PUBLIC DISCLOSURE STATEMENT

CITY OF MELBOURNE

ORGANISATION CERTIFICATION
FY2021–22

Australian Government

Climate Active
Public Disclosure Statement

CITY OF MELBOURNE

An Australian Government Initiative

Climate Active

NAME OF CERTIFIED ENTITY	CITY OF MELBOURNE
REPORTING PERIOD	1 July 2021 – 30 June 2022 Arrears Report
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.*
	Alison Leighton Acting Chief Executive Officer

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

Version March 2022.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	11,134 tCO_2-e
OFFSETS BOUGHT	89% VCUs, 11% VERs
RENEWABLE ELECTRICITY	98.32% Renewable Electricity
TECHNICAL ASSESSMENT	October 2022 Tim Pittaway RSM Australia Next technical assessment due: FY2024-25

Contents

2. CARBON NEUTRAL INFORMATION

Description of certification

The City of Melbourne is certified carbon neutral for council operations. This certification covers all City of Melbourne facilities, as well as major contracts and services.

"City of Melbourne is committed to leading the community transition to a zero emissions city"

Organisation description

The City of Melbourne (ABN 55 370 219 287) , legally known as the Melbourne City Council, is one of 79 councils in Victoria operating as a public statutory body incorporated under the Victorian Local Government Act 1989.

The City of Melbourne sits at the heart of Greater Melbourne, the state capital of Victoria and is Australia's second largest city. The municipality covers 37.7 square kilometers, spanning the Melbourne city center and surrounding areas (see Figure 1), and has a residential population of 184,000.

As a local government authority, the City of Melbourne strives to achieve its community's vision of a bold, inspirational and sustainable city. To lead the city towards this vision, the City of Melbourne is focused on reducing its own environmental impact. In 2019, the City of Melbourne declared a climate and biodiversity emergency and amended its target to zero emissions for the municipality to 2040, ten years ahead of schedule. Actions to achieve this are set out in the City of Melbourne's Emissions Reduction Plan for our Operations 2021-2026. The Plan also outlines a commitment to maintain carbon neutrality for our operations.

The following subsidiaries / child companies are also included within this certification.

Legal entity name	ABN	ACN
CITYWIDE SERVICE SOLUTIONS PTY LTD	94 066 960 085	066 960 085
QUEEN VICTORIA MARKET PTY LTD	44 069 959 771	069 959 771

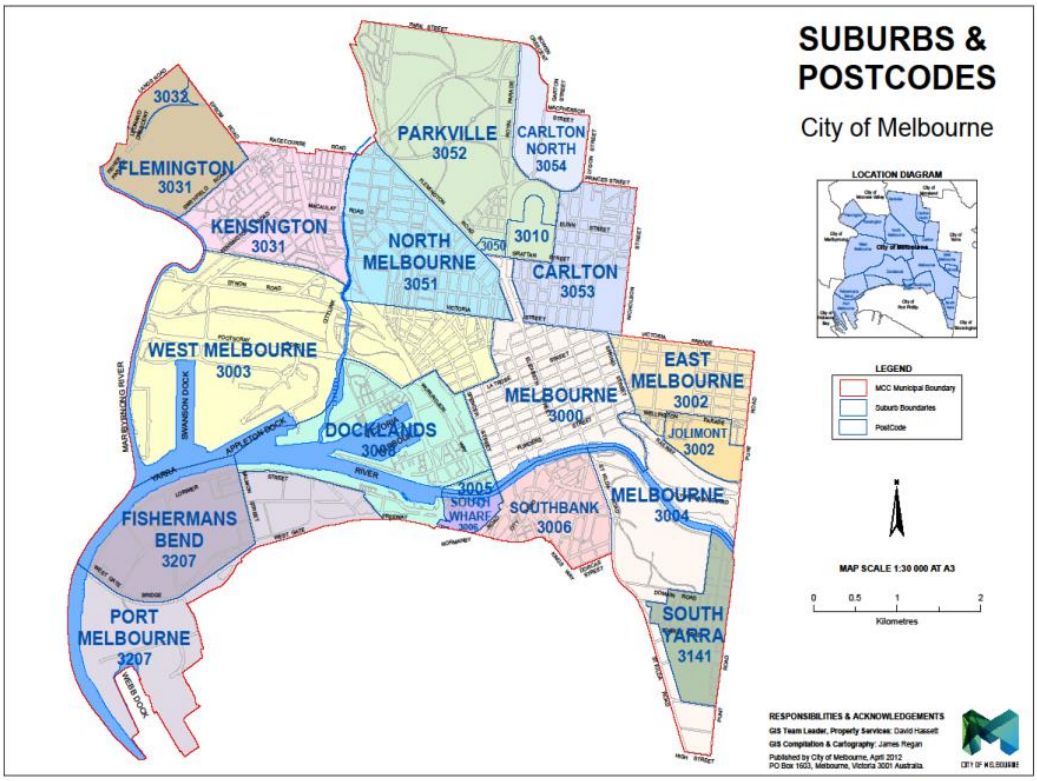


Figure 1: City of Melbourne boundary map

Services and Facilities

The City of Melbourne is responsible for maintaining an extensive range of facilities and delivering a diverse range of services. The community infrastructure maintained by the City of Melbourne includes roads, bridges, drains, town halls, libraries, recreation facilities, child care centres, community hubs, event venues, parks and gardens.

The majority of the City of Melbourne's operations are run out of three main administrative buildings in the central business district, including the Melbourne Town Hall, Council House 1 and Council House 2.

Additional operations are run out of a number of external sites and facilities located throughout the municipality. The City of Melbourne owns and/or operates more than 350 buildings, parks, gardens and other facilities.

The services provided by the City of Melbourne include property, economic, human, recreational and cultural services. The City of Melbourne also enforces state and local laws relating to matters of land use, planning, environment protection, public health, traffic and parking, and animal management.

Below is an overview of the services and operations undertaken by the City of Melbourne during 2021-22:

- Animal management
- Community and cultural services
- Event management and sponsorship
- Health services
- Local laws
- Parks, gardens and open space
- Planning and building
- Recreation services
- Roads and parking
- Strategic planning
- Sustainability
- Waste management

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.

Inside emissions boundary

Quantified

City of Melbourne

- *Electricity*
- *Stationary energy*
- *Natural Gas*
- *Water*
- *Waste*
- *Transport Fuel*
- *Refrigerants*
- *Paper*
- *Business Travel –flights, taxi,*
- *Staff Commute to Work*
- *Working from Home*
- *Waste*
- *Recycling*
- *Street lighting*

Subsidiaries

- *Queen Vic Markets*
  - *Electricity*
  - *Natural Gas*
  - *Fuel*
- *Citywide*
  - *Electricity*
  - *Natural Gas*
  - *Fuel*
  - *Waste*

Supply chain

- *Electricity*
- *Natural gas*
- *Fuel*
- *Refrigerant*
- *Waste*
- *Water*
- *Chemicals*

Non-quantified

- *Purchased goods and services with < 0.5% expenditure*
- *Web Hosting & Services*
- *Video / Filming / Photography*
- *Catering*
- *Real Estate Services*

Outside emission boundary

Excluded

- *Citywide (non-CoM contract)**
- *Municipal waste disposal at third party facilities*
- *Animal Management*
- *Upstream transportation & distribution*
- *Business travel (regional)*
- *Downstream transportation & distribution*
- *Processing, use & end of life of sold products*
- *Capital goods*
- *Investments*
- *Community Emissions*

**Citywide is a wholly owned subsidiary that is not under City of Melbourne's operational control. Citywide emissions not associated with City of Melbourne usage have been excluded. City of Melbourne represents 19% of Citywide's revenue and thus emissions not associated with service provision to City of Melbourne are excluded*.

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.

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

The City of Melbourne's Emissions Reduction Plan (ERP) for Council Operations summarises the actions the City will take to reduce emissions from activities and operations between 1 July 2021 and 30 June 2026, and maintain carbon neutrality.

Emissions reduction actions

The ERP describes actions the City of Melbourne has taken to reduce emissions from activities and operations across eight priority areas:

1. Carbon Neutral Events
2. Zero carbon for our buildings
3. Measure and minimise embodied carbon in design and construction
4. Carbon neutral goods and services
5. Zero carbon corporate transport
6. Towards zero waste for Council operations
7. Low emissions subsidiaries
8. Tell City of Melbourne's climate change story

Melbourne Renewable Energy Project

The Melbourne Renewable Energy Project (MREP) marked the first time in Australia that a group of local governments, cultural institutions, universities and corporations collectively purchased renewable energy from a newly built facility.

The 39-turbine Crowlands Windfarm near Ararat is owned and operated by Melbourne-based clean energy company Pacific Hydro. Under this project, fourteen members of the buying group combined their purchasing power and committed to purchase 88 GWh of electricity per year from the windfarm under a long-term power purchase agreement. The agreement enabled financing and construction arrangements for the project; and because the windfarm generates more than the purchasing group's needs, it brings additional renewable energy into the market.

The windfarm began supplying energy from 1 January 2019 and from this date the City of Melbourne's electrical load has been powered by renewable energy. The renewable energy certificates generated by the windfarm are surrendered on behalf of City of Melbourne by our electricity retailer and the electricity usage is treated as zero emissions.

Solar

Since 2003 the City of Melbourne has undertaken multiple solar photovoltaic installations to reduce Council's reliance on Victoria's carbon-intensive electricity grid.

The existing solar system at the Queen Vic Market is upgraded to a larger system in FY23 as part of a wider redevelopment. The new system will comprise approximately 1,500 solar panels and abate more than 1,300 tonnes of carbon emissions each year.

5. EMISSIONS SUMMARY

Emissions over time

The below table summarises the total emissions of each reporting period since the City of Melbourne started reporting through Climate Active (formally National Carbon Offset Standard) in 2011-12.

Emissions since base year		
		Total tCO_2-e
Year 1:	2011–12	52,059
Year 2:	2012–13	49,030
Year 3:	2013–14	50,967
Year 4:	2014–15	46,125
Year 5:	2015–16	43,083
Year 6:	2016–17	37,172
Year 7:	2017–18	35,914
Year 8:	2018–19	23,706
Year 9:	2019–20	12,346
Year 10	2020–21	11,209
Year 11	2021–22	**11,429**

Significant changes in emissions

The City of Melbourne has seen a steady decline in emissions each year. In total, the City of Melbourne's operational emissions have reduced by 78 per cent from our 2011-12 baseline. Emission reductions have been driven largely by our Emissions Reduction Plan, however reductions have far exceeding the science-based targets set out in this Plan.

- Reductions between FY16 and FY18 are attributable to major energy efficiency program funded by the Clean Energy Finance Corporation (CEFC).
- Significant step changes between FY19 and FY20 were a result of the purchase of renewable energy through the Melbourne Renewable Energy Project.
- Changes between FY21 and FY22 are predominantly due to the easing of COVID-19 lockdown restrictions.

Changes in emission source categories

The below table summarises the reasons for significant (+/- 5%) change in emission source categories between this year (FY22) and the previous year.

Emission source name	Current year (tCO_2-e)	Previous year (tCO_2-e)	Detailed reason for change
General waste (municipal waste)	1,473	1,374	Increase in municipal waste associated with the easing of COVID restrictions.
Natural Gas VIC (metro) (GJ)	983	1,127	Closure of Kensington Recreation Centre in July 2021 resulted in removal of approx. 7,500 GJ annual consumption.
Water supply and wastewater treatment - Melbourne	2,314	1,592	Increase in building and parks water usage associated with the easing of COVID restrictions.
Garden and green	599	113	Contractor (Serco) acknowledges that previous year's data was under-reported. Correct figure for 2020/21 was 711 tCO2.

Use of Climate Active carbon neutral products and services

N/A

Organisation emissions summary

The electricity summary is available in the Appendix B. Electricity emissions were calculated using a market-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)
Cleaning and Chemicals	13.49	-	59.35	72.85
Construction Materials and Services	-	-	3.56	3.56
Electricity	-	536.48	-	536.48
Horticulture and Agriculture	-	-	48.48	48.48
Office equipment & supplies	-	-	29.60	29.60
Postage, courier and freight	-	-	285.45	285.45
Refrigerants	123.08	-	-	123.08
Stationary Energy (gaseous fuels)	912.25	-	70.81	983.07
Stationary Energy (liquid fuels)	305.53	-	16.38	321.91
Transport (Air)	-	-	24.92	24.92
Transport (Land and Sea)	3,467.54	-	194.27	3,661.81
Waste	-	-	2,072.14	2,072.14
Water	-	-	1,760.05	1,760.05
Working from home	-	-	952.59	952.59
Total	**4,821.89**	**536.48**	**5,517.59**	**10,875.96**

Uplift factors

An uplift factor has been applied to the emissions total. This upwards adjustment to City of Melbourne's total carbon inventory accounts for relevant emissions, which can't 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
Uplift to account for non-quantified sources where data is unavailable or where data collection is not cost effective	553.04
Total footprint to offset (uplift factors + net emissions)	11429.00

6.CARBON OFFSETS

Offsets strategy

Offset purchasing strategy: Arrears		
1.	Total offsets previously forward purchased and banked for this report	4,545
2.	Total emissions liability to offset for this report	11,429
3.	Net offset balance for this reporting period	6,884
4.	Total offsets to be forward purchased to offset the next reporting period	0
5.	Total offsets required for this report	11,429

Co-benefits

Our emissions were offset through a variety of projects, which were chosen based on the above principles. All projects generate multiple co-benefits, which are supportive of the United Nations Sustainable Development Goals. The table below provides an overview of the offset projects, their co-benefits, and their alignment to the UN Sustainable Development Goals.

Table 5. Offset projects and co-benefits		
Project	**Offsets (tCO_2-e)**	**% of CoM inventory**
Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.	**9,934**	**89%**
This project consists of multiple small-scale hydropower plants that generate renewable energy for rural Southwest and South Central China. By supplying clean hydroelectric power to the local grid, the project displaces greenhouse gas emissions, helping mitigate climate change. The project helps to improve the livelihoods of people living in remote and sometimes isolated communities through funding a number of initiatives, including a social fund and sustainable agricultural workshops. The project contributes to the following United Nations Sustainability Goals: 		
EcoAustralia - Prony Windfarm (2014 – 2016) Gold Standard project*	**600**	**5.5%**
Prony Wind Power involves six wind farms located at two different sites on the island of New Caledonia that supply electricity to the local grid. The Kafeate and Prony sites consist of 116 wind turbines with a total capacity of 31 MW, with an estimated yearly production of 40 GWh of emissions-free, renewable electricity. By displacing greenhouse gas emissions from fossil fuel power plants with renewable		

electricity, Prony Wind Power is helping to drive the clean energy transition in regions where there are not the resource to do so.

The project contributes to the following United Nations Sustainability Goals:

EcoAustralia - InfraVest Taiwan Wind Farm (2020) Gold Standard project*	**600**	**5.5%**

This project comprises of 42 Enercon wind turbines with total installed capacity of 92.4 MW. At full capacity, these grouped wind farms can generate approximately 250,866 MWh of clean energy a year, which is delivered to the state-owned power grid, Taipower Grid. This aids in reducing Taiwan's dependence on carbon-intensive fossil fuel energy generation methods. Beyond environmental benefits, this project creates local employment and capacity building as the employees are trained by wind turbine manufacturer (Enercon) on maintenance, safety and operational issues.

The project contributes to the following United Nations Sustainability Goals:

Units stapled with Biodiversity units

EcoAustralia - Mount Sandy Biodiversity protection (ABU)	***1,200***	***n/a***

The Mount Sandy project ensures permanent protection for a regionally and culturally important pocket of biodiversity-rich land in partnership with its Traditional Owners. Local birds, animals and plants flourish undisturbed, while native plants for revegetation will be supplied by the local nursery at Raukkan Aboriginal Community, a self-governed Indigenous community 50 kilometres northwest of the project site.

The project contributes to the following United Nations Sustainable Development Goals:

Eligible offsets retirement 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**	**Stapled quantity**	**Eligible quantity (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 (%)**
Grouped Hydropower Plants in Chongqing, Yunnan,Sichuan and Guizhou Provinces, P.R. China	VCU	VERRA	26-Oct-21	9407-95959708-95964707-VCS-VCU-785-VER-CN-1-438-28032016-25092016-1	2016		4,545	455	0	4,545	40%
Grouped Hydropower Plants in Chongqing, Yunnan,Sichuan and Guizhou Provinces, P.R. China	VCU	VERRA	7-Oct-21	9407-95972963-95978351-VCS-VCU-785-VER-CN-1-438-28032016-25092016-1	2016		5,389	0	0	5,389	47%
Grouped Hydropower Plants in Chongqing, Yunnan,Sichuan and Guizhou Provinces, P.R. China	VCU	VERRA		6943-360495560-360495854-VCU-028-APX-CN-1-438-28032016-25092016-1	2016		295	0	0	295	3%
Mount Sandy Biodiversity protection (ABU)	ABU			N/A	2020	1,200	0	0	0	0	0%
Stapled to Prony Windfarm Gold Standard project	VER	GSIR		GS1-1-NC-GS566-12-2016-19149-19251-19850	2016		600	0	0	600	5%
InfraVest Taiwan Wind Farm Gold Standard project	VER	GSIR	7-Oct-21	GS1-1-TW-GS1001-12-2020-22066-99942-100541	2020		600	0	0	600	5%

Total offsets retired this report and used in this report	**11,429**
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 Emissions Reductions (VERs)	1,200	11%
Verified Carbon Units (VCUs)	9,404	89%

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)*	13,298

* 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 serial number	Generation year	Quantity (MWh)	Fuel source	Location
Melbourne City Council									
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	187815-190907	2021	3,093	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	211831-212096	2021	2,663	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	27869-27901 14359-15808 48755-50406	2021	3,135	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	72943 - 76215	2022	3,273	Wind	VIC, Australia
						Melbourne City Council - Total	12,164		
Melbourne City Council - Engineering & Eng Collective									
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	190969-191234	2021	266	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	209168-211830	2021	266	Wind	VIC, Australia

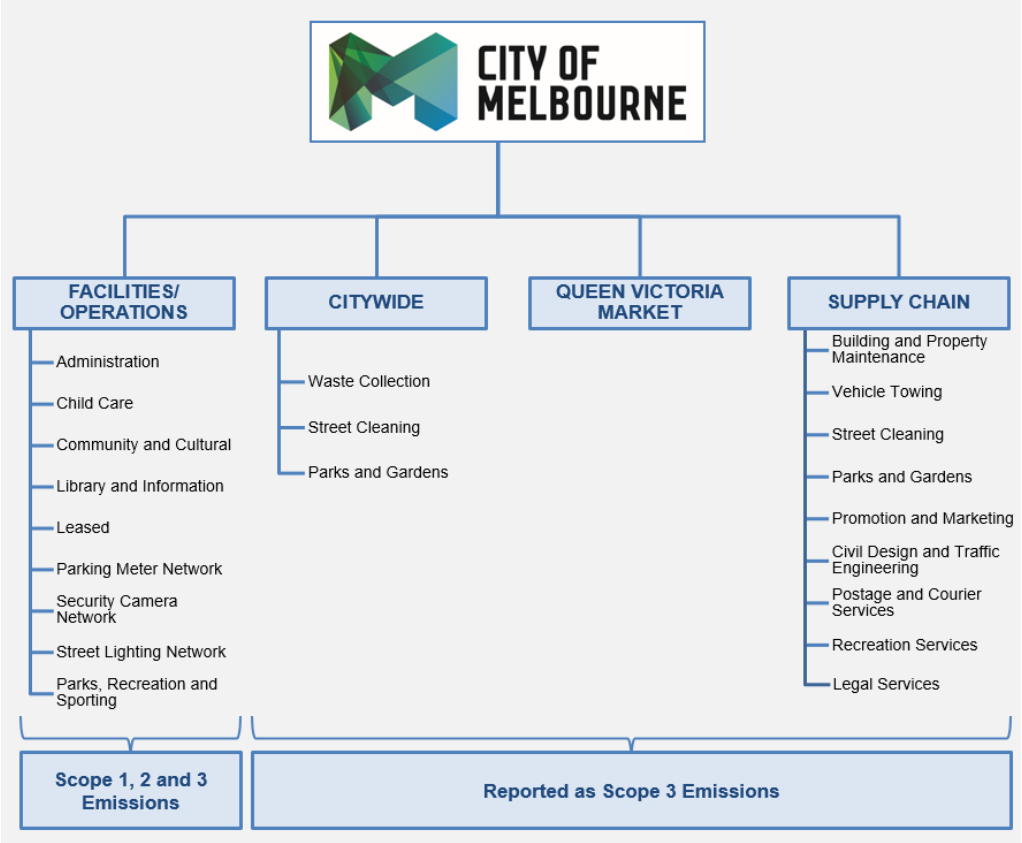
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	47756-47990	2019	235	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	39427 - 39659	2022	233	Wind	VIC, Australia
						Melbourne City Council - Engineering & Eng Collective - Total	1,000		
Citywide Service Solutions Pty Ltd									
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	186173-186367	2021	195	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	30/03/2022	WD00VC32	57272 - 57307	2021	160	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	87486 - 87662	2022	177	Wind	VIC, Australia
Wind Farm	LGC	REC Registry	*To be surrender 2023	WD00VC32	22573-22746	2021	174	Wind	VIC, Australia
						Citywide Service Solutions Pty Ltd - Total	706		
						Citywide is a wholly owned subsidiary that is not under City of Melbourne's operational control. Citywide emissions not associated with City of Melbourne usage have been excluded. City of Melbourne includes 19% of Citywide's emissions (and associated LGCs) as this is the proportion of Citywide's revenue associated with service provision to City of Melbourne	134		
						Total LGCs surrendered this report and used in this report	13,298		

APPENDIX A: ADDITIONAL INFORMATION

The City of Melbourne's greenhouse gas emissions inventory has been prepared according to the Climate Active Carbon Neutral Standard. The emissions boundary is consistent with the GHG Protocol Corporate Accounting and Reporting Standard:

- *Organisational boundary:* The City of Melbourne uses the operational control approach for measuring and reporting on the organisation's emissions. The City of Melbourne includes emissions from all activities over which we have full operational control (see Figure 2).
- *Operational boundary:* The emissions inventory includes direct emission sources (scope 1), emissions from purchased energy (scope 2) and other measurable indirect emission sources (scope 3) that are material to the City of Melbourne's operations.

Figure 2: Organisational and operational boundary



The following greenhouse gases have been considered:

- Carbon dioxide CO_2
- Methane CH_4
- Nitrous oxide N_2O
- Synthetic gases HFCs, SF_6, CF_4, C_2F_6

The following emission sources have been included:

EMISSIONS SOURCE	SCOPE
Natural gas	1, 3
Transport fuels	1, 3
Stationary fuels	1, 3
Refrigerants	1
Grid electricity	2, 3
Waste disposal	3
Reticulated water	3
Subsidiaries	3
Supply chain	3
Staff and volunteer travel	3

The City of Melbourne maintains an internal reporting procedures document. This document outlines the reporting process and acts as a guide for the relevant reporting officer to assist in preparing the Climate Active inventory in an accurate, transparent and timely manner.

Utility data for gas, water and electricity is collated on a carbon management software platform. The software provider collects data directly from utility providers and the City reporting officer manually uploads supply chain data.

A materiality test is used to initiate the reporting process to determine the major areas of business activity and associated emissions. The assessment looks at total expenditure across the organisation through account codes for all purchased goods and services. All sources that are equal or greater than 0.5% of the total expenditure are assessed for possible inclusion. Anything outside this range is excluded as immaterial and an uplift factor is applied.

For everything within range, the reporting officer requests data directly from the contractors and suppliers. These data owners are provided with a template for providing information on the energy, water, waste, and materials used in line with the services provided to the City of Melbourne. Provision of environmental data is included as a standard clause in City of Melbourne contracts. Where contractors and suppliers are unable to provide reliable data the City of Melbourne works with these specific contractors to build their capacity to provide suitable data.

Offsets strategy

The City of Melbourne purchases offsets according to the principles set out in our City of Melbourne Carbon Neutrality Strategy (Council Operations) approved by the Council's Future Melbourne Committee at a meeting held on 17 April 2012:

Essential principles

- Compliance with Carbon Neutral Standard
- Social responsibility
- Timeliness

Important principles

- Certainty
- Transparency
- Cost effectiveness
- Leadership
- Biodiversity

The City of Melbourne procures offsets at the start of each reporting period. These offsets are held by our offset provider and are then retired upon request at the end of the reporting period, after the inventory has been completed.

As of 30 June 2022, the City of Melbourne held 741 kW of solar capacity across 27 sites:

Installed Capacity	Site
200 kW	North Melbourne Football Club
99.8 kW	Kensington Recreation Centre
85 kW	Library at the Dock
52 kW	Fitzroy Garden Depot
45.8 kW	Carlton Baths (2)
38.9 kW	Kensington Flemington Bowls
38 kW	Gowrie Child Care
35.1 kW	Community Hub at The Dock (2)
30 kW	Community Hub at The Dock (1)
27 kW	Fitzroy Garden Visitor Centre
20 kW	Boyd School
20 kW	Flagstaff Bowls Club
15.6 kW	Carlton Baths (1)
15.6 kW	Fawkner Park Children's Centre & Senior Citizens Centre
15.6 kW	Kensington Family Services
10.4 kW	East Melbourne Library
10.4 kW	Kensington neighbourhood Centre
7.5 kW	Royal Park North Depot
6.24 kW	North Melbourne Children's Centre
5.1 kW	The Venny
4.8 kW	Urban Camp
3.6 kW	CH2
3.23 kW	Art Play

2.3 kW	North Melbourne Baths
1.3 kW	Signal
7.5 kW	Royal Park North Depot
40.3 kW	Lady Huntingfield

Energy Efficiency

The City of Melbourne's ERP and Asset Management Strategy 2015-2026 help to ensure we make the right decisions about community assets, with the right information, by establishing the correct data and processes. The integration of these three elements helps ensure best practice energy efficiency technology is delivered across the life cycle of assets. During FY22, control upgrades were completed across a number of administration buildings and a feasibility study were continued to investigate the shifting of all City of Melbourne buildings assets from gas to electricity.

Waste Reduction

The City of Melbourne's Waste and Resource Recovery Strategy 2030 addresses the emissions generated by waste across the municipality and sets a key target of 1.2Mt CO_2-e in greenhouse gas emissions avoided by 2030. The strategy outlines key activities to enhance the circular economy that will reduce environmental impacts, improve the amenity and livability of the city, and make the waste and resource recovery system more resilient. The City of Melbourne does not own or operate any landfills; however the waste collected from our facilities is taken to organics and comingled recycling stations and landfills outside the municipality. The indirect emissions associated with recycling and waste collected at our facilities is included in our operational emissions inventory.

Transport

Staff at the City of Melbourne regularly travel by foot, cycling with electric bicycles, taking public transport and driving electric vehicles to avoid emissions through the use of petroleum and diesel run vehicles. Employee commutes have been largely reduced as a result of the COVID-19 lockdowns. Emissions from any work-related air travel are offset. Carbon neutrality for the vehicle fleet is maintained through: offsetting transport fuel, reducing fleet size, reducing the vehicle engine size, introducing hybrid and electric vehicles, charging electric vehicles in car parks owned by the City of Melbourne, and increasing the weighting given to fuel efficiency in the evaluation criteria for new vehicle purchases. The City of Melbourne's corporate vehicle fleet comprises 58 vehicles, including 19 fully electric vehicles, 12 hybrid vehicles and 9 plug-in hybrid electric vehicles. Electric and hybrid vehicles constitute 69% of City of Melbourne's total fleet (a 4% increase from 2020-21).

Events

Since 2018-19, the City of Melbourne has maintained a certified carbon neutral large events portfolio consisting of Melbourne Fashion Week, Melbourne Music Week and Melbourne Knowledge Week. During 2021/22 another large event portfolio was added which saw the famous Moomba Festival and the Docklands Firelight Festival both achieving carbon neutral certification for the first time. Carbon Neutral Events.

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 (kgCO2e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	385,949	0	2%
Total non-grid electricity	**385,949**	**0**	**2%**
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	13,298,000	0	76%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	1,220	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	279	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	3,166,247	0	18%
Residual Electricity	567,745	564,886	0%
Total grid electricity	**17,033,491**	**564,886**	**95%**
Total Electricity Consumed (grid + non grid)	**17,419,440**	**564,886**	**97%**
Electricity renewables	16,851,694	0	
Residual Electricity	567,745	564,886	
Exported on-site generated electricity	**38,907**	**-28,402**	
Emissions (kgCO2e)		536,484	

Total renewables (grid and non-grid)	**96.74%**
Mandatory	**18.19%**
Voluntary	**76.34%**
Behind the meter	**2.22%**
Residual Electricity Emission Footprint (TCO2e)	**536**

Figures may not sum due to rounding. Renewable percentage can be above 100%	
Voluntary includes LGCs retired by the ACT (MWh)	1

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	1,498	1,169	105
NSW	23,673	18,465	1,657
SA	0	0	0
Vic	16,993,050	15,463,675	1,699,305
Qld	11,841	9,473	1,421
NT	0	0	0
WA	0	0	0
Tas	3,429	480	69
Grid electricity (scope 2 and 3)	**17,033,491**	**15,493,262**	**1,702,556**
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	385,949	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Non-grid electricity (Behind the meter)	**385,949**	**0**	**0**
Total Electricity Consumed	**17,419,440**	**15,493,262**	**1,702,556**

Emission Footprint (TCO2e)	**17,196**
Scope 2 Emissions (TCO2e)	15493
Scope 3 Emissions (TCO2e)	1703

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. 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.

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.

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 (artists/speaker travel)	Yes	No	No	No
Web Hosting & Services	No	No	Yes	No
Video/Filming/Photography	No	Yes	No	No
Catering	No	No	Yes	No
Real Estate Services	Yes	No	No	No

Non quantified emission sources	Data management plan to quantify these sources
Web Hosting & Services	Majority (80%) of data is hosted and stored in on premises servers and emissions from energy use are captured through building electricity usage. The remaining data is stored in the cloud. Investigations are underway with City of Melbourne IT team to determine how to accurately quantify energy use data from these solutions to determine if it represents material emissions.
Catering	Majority of Catering is undertaken through single contractor within the Melbourne town hall, emissions are included within energy use of the building. Catering at sites external to City of Melbourne are not quantified. Emissions are considered to be immaterial and covered through uplift factor.

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?
Citywide (non-CoM contract)	yes	No	No	No	No	No
Municipal waste disposal at third party facilities	yes	No	No	No	No	No
Animal Management	No	No	No	No	No	No
Upstream transportation & distribution	No	No	No	No	yes	No
Business travel (regional)	No	No	No	No	No	No
Downstream transportation & distribution	No	No	No	No	No	No
Processing, use & end of life of sold products	No	No	No	No	No	No
Capital goods	No	No	No	No	No	No
Investments	No	No	No	No	No	No
Community Emissions	Yes	No	No	No	No	No

The following emissions sources have been excluded in line with the provisions of the Climate Active Standard for Organisations. The impact of excluding these sources is not expected to materially affect the overall total emissions.

Emission source	Scope	Justification for exclusion & overall implications for footprint
Citywide (non-CoM contract)*	3	Citywide is a wholly owned subsidiary that is not under City of Melbourne's operational control. Citywide emissions not associated with City of Melbourne usage have been excluded. City of Melbourne includes 19% of Citywide's emissions, as this is the proportion of Citywide's revenue associated with service provision to City of in 2021-22. This is consistent with the method used for all contractors.
Municipal waste disposal at third party facilities	3	The City of Melbourne includes emissions associated with waste generated during the course of business, i.e. within the operational control of the City. The emissions associated with waste generated by residents and businesses (municipal, commercial, industrial, construction and demolition waste streams) have been excluded, as these waste streams are not under the City's operational control. However it should be noted the City collects and transports a portion of this waste, Waste collected during the course of street cleaning is excluded, as the City has no operational control over this waste. However the emissions resultant from Citywide transporting this waste is included in within our emissions.
Animal Management	3	Animal management is primarily serviced in-house by City of Melbourne staff and the fuel used is included in the corporate fleet emissions source. There are instances where the collection of animals is undertaken by the RSPCA but these are considered insignificant (less than 10 pick-ups per month).
Upstream transportation & distribution	3	The City of Melbourne has included transportation and distribution of goods and services for seven emissions sources; towing, parks and recreation, building and property maintenance, street cleaning, security services, coin collection and aged and disability services. The remaining emissions sources with transportation and distribution have been excluded due to lack of reliable data from suppliers. These include office paper, animal management, promotion and marketing, and civil design and traffic engineering.
Business travel (regional)	3	The City of Melbourne currently includes metropolitan public transport use by staff, hire cars, taxis, flights and use of its own fleet. Business travel undertaken by regional public transport or in employee vehicles are excluded due to lack of reliable data.
Downstream transportation & distribution	3	The City of Melbourne does not sell products.
Processing, use & end of life of sold products	3	The City of Melbourne does not sell products.
Capital goods	3	The City of Melbourne purchases and maintains capital goods to support the delivery of Council services. The operational emissions from this equipment is included within the inventory (eg, emissions from gas from use in hot water units) however the embodied emissions in the purchasing of these Capital goods themselves is excluded due to a lack of reliable methodology for equipment types.
Investments	3	Council holds no financial investments (as defined under the Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard) as its investments are held in term deposits with no link to any specific products or services. Council have limited resources to collect this information. Implication for the footprint considered to be immaterial

Community Emissions	3	Emissions that are resultant from activity within the broader municipality of the City of Melbourne but are not the result of activity of the City of Melbourne operations are excluded. The City of Melbourne reports on these through a separate reporting framework using the GHG Protocol standard developed by C40

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