Climate Solutions Action Plan





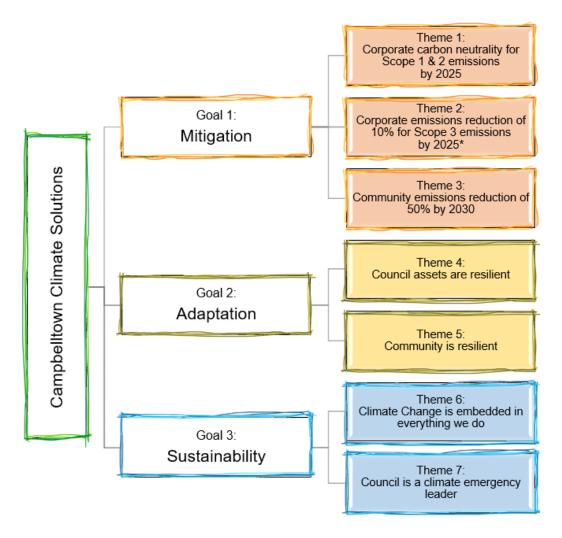
1. Introduction

"Leading our City towards a climate-resilient and sustainable future"

Climate change has always been, and continues to be, a key priority for Campbelltown City Council. In December 2021, Council released a Climate Solutions Strategy (*Climate Strategy*), which sets an overarching framework and identifies key focus areas for Council's climate response moving forward. The document was developed and informed by joint inputs from Council Members and Staff, industry experts, regional partners, and more importantly, our Community.

In it, Council has committed to taking a multi-faceted approach in tackling climate change. Particularly, the following goals were set:

- Mitigation: This includes reducing both Council and the Community's Greenhouse Gas (GHG) emissions as much and as quickly as possible
- Adaptation: This means putting in place mechanisms that will ensure our City is prepared and can adjust to a changing climate. Some of us will be able to adapt more than others. We want to make sure no one will be left behind.
- Sustainability: We need to ensure any action we take will be long-lasting, integrated across sectors and communities, and be economically stable.



2. Current State

In 2018/19, Council emitted a total of 18,810 tonnes of CO_2 equivalent (T CO_{2-e}) in greenhouse gas (GHG) emissions directly (Scope 1 Emissions) and indirectly (Scope 2 and 3 Emissions) across its operational activities. As a City, the Campbelltown City Council Community collectively emitted an estimated 307,000 tonnes of CO_2 equivalent of greenhouse gas emissions in the same fiscal year.

For context, Campbelltown City Council has a smaller carbon footprint per capita compared to the state average and other local government areas with similar estimated profile (see left image in Figure 1) (Snapshot Community Climate Tool 2020). This is likely due to a lack of carbon-intensive economic sectors in the municipality such as agriculture, manufacturing, and mining. Contrarily, Campbelltown's residential emissions profile follows closely to the state average (see right image of Figure 1). This is indicates that the Community emission is presently highly dependent on state-led efforts such as emissions reduction in electricity grid, transport, waste and water.

If Council decides to take no action and continue "Business-As-Usual" (BAU) being solely dependent on state efforts, it would likely still see a 38% reduction in its Scope 1 and 2 emissions by 2030 compared to its baseline year. This is largely driven by the South Australian Government's bid to rapidly transition the state's electricity to being generated by renewable energy.

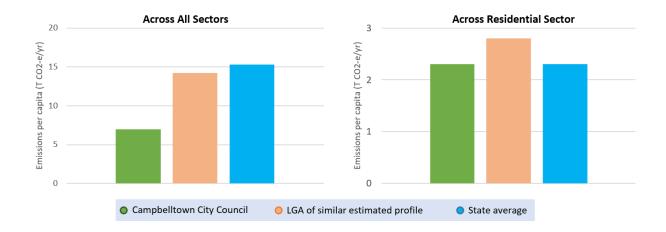


Figure 1: Comparison of Campbelltown City Council's carbon footprint with LGAs of similar estimated profile and the state average.

Given Council's mitigation goals set out in the Climate Solutions Strategy, where it aims to achieve corporate carbon neutrality by 2025 and help the Community achieve 50% emissions reduction compared to the 2018 baseline levels, strong Council-actions would need to be taken in addition to the BAU state. However, it is noted that while Council is acting with a sense of urgency, the actions it proposed to carry out would consider financial and economic implications to ensure financial stability for the Council and City.

3. Pathways to Climate Resiliency

To achieve the goals set in the *Climate Strategy*, Council has identified five pathways to becoming a climate-resilient and sustainable city. The intention of this is that Council will be working closely with its partners and the Community to deliver the following:



Pathway 1 – Low Carbon Energy

 Council will reduce its corporate carbon footprint through reduction of its energy consumption and reliance on traditional fossil fuel.



Pathway 2 – Resource Efficiency

- Council will actively encourage and promote sustainable consumption of resources, and circular economy opportunities.
- Council will consider whole-of-life emissions in the product it purchases, as well as the services it engages and offers.



Pathway 3 – Low Carbon Transport

- Council will support Community uptake of low carbon transport such as public and active transport, as well as electric vehicles through provision of infrastructures and services.
- Council will start transitioning its own fleet to low carbon alternatives



Pathway 4 – Community Engagement

 Council will provide high quality and accessible information to build Community capacity to respond to climate change risks and opportunities.



Pathway 5 – Strong Governance and Leadership

 Council will embed climate change considerations in all relevant aspects of its decision making and investments. Council will lead by example and achieve carbon neutrality by 2025*.

3.1. Low Carbon Energy

No	Council-led Action	Description	Starting Timeline
1.1	Continue to provide capacity building training to Staff on energy reduction and efficiency strategies	Ongoing capacity training will be provided on, but not limited to: Climate change impacts on infrastructure Embodied carbon concepts Energy standards Environmentally sustainable design (ESD) strategies Water sensitive urban design (WSUD) City-wide greening strategies	Jan 2022
1.2	Set internal minimum energy standards for all Council building assets	Energy standards will be set based on consideration of industry best practice standards and adapted for different Council-owned building types, usage, and asset maintenance schedule. Council will be using these energy standards internally to inform all future building upgrades.	Jan 2022
1.3	Continue to install renewable energy systems in Council-occupied buildings	Feasibility of installing renewable energy systems, including battery systems, on Council-occupied building assets will be assessed. Prioritisation and implementation will done based on consideration of building types, usage, asset life and financial implications.	Jan 2022
1.4	Include Environmentally Sustainable Design (ESD) features for all new major building projects	Reviews of relevant Council policies and/or major projects procedures will be undertaken to ensure consideration of ESD will be included in all future major building projects.	Jan 2022
1.5	Upgrade all Council-owned 'V' category public street lights to high efficiency options	Upgrades of all Council-owned 'V' category public streetlights to high efficiency options will be undertaken. In the first instance, a business plan will be developed to assess various upgrade options.	Jan 2022
1.6	Actively seek grant funding to improve energy efficiencies of Council-owned assets	Council will actively seek federal and state funded grants to subsidise and accelerate its energy efficiency plans for its assets.	Jan 2022

No	Council-led Action	Description	Starting Timeline
1.7	Investigate and implement carbon emission reduction opportunities for Campbelltown ARC	Investigations of carbon emission reduction opportunities (<i>e.g.</i> replacing ARC gas boiler to low carbon options, lighting upgrades, <i>etc</i>) will be undertaken for Campbelltown ARC. Prioritisation and implementation will consider asset useful life, financial implementation, and impact of the upgrade on Council's carbon footprint.	June 2022
1.8	Continue to undertake energy efficiency upgrades in all Council occupied buildings	 This will be further broken down to the following: Undertaking energy audits of all Council-occupied buildings Assessing of all Council-occupied building assets for energy efficiency improvement opportunities Prioritising and implementing energy efficiency upgrades based on considerations of the internal minimum energy standard set, financial implication, asset renewal schedule, and impact of the upgrade on Council's carbon footprint (i.e. value-for-money). 	June 2022
1.9	Include ESD features for all new major roadwork projects	Reviews of relevant Council policies and/or major projects procedures will be undertaken to ensure consideration of ESD will be included in all future major roadwork projects.	Jun 2022
1.10	Support and encourage lessee of Council-owned buildings to undertake energy efficiency upgrades and install renewable energy systems	 Support may be provided through: Capacity building on energy reduction and efficiency strategies Investigations on potential of a partnership approach between Council and lessee to implement upgrades if strong business case is presented 	Jun 2022
1.11	Actively trial new and emerging technologies to progress towards zero carbon buildings for Council-owned assets	This includes monitoring and trialing emerging technologies as they become available	Jan 2023
1.12	Purchase green energy	Green energy will be purchased to minimise GHG emissions while Council continues to optimise its building and other infrastructure assets	Jun 2023
1.13	Investigate feasibility of programs to encourage more sustainable living / commercial operations	This will include looking into programs to encourage residential building envelope upgrades, building energy efficiency upgrades, Community solar installations, and electrifications of gas appliances	Jun 2023

1.14	Purchase carbon offset	Carbon offset will be purchased in the last quarter of 2025 to help Council achieve its target of carbon neutrality. This will be a last-resort, and will not preclude Council from continuing its efforts to reduce its carbon footprint.	Dec 2025

3.1.1. Quantitative Indicators to be Monitored

To determine if the proposed actions would be successful, Council will continuously monitor:

- Council's corporate energy consumption
- Council's carbon emissions (to be calculated based on the GHG protocol)
- Emissions reduction as a direct result of energy upgrades / renewable energy system installation compared to BAU cases
- Amount of renewable energy and battery systems (kWh) installed for Council assets
- Percentage of all solar installations across the Council area
- Amount of Green Power (in kWh) and carbon offsets (T CO_{2-e}) needed to be purchased after 2023 and 2025 respectively

3.1.2. Measures of Success

- Council achieves corporate carbon neutrality for its Scope 1 & 2 emissions by 2025
- The Community achieves 50% emissions reduction by 2030
- The Community achieves overall financial savings due to sustainable living capacity building and implementation of energy-efficient upgrades in the long term
- Council assets are energy-efficient and generates cost-savings in the long run
- ESD features and strategies become a part of all Council's new capital works projects

3.2. Resource Efficiency

No	Council-led Action	Description	Starting Timeline
2.1	Provide capacity building training to Staff on resource efficiency and circular economy	Ongoing capacity training will be provided on, but not limited to: Recycling and waste Resource efficiency in procurement Understanding financial implications of climate solutions initiatives	Jan 2022
2.2	Update Council's procurement policies and documents to strengthen sustainable outcomes	Review of Council's procurement policies and procedures will be undertaken to include consideration of sustainable material, product, and services procurement.	Jun 2022
2.3	Continue to implement waste reduction strategies	This will be done in conjunction with the EMP. For example, Council is currently in the process of developing a business case to encourage food waste diversion from landfill.	Jan 2022
2.4	Phase out single use plastics in Council operations	This will be done in conjunction with the Environment Management Plan (EMP)	Jun 2022
2.5	Investigate and implement opportunities to reduce water usage in Council buildings	Audits of current water usage and identification of water reduction strategies in Council buildings will be done in conjunction with Action 1.3	Jun 2022
2.6	Continue supporting Community initiatives that foster local share economy	This will be done in conjunction with the EMP, and will include Community capacity training on circular economy, as well as Staff support on share economy initiatives such as repair cafes, food swap, Community garden, etc.	Jun 2022
2.7	Invest in research projects / trials to explore low-carbon alternatives to raw materials in capital projects	This includes monitoring and investing in research projects / trials as they become available	Jun 2022
2.8	Maximise use of non-potable water in Council operations	This will be done in conjunction with Action 1.1, 1.5, and 1.6, where continuous Staff capacity building, and inclusion of WSUD will be undertaken	Jan 2023
2.9	Training and supporting users of Council land (sports clubs, Community groups, etc.) on circular economy	Ongoing capacity training will be provided on, but not limited to: Recycling and waste Circular economy in their value chain Understanding financial implications of climate solutions initiatives	Jan 2023

No	Council-led Action	Description	Starting Timeline
2.10	Investigate opportunities for sustainable water use in sports field, parks and reserves	Audits of current water usage in sports field, parks and reserves will be undertaken to identify opportunities for WSUD features to be installed. Prioritisation and implementation of the identified opportunities will consider financial implication, and impact of the upgrade on Council's carbon footprint.	Jan 2023
2.11	Continue to investigate circular economy opportunities with other partners	Investigations on circular economy opportunities will be undertaken with Resilient East partners and the LGA.	Jan 2023
2.12	Phase out single use plastics for users of Council land (sports clubs, Community groups, events etc)	This will be done in conjunction with the Environment Management Plan (EMP).	Jun 2023

3.2.1. Quantitative Indicators to be Monitored

To determine if the proposed actions would be successful, Council will continuously monitor:

- Council's carbon emissions (to be calculated based on the GHG protocol)
- Amount of waste diverted from landfill
- Number of climate-smart contractors engaged
- Number of trials on low-carbon alternatives to raw materials in capital projects undertaken

3.2.2. Measures of Success

- Council achieves corporate emissions reduction of 10% in Scope 3 emissions by 2025
- City-wide increase of waste diversion from landfill
- City-wide increase of food and organics waste recycling
- There is an increase of recycled water in Council-owned assets
- Climate considerations integrated to Council procurement policies
- Council Staff trained and able to include circular economy considerations in their daily work
- Consideration of WSUD for all new capital works projects is "business as usual"
- · Community local share economy thriving

3.3. Low Carbon Transport

No	Council-led Action	Description	Starting Timeline
3.1	Support uptake of electric bicycle to encourage low carbon transport in Council operation	Provision of electric bicycles and training on their safe usage will be made available to Staff. Council will organise a session of e-bike as part of EV showcase/seminar.	Jan 2022
3.2	Continue to implement Council's bicycle and pedestrian management plan & transport plan to support active transport	Review of the implementation of Council's bicycle and pedestrian management plan, as well as the transport plan to ensure uptake of active transport (including consideration of future e-scooter trials in key parts of the City). This also includes further provision of fast-charging infrastructure at key locations in the City to encourage uptake of EVs among the Community.	Jan 2022
3.3	Showcase and promote electric vehicles	Council will organise an event to showcase and promote uptake of electric vehicles (including e-bike) in the Community.	May 2022
3.4	Install EV charging station to support Council EV fleet	Council will investigate and install EV charging stations at Council's facilities to support transition of Council fleet to EVs	Jun 2022
3.5	Support the installation of electric vehicle charging stations powered by renewable energy across the city to encourage uptake	Council will install EV charging stations at key locations throughout the City to encourage Community uptake of EVs.	Jun 2022
3.6	Provide capacity building training to Staff on implementation strategies of low carbon transport (e.g. why it is needed, how to implement, what are the financial implications)	Ongoing capacity training will be provided on, but not limited to: Importance on need for low carbon transport Implementation strategies Understanding financial implications of low carbon transport implementation	Jan 2023
3.7	Provide capacity building training to Community on low carbon transport options	Council will provide capacity-building infosessions to the Community to encourage uptake of low carbon transport.	Jan 2023
3.8	Develop plan for Council vehicle transition to low or zero emissions	Development of an EV transition plan to transition Council fleet to low or zero emission. This will be undertaken with the consideration of availability of EV technologies, financial implications and vehicle renewal period	Jan 2023

3.3.1. Quantitative Indicators to be Monitored

To determine if the proposed actions would be successful, Council will continuously monitor:

- Council's carbon emissions (to be calculated based on the GHG protocol)
- Number of capacity building event / info-sessions held to encourage Community uptake in low carbon modes of transport
- Number of EVs in Council fleet
- Number of renewable energy-powered EV charging stations in the city
- Percentage of city population engaging in active and public transport

3.3.2. Measures of Success

- There is an increase in active and public transport uptake among the Community
- Council fleet transitioned to low or zero emission options

3.4. Community Engagement

No	Council-led Action	Description	Starting Timeline
4.1	Build capacity in development industry to go 'beyond compliance' in climate smart design	Council will provide capacity building infosessions targeted at developers and the Community to encourage sustainable development and purchase.	Jan 2022
4.2	Continue support the local Community to develop capacity and skills to tackle climate change	Council will continue to communicate with and educate the Community on climate change risks, and mitigation / adaptation opportunities.	Jan 2022
4.3	Showcase / celebrate sustainable initiatives from local resident to encourage others	Council will showcase Community-led sustainable initiatives, including through social media and other technological platforms to engage and encourage the others in the Community.	Jun 2022
4.4	Develop education and behaviour-change programs to support local residents and businesses to tackle and adapt to climate change	Council will develop programs and easy-to-digest info graphs to build Community and local business capacity in climate change risks, mitigation and adaptation strategies, and sustainable living.	Jan 2023
4.5	Set up annual grant funding to support Community-led sustainability events / initiatives	Council will set up an annual grant funding that will be dedicated to supporting Community-led sustainability events / initiatives.	Jan 2023
4.6	Showcase energy saving strategies and ESD features in Council buildings to encourage Community to do the same	Council will showcase energy saving and ESD features in its buildings.	Jun 2023

3.4.1. Quantitative Indicators to be Monitored

To determine if the proposed actions would be successful, Council will continuously monitor:

- Number of capacity building event / info-sessions held to encourage Community uptake
- number of uptake in informative / educative sessions
- Number of grants awarded to support Community-led sustainability events / initiatives

3.4.2. Measures of Success

- There is strong participation in Community informative / educative sessions
- There is an increase in number of Community-led climate solutions initiatives

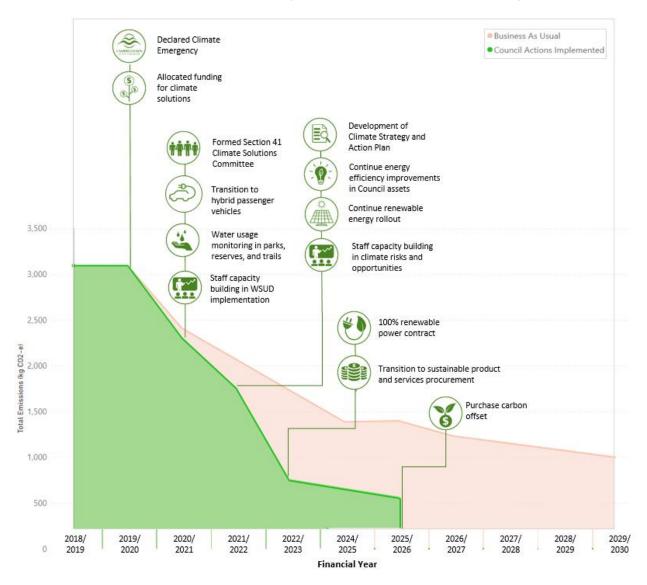
3.5. Strong Governance and Leadership

No	Council-led Action	Description	Starting Timeline
5.1	Continue advocating for higher standards in the State and Federal-wide Construction, Planning and Design Code	Council will continue to advocate for higher planning standards in the state and federal level.	Jan 2022
5.2	Join Cities Power Partnership (CPP) and Global Covenant of Mayors for Climate & Energy (GCOM) and committing to achieving the pledges selected	Acknowledging that the importance of partnerships in knowledge sharing, accountability, and implementing change, Council will join CPP and GCOM.	Jan 2022
5.3	Consolidate climate risk register and management plan - ensure publically available	Climate risk register and management plan will be consolidated and made publically-available and accessible.	Jan 2022
5.4	Apply climate risk considerations in the development and implementation of the Urban Forest Strategy	Noting the importance of City-wide greening and having large open spaces that are comfortable to the Community, Council will incorporate climate risks to the Urban Forest Strategy currently under development, including working towards achieving the tree canopy target set with its Resilient East partners. This will be done in conjunction with the EMP.	Jun 2022
5.5	Continue to improve on Council and city-wide emissions monitoring	Council will continue to improve its emissions monitoring process to improve data accuracy.	Jun 2022
5.6	Implement green revolving energy fund	Council will set up a green revolving fund to ensure savings from sustainability initiatives gets reinvested for future initiatives.	Jun 2022
5.7	Investigate feasibility of setting internal carbon budget within Council	 This will be further broken down to the following: Provide capacity building training to staff and elected members on impact of carbon emissions Collate and analyse carbon emissions of infrastructure projects of different scales Set internal carbon price for all Council emissions Set internal carbon budget for different project scales. 	Jun 2022

No	Council-led Action	Description	Starting Timeline
5.8	Provide capacity training to Staff to assess climate risks	Ongoing capacity training will be provided on, but not limited to: Climate risks (physical vs transitional) Mitigation strategies Adaptation strategies	Jan 2023
5.9	Review Council financial investments to divest from fossil-fuel aligned investments	LTFP (long-term financial plan) modelling will be undertaken to understand if there is a long-term financial implication.	Jan 2023
5.10	Review emergency management and related plans to develop priority projects to mitigate climate-related bushfire risks	Council will review the related emergency management plans to identify projects to mitigate	Jan 2023
5.11	Undertake a physical risk assessment to determine climate change risks on Council assets	Council will incorporate the risk assessment as part of the review of Council's Infrastructure Asset Management Plans	Jan 2023
5.12	Support opportunity to host climate-related PhD project	Council will monitor opportunities to host a climate-related PhD project.	Jun 2023
5.13	Provide periodic update to Council and Community on progress against Climate Action Plan	This will be done annually through Council's Annual Report.	Jun 2023
5.14	Update flood modelling plans to include climate change scenarios (low, medium, high) to develop priority projects to mitigate flood risks	This will be done in conjunction through a State-funded project to update the flood modelling plan. Prioritisation of new projects and asset management will be informed through this.	Jun 2023
5.15	Explore opportunities to partner with others for carbon sequestration opportunities	Council will work with its partners to identify carbon sequestration opportunities to reduce dependency on carbon offset purchase.	Jun 2023

4. Expected Outcomes

By following the actions presented in *Section 3 - Pathways to climate resiliency*, Council believes that it can achieve carbon neutrality for its Scope 1 and 2 emissions by 2025.



5. Monitoring and Reporting

Given that this is the first time Council has started tracking its corporate and Community carbon footprint, reasonable assumptions were made to estimate total GHG emissions. Moving forward, Council will look to improve its data collection method.