PUBLIC DISCLOSURE STATEMENT

CITY OF SUBIACO

ORGANISATION CERTIFICATION
FY2021 - 22

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	City of Subiaco
REPORTING PERIOD	Financial year 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.*  Colin Cameron Chief Executive Officer 16 June 2023

Australian Government
Department of Industry, Science, Energy and Resources

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	3,715.6 tCO_2-e
OFFSETS BOUGHT	76% VCUs, 13% VERs, 9% CERs
RENEWABLE ELECTRICITY	31%
TECHNICAL ASSESSMENT	3rd May 2021 James Endean Pangolin Associates Next technical assessment due: FY2022-23

Contents

2.CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the financial year from 1 July 2021 to 30 June 2022 and covers the Australian business operations of The City of Subiaco (ABN: 84 387 702 890).

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

- Administration Centre
- Admin on Bishop
- Admin on Bishop (depot)
- Library
- Lords Recreation Centre
- Subiaco Community Centre
- Shenton Park Community Centre
- Rosalie Park
- Tom Dadour Community Centre
- The Palms Community Centre
- Public realm
- Parks and gardens
- City of Subiaco (for all emission sources shared across council facilities and the council overall).

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

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

"The City is committed to sustainability and to leadership in climate action. Being certified carbon neutral demonstrates this commitment to continual improvement."

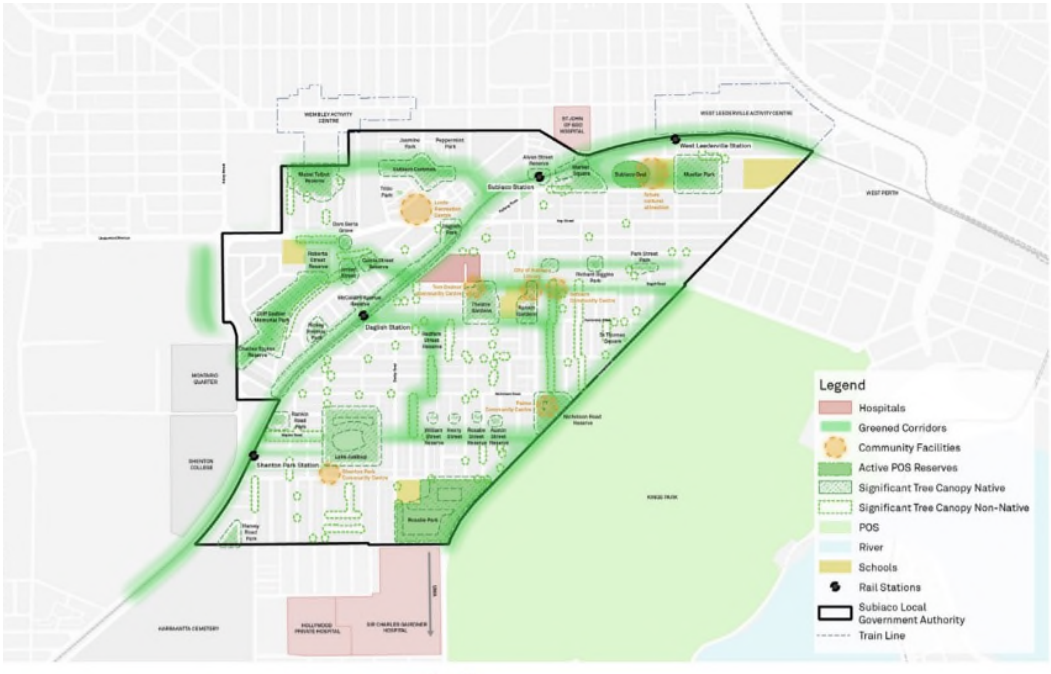
Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with "Method 1" from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). These have been expressed as carbon dioxide equivalents (CO_2-e) using relative global warming potentials (GWPs).

Organisation description

Established on the traditional homelands of the Noongar people, the City of Subiaco is an inner-city local government located within the Perth metropolitan area. It has an area of six square kilometres and home to over 17,000 residents within the suburbs of Subiaco, Daglish, and parts of Jolimont and Shenton Park which are some of Perth's prime inner-city suburbs, renowned for their quality of lifestyle, cultural interests, and business sector.

The City's operations being certified by Climate Active include 39 community facilities including two administrative centres, one recreation centre with an indoor swimming pool and gym, a local library, and various community facilities and public amenities. It also takes into account the operational costs for over $250 million worth of infrastructure assets such as, but not limited to, City-owned streetlights, car parks, roads and reserves. In 2019-20, the City had a total operating expenditure of $42.2 million, and employed 210 permanent staff and 132 casual staff members.



Map 2- Community Facilities, Recreation and Open Spaces

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.

Council-owned commercial investment properties are excluded as per the relevance test in Appendix D. These properties are owned by the council but are on long-term commercial leases and the council has minimal influence over their operation.

Council resident waste disposal is the disposal of waste through council managed contracts on behalf of residents and businesses within the local government area. As this is not waste generated by council operations it is not considered relevant to the certification as per Appendix D.

Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

The City of Subiaco commits to reducing emissions by 45% by 2030 compared to a 2018/19 baseline. Emissions for 2018/19 were 3,279 t CO_2-e across Scopes 1, 2 and 3.
Specific actions are detailed within the City's Corporate Carbon Reduction Plan 2020-2030 which can be accessed here. Key actions include:

- Scope 1 emissions will be reduced by:
    - Replacing natural gas appliances with suitable electric alternatives within the next three years that can then be powered by renewable electricity.
    - Replacing conventional vehicles with suitable electric and hybrid alternatives as fleet, ranger, and pool vehicles come up for renewal. The City is targeting an average efficiency of 105g CO_2-e/km by 2025.
    - Undertaking a route optimisation program for heavy vehicles (waste trucks, street sweepers, etc) to reduce diesel consumption whilst exploring opportunities for trialling electric, hybrid, or hydrogen alternatives.

- Scope 2 emissions will be reduced by:
    - Achieving 100% renewable electricity by 2025 through a combination of energy efficiency improvements, expanding rooftop PV systems, and purchasing renewable electricity. Significant reductions in electricity consumption is expected through the City's streetlight upgrade program where globes are replaced with high efficiency LEDs. Further reductions are expected through the development and implementation of a sustainable design policy for Council owned buildings. The City seek to expand rooftop PV systems to provide an additional 56.2 MWh of electricity per year and, through a Power Purchase Agreement driven by WALGA, purchase renewable electricity to cover the balance of energy.

- Scope 3 emissions will be reduced by:
    - Implementing and extending recycling and composting facilities across Council to reduce waste to landfill by 20% by 2030.
    - Updating Council's Purchasing Policy and Guidelines to strengthen sustainability considerations in tendering.
    - Continuing to implement the City's Waterwise Council Action Plan and associated irrigation upgrades to reduce water consumption.
    - Monitor embodied carbon across at least five capital works projects over a two-year period o identify opportunities for improvement.
    - Continue to utilise Green Star certified concrete for all new footpaths.
    - Review Council Work from Home policy to reduce emissions from staff commute, alongside continuing to offer a sustainable transport incentive for staff to take active or public transport options.

Emissions reduction actions

Actions taken over the FY2021 – 2022 reporting period include:

- Upgraded 105 streetlights to LEDs
- Signed up six contestable sites to the WALGA Power Purchase Agreement to purchase 100% renewable electricity
- Commenced an energy monitoring project at Subiaco Library – significant renovations are planned within the next couple of years so this project will inform energy efficiency upgrades
- Updated Purchasing Policy to embed sustainability considerations in decision-making.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year		
		Total tCO_2-e
Base year/Year 1:	2019-20	3,225.8
Year 2:	2020-21	3,636.6
Year 3:	2021-22	3,715.6

Significant changes in emissions

Emission source	Current year (tCO_2-e and activity data)	Previous year (tCO_2-e and activity data)	Detailed reason for change
Electricity (market-based)	2,197.0 tCO_2-e (57% contribution to inventory) 3,241,894 kWh	Previous year electricity was using the location-based method, totalling 1,908.0 tCO_2-e. 2,725,618 kWh	The City have undertaken a range of improvement projects over the financial year. These include: • Numerous significant public realm lighting upgrades, most notably at Rosalie Park and Subiaco Common, to provide safe, high quality open space and recreational facilities for the growing population. • A fire at one of the Administration centres, meaning a greater number of staff were working out of other facilities (note: it is difficult to ascertain which facilities experienced an increase as a number of facilities were grouped in FY21). • Lords Recreation Centre experienced an increase which is considered a result of organic growth, including a series of equipment upgrades and additional classes.

Use of Climate Active carbon neutral products and services

This assessment and Climate Active submission was prepared with the assistance of Pangolin Associates and these services are carbon neutral.

City of Subiaco also purchased Opal Australian Paper carbon neutral paper product.

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 (tCO_2-e)	Sum of Scope 2 (tCO_2-e)	Sum of Scope 3 (tCO_2-e)	Sum of total emissions (tCO_2-e)
Accommodation and facilities	-	-	0.4	0.4
Cleaning and Chemicals	-	-	13.8	13.8
Construction Materials and Services	-	-	240.4	240.4
Electricity	-	2,197.0	-	2,197.0
ICT services and equipment	-	-	41.3	41.3
Machinery and vehicles	-	-	204.1	204.1
Office equipment & supplies	-	-	35.4	35.4
Postage, courier and freight	-	-	15.3	15.3
Products	-	-	3.0	3.0
Professional Services	-	-	120.8	120.8
Refrigerants	-	-	21.1	21.1
Roads and landscape	-	-	15.5	15.5
Stationary Energy (gaseous fuels)	112.1	-	8.9	121.1
Transport (Air)	-	-	1.4	1.4
Transport (Land and Sea)	336.2	-	206.0	542.2
Waste	-	-	99.7	99.7
Water	-	-	36.3	36.3
Working from home	-	-	0.6	0.6
Products, Materials and Equipment	-	-	6.4	6.4
Total	**448.3**	**2,197.0**	**1,070.4**	**3,715.6**

Uplift factors

N/A

6.CARBON OFFSETS

Offsets retirement approach

In arrears		
1.	Total number of eligible offsets banked from last year's report	0
2.	Total emissions footprint to offset for this report (tCO_2-e)	3,716
3.	Total eligible offsets required for this report	3,716
4.	Total eligible offsets purchased and retired for this report	3,883
5.	Total eligible offsets banked to use toward next year's report	167

Co-benefits

Yarra Yarra Biodiversity Corridor

The *Yarra Yarra Biodiversity Corridor* is a native reforestation project located in Southwest Australia. The table indicates the co-benefits of this project and how this project contributes to the United Nation SDGs. As land use and forestry activities are recognised as requiring high levels of upfront finance to source land, to plant and to manage, we have supplemented local biodiverse reforestation carbon offsets from the *Yarra Yarra Biodiversity Corridor* with Climate Active eligible offset units.

Co-benefits category	Core co-benefit	Co-benefit description/nature of potential co-benefit	UN Sustainable Development Goals	
Environment	Biodiversity / ecosystem services	The Yarra Yarra project reconnects and restores fragmented and declining (remnant) woodland and shrubland which provides habitat for threatened flora and fauna.	Goal 15: Life on land	
	Water Quality	Water quality is assumed to improve due to reduced surface runoff and reduction in sediment and nutrient loads in water catchments. Groundwater levels and salt concentrations are also expected to reduce over time.	Goal 6: Clean Water and Sanitation	
	Soil Quality	Soil quality of the Yarra Yarra project area is expected to improve over time with soil organic matter increasing and salt concentrations declining.	Goal 15: Life on land	
Economic	Local Employment and Skills	The establishment of plantations and conservation areas creates employment opportunities and skills development during the preparation, planting, management of the Yarra Yarra project.	Goal 3: Good Health and Well-being Goal 4: Quality Education Goal 8: Decent Work and Economic Growth Goal 17: Partnerships for the goals	
Social	Indigenous cultural heritage	The Yarra Yarra project recognises and continues to protect significant cultural heritage sites that are located in the project area. This is assumed to strengthen cultural heritage and support spiritual re-connection to country which potentially has positive impacts on mental health and wellbeing of indigenous communities.	Goal 3: Good Health and Well-being Goal 17: Partnerships for the goals	

Chakala Wind Power Project in Maharashtra, India

This greenfield project generates power using renewable energy source (wind energy) and sells the power generated to the state grid. It replaces the use of diesel generators by meeting the power demand during shortage periods.

The project helps in generating employment opportunities during the construction and operation phases. The project activity will lead to development in infrastructure in the region such as development of roads and may promote business with improved power generation.

Project developers will use at a minimum 2% of the revenues accrued from the sale of carbon credits on an annual basis for community related activities. These include providing assistance for development of public amenities in the surrounding areas such as water distribution/sanitation facilities/building of schools and hospitals and free distribution of educational books and school uniforms, annual eye camps health checks for villagers.

The project is a clean technology investment in the region, which would not have taken place in the absence of the VCS benefits. The project activity will also help to reduce the demand supply gap in the state. The project will generate power using zero emissions, wind-based power generation which helps to reduce GHG emissions and specific pollutants like SOx, NOx, and SPM associated with the conventional thermal power generation facilities.

Distribution of Dos por Tres Cookstoves in Honduras, Latin America

Currently 81% of rural households in Honduras use fuelwood for cooking and 65% of the country's total energy comes from fuelwood.

Lower-income households are more dependent on wood because it is less costly than electricity or gas. The traditional fogón cookstove is in widespread use across Honduras, especially in rural areas. Chronic exposure to smoke from inefficient biomass cookstoves causes respiratory illness such as asthma, emphysema, acute respiratory lung infections (ARLI) and lung cancer.

Mirador donates to each client the plancha, the chimney and chimney top, the six custom ceramic pieces for the stove mouth or firebox, and the installation and training. Since project inception over 190,000 stoves have been installed across 16 Departments (provinces) in Honduras. Based on a reported average of 4.8 people per household, this translates to 912,000 people served, which equates to roughly 10% of the population of Honduras

Improved Kitchen Regimes: Shyara (Bugesera), Rwanda

This project mitigates climate change caused by the combustion of unsustainably harvested biomass. More than 21,000 fuel efficient stoves have been provided to families in rural areas of the Bugesera District in the Eastern Province of Rwanda. In Rwanda, families traditionally cook on thermally inefficient 3-stone fires inside homes with little ventilation. These large fires expose households to indoor air pollution and consume a lot of firewood which contributes to deforestation.

Positive impacts

- Reduced deforestation and degradation of surrounding forests
- Reduced soil erosion and nutrient loss
- Reduced risk of flooding in hilly areas
- Reduced burden on women and children to collect firewood
- Decrease in respiratory infections in rural households

Eligible offsets retirement summary

Offsets retired for Climate Active carbon neutral certification											
Project description	**Type of offset unit**	**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 (%)**
Chakala Wind Power Project, Maharashtra, India	VCU	Verra	2 March 2023	6870-353270950-353273832-VCU-034-APX-IN-1-1197-01012018-31052018-0	2018	-	2,883	0	0	2,883	74%
Proyecto Mirador Enhanced Distribution of Improved Cookstoves in Latin America - First VPA for Distribution of Dos por Tres Cookstoves in Honduras	VER	Gold Standard	2 March 2023	GS1-1-HN-GS2758-16-2018-18951-128636-129102	2018	-	467	0	0	467	12%
Metro Delhi Project, India *Stapled to*	CER	ANREU	2 March 2023	239,758,389 - 239,758,888	CP2	-	500	0	167	333	9%
Yarra Yarra Biodiversity Corridor Biodiverse Reforestation Carbon Offsets, WA	-	-	2 March 2023	12PWA347616B - 12PWA348115B	-	500	-	-	-	-	-
Improved Kitchen Regimes: Shyara (Bugesera), Rwanda	VER	Gold Standard	2 March 2023	GS1-1-RW-GS3444-16-2018-19191-5349-5381	2018	-	33	0	0	33	1%
									Total offsets retired this report and used in this report	**3,716**	
									Total offsets retired this report and banked for future reports	**167**	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Certified Emissions Reductions (CERs)	333	9%
Verified Emissions Reductions (VERs)	500	13%
Verified Carbon Units (VCUs)	2883	76%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

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	0	0	0%
Total non-grid electricity	**0**	**0**	**0%**
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	0	0	0%
GreenPower	416,799	0	13%
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)	602,668	0	19%
Residual electricity	2,222,427	2,211,234	0%
Total grid electricity	**3,241,894**	**2,211,234**	**31%**
Total electricity consumed (grid + non grid)	**3,241,894**	**2,211,234**	**31%**
Electricity renewables	1,019,468	0	
Residual electricity	2,222,427	2,211,234	
Exported on-site generated electricity	**19,566**	**-14,283**	
Emissions ($kgCO_2$-e)		2,196,950	

Total renewables (grid and non-grid)	**31.45%**
Mandatory	**18.59%**
Voluntary	**12.86%**
Behind the meter	**0.00%**
Residual electricity emissions footprint (tCO_2-e)	**2,197**

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

Location-based approach summary

Location-based approach	Activity data (kWh	Scope 2 emissions ($kgCO_2$-e)	Scope 3 emissions ($kgCO_2$-e)
WA	3,241,894	2,172,069	32,419
Grid electricity (scope 2 and 3)	**3,241,894**	**2,172,069**	**32,419**
WA	0	0	0
Non-grid electricity (Behind the meter)	**0**	**0**	**0**
Total electricity consumed	**3,241,894**	**2,172,069**	**32,419**

Emissions footprint (tCO_2-e)	**2,204**
Scope 2 emissions (tCO_2-e)	2172
Scope 3 emissions (tCO_2-e)	32

Climate Active carbon neutral electricity summary

Carbon neutral electricity offset by Climate Active product	Activity data (kWh)	Emissions ($kgCO_2$-e)
N/A	**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.

No emission sources in City of Subiaco's organisation boundary were non-quantified in FY2021 - 22.

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
N/A	N/A	N/A	N/A	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?
Council-owned commercial investment properties	Yes	No	No	No	No	No
Council resident waste disposal	Yes	No	No	No	No	No
Food and catering	No	No	No	No	No	No

An Australian Government Initiative

Climate Active