	Location
Crowlands Wind Farm	LGC	REC Registry	30th March 2021	WD00VC32	YarraCC VolQ4-20	227960-228411	2020	452	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2021	WD00VC32	YarraCC Vol Q4-20	226045-226545	2020	501	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2021	WD00VC32	YarraCC Vol Q3-20	147801-148913	2020	1113	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q1-21 Volunt	60826-60937	2021	112	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q1-21 Volunt	69736-69915	2021	180	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q1-21 Volunt	62139-62606	2021	468	Wind	VIC

Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q1-21 Volunt	63801-64106	2021	306	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q1-21 Volunt	57824-57842	2021	19	Wind	VIC
Crowlands Wind Farm	LGC	REC Registry	30th March 2022	WD00VC32	YarraCity Q2-21 Volunt	101936-103213	2021	1278	Wind	VIC
<i>Total LGCs surrendered this report and used in this report</i>								4,429		

APPENDIX A: ADDITIONAL INFORMATION

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a **market-based approach**

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.

Market Based Approach Summary			
Market Based Approach	Activity Data (kWh)	Emissions (kgCO ₂ e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	701,731	0	11%
Total non-grid electricity	701,731	0	11%
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	4,429,000	0	72%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,033,448	0	17%
Residual Electricity	-1,693	-1,816	0%
Total grid electricity	5,460,755	-1,816	89%
Total Electricity Consumed (grid + non grid)	6,162,486	-1,816	100%
Electricity renewables	6,164,179	0	
Residual Electricity	-1,693	-1,816	
Exported on-site generated electricity	257,634	-200,954	
Emission Footprint (kgCO ₂ e)		0	
<i>A minus Residual Electricity Emissions in kgCO₂e rounds to zero because the negative emissions can only be used to reduce electricity consumption emissions. See electricity accounting rules for further information</i>			
Total renewables (grid and non-grid)	100.03%		
Mandatory	16.77%		
Voluntary	71.87%		
Behind the meter	11.39%		
Residual Electricity Emission Footprint (TCO₂e)	0		

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

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Emissions (kgCO2e)
ACT	0	0
NSW	0	0
SA	0	0
Vic	5,460,755	5,952,223
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
Grid electricity (scope 2 and 3)	5,460,755	5,952,223
ACT	0	0
NSW	0	0
SA	0	0
Vic	701,731	0
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
Non-grid electricity (Behind the meter)	701,731	0
Total Electricity Consumed	6,162,486	5,952,223

Emission Footprint (TCO2e) 5,952

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
Enter product name/s here	0	0

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their Product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions have been assessed as relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable, but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Purchased Goods and Services (excluding Contractor fuel use, Asphalt, Paper)	Yes	No	No	N/A
Oils and Lubricants purchased via Third Parties	No	Yes	No	N/A
Redevelopment (of Buildings)	Yes	No	No	N/A
Non-contestable electricity	Yes	No	No	N/A
Outdoor Events	No	Yes	No	N/A
Contractor Electricity and Gas	No	Yes	No	N/A
Employee Commuting	No	Yes	No	N/A
Council-owned buildings leased to commercial or community groups	No	Yes	No	N/A
Investments	Yes	No	No	N/A

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct'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	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
Municipal waste	Yes	No	No	No	No	No
Community emissions	Yes	No	No	No	No	No



An Australian Government Initiative

