CITY OF BALLARAT

Carbon Neutrality and 100% Renewables Action Plan 2019–2025

Contents

Statement of acknowledgement

The City of Ballarat is proud to acknowledge the Traditional Owners of Country which includes in Ballarat today, the Wadawurrung and the Dja Dja Wurrung peoples, and pays respect to all Elders, past, present and emerging, as well as Elders from other communities who reside here today. They hold the memories, traditions, culture and hope of Aboriginal and Torres Strait Islander people around Australia.

Vision – an ambitious goal

Renewable clean energy sources will power our households and businesses.

Less energy consumption will ensure our homes are affordable, comfortable and healthier.

Neighbourhoods will become centres of activity with more opportunities for residents to connect and prosper.

Ballarat will attract energy-wise and resource-smart businesses guaranteeing future prosperity.

Thriving within an affordable carbon budget, residents will act as conscious consumers.

The vision for the City of Ballarat is to achieve zero net carbon dioxide emissions from its own corporate activities. Addressing climate change is a global action that aims to reduce emissions (mitigation) and change the management of our natural and built environment to better respond to the impacts of climate change (adaptation).

The primary aim of the Carbon Neutrality Strategy and 100% Renewables Action Plan is to provide the pathway for Council to meet its long-term goal of zero net corporate emissions. The strategy also provides direction for Council on how best to support the Ballarat community and business to reduce their greenhouse gas emissions.

As the world transitions to a low carbon economy, now is the ideal time to capitalise on changes to our energy systems that deliver cost savings, attract investment, drive innovation and create jobs.

Council is in a unique position to lead and enable our communities to effectively embrace renewable energy and carbon reduction initiatives. This will be achieved via collaboration with our community partners, including residents, business and the not-for-profit sector. Leading by example we will make climate consciousness integral to every aspect of our business and invest in this plan to ensure our corporate emissions are ultimately reduced to zero. Decisions made today, and implementation of this plan, will have a direct effect on a cleaner future and the health, economic development and prosperity of Ballarat.

Climate change and what it means for Ballarat

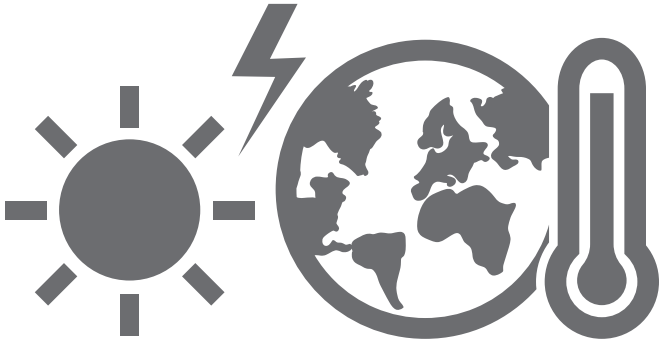
Since the Industrial Revolution began, human activities have accelerated climate change. The main causes of this acceleration are from burning fossil fuels, emissions from agriculture, and from land clearing reducing the ability of the earth to sequester greenhouse gases.

Victoria has already become warmer and drier, already 1.5 degrees since 1960s, which is a climate trend likely to continue. By 2030 Victoria is forecast to experience:

- increasing average annual temperature approx. 0.6-1.2 degrees,
- additional hot days,
- more frequent and severe heat waves (e.g. 3-5 days),
- more frequent and severe droughts,
- increased frequency and intensity of storms, but overall decrease in rainfall by almost 10% particularly in spring and winter.

Local Government in Victoria, through the Municipal Association of Victoria (MAV), recognise that while we are in a state of climate emergency now, it is possible to prevent the long-term impacts of climate change and that action by all levels of government is required now.

This document outlines the City of Ballarat's response toward mitigation of its own corporate greenhouse gas emissions, and while several actions inherently address climate adaptation techniques, it is important to note this document does not aspire to be a climate change adaptation strategy.



Our progress

Ballarat has a long and successful history of reducing carbon emissions, as well as undertaking many significant initiatives across a range of environmental disciplines. The City of Ballarat has been pivotal to these initiatives as the project lead, investor and/or key stakeholder enabling them to progress. Below is a list, albeit non-exhaustive, of the City of Ballarat's achievements.

Renewable energy

A 300 kilowatt solar park at the Ballarat Airfield, a 780 kilowatt generator at the landfill fueled by methane (25 times worse than carbon) and more than 150 kilowatt of solar on City of Ballarat facilities, which is collectively the equivalent of about 900 homes. In 2017 and 2018 we have seen the installation of solar electricity on low income households, signing of the Heads of Agreement in 2018 for a proposed Waste to Energy plant in Ballarat West Employment Zone, and the installation of a 30 megawatt battery storage complex (equivalent to 20,000 homes) at Warrenheip improving stability of the grid when commissioned and as more renewable energy comes on line.

Waste management

Kerbside greenwaste service was introduced to Ballarat in 2016, resulting in reduced contamination in general waste bins and approximately 4,000 tonnes less waste going to landfill each year. The diversion of waste to recyclable streams increased to above 50%, which is above the Victorian average, and has reduced greenhouse gas emissions from landfill, as well as providing organic products for use in the City of Ballarat environmental restoration programs.

Vehicle Fleet

The City of Ballarat was one of the first municipalities in Victoria to procure a bulk supply of bio-diesel, which from an emissions point of view is near carbon neutral from the sequestration of carbon dioxide by the crops used to create the biodiesel. For our small fleet vehicles, the City of Ballarat's current approach is to purchase hybrids (four hybrids in

2017/18) and several actions within this plan target research into renewable fuel options, potential bulkbuy for Electric Vehicles (EVs), and the City of Ballarat support toward community uptake of EVs and eBikes.

Urban Forestry

The original greening Ballarat project began in the late 1980s and triggered a plethora of environmental programs, most notably the vested management of the Yarrowee River with the City of Ballarat in the 1990s from the State Government. This renewed mindset is embedded today through, for example, our Open Space Strategy, Tree Management Plan and Landscape Design Manual which influence management and development of the city, and through the Ballarat Strategy with a target of 40% canopy cover.

Integrated Water Management (IWM)

Ballarat's water stakeholders are multi award winning. Key initiatives include the Harnessing Ballarat Stormwater Network carrying more than 650 meglitres of recycled water sources per year to Lake Wendouree and capacity to deliver almost 190 megalitres to many irrigation sites. In 2017 Ballarat commenced roll out of a third pipe network in BWEZ for alternative water supply and in 2018 Ballarat was the first regional city to develop a city-scale Integrated Water Management Plan, which provides recommendations toward a diverse range of water sources to secure a greener and more prosperous water future for Ballarat.

These achievements by the City of Ballarat (as lead, investor and/or key stakeholder) have delivered many benefits to Ballarat residents such as cost savings, environmental benefits, sport and active living opportunities, and community education. The City of Ballarat is now well positioned to move into the final phase of preparing for zero net carbon emissions from its operations, and continue to provide strong support to the community.

How did we develop our strategy and action plan?

The development of this strategy and action plan was developed over an eight month period. A description of the major steps is outlined briefly below.

1

Assembled Project Control Group

Included staff from Finance, Facilities Management, Strategic Planning, and Environmental Services to ensure high level support was gained across the organisation to implement the action plan.

2

Looked at existing work

This allowed the progress and successes to date to be quantified. This provided the underlying information to start planning the path to carbon neutrality.

3

Established baseline measurement

The process quantified the level of savings available within each emissions theme, including an independent review of landfill emissions and emissions from street lighting as two of the major sources.

4

Benchmarked other cities

Looked at cities throughout the world leading the charge to carbon neutrality, which provided certainty that actions that were identified are the best methods to reduce emissions.

5

Internal consultation

This involved more than 20 officers and middle management from across the organisation. This in-depth process allowed for the identification of practical carbon reduction solutions and buy in of the plan across the organisation.

6

Community engagement

This was conducted via the Regional Sustainability Alliance Ballarat. The RSAB is a network of more than 20 organisations from the public, private and nonprofit, and community group sectors that is taking a leading role in moving the region towards sustainability. The group provides strategic advice to the City of Ballarat and has provided expert input over a wide range of topics for many years.

7

Creation of an action plan

Including the identification of priority items to accelerate action (see Page 8 for definitions).

Strategic context

To maximise the success of the Carbon Neutrality and 100% Renewables Action Plan, many of the broad strategies and targeted actions deliberately align with delivery against numerous strategic outcomes of the City of Ballarat. This includes but is not limited to:

- many aspects of Section 5 Sustainable Ballarat of the Ballarat Strategy 2015.
- opportunities for alternative/ renewable fuel options to support public transport and the CBD Smarter Parking Plan
- urban Forestry and microclimate improvements, and associated energy reduction, at social infrastructure sites
- diversion of waste from landfill as outlined in the Resource Recovery and Waste Management Strategy 2018 and associated reductions in greenhouse gas emissions,
- addresses gaps from previous energy audits at City of Ballarat facilities and transfer audit knowledge to other existing and newly constructed City of Ballarat sites
- aligned to the City of Ballarat's TAKE2 pledge and membership Cities Power Partnership of the Australian Climate Council
- the renewable energy section was developed in accordance with the working draft for alternative energy models: A guide for Councils (Point Advisory, for the CVGA 2018).
- The principles for prioritising actions aligns with the Social Policy Framework, impact on social determinants of health

What does it mean to be carbon neutral?

Carbon neutrality will be achieved when net greenhouse gas emissions within the City of Ballarat's operations are equal to zero. This will be achieved primarily by avoiding and reducing greenhouse gas emissions as a priority, offsetting remaining emissions, continuing to measure corporate emissions and publicly report on carbon neutrality.

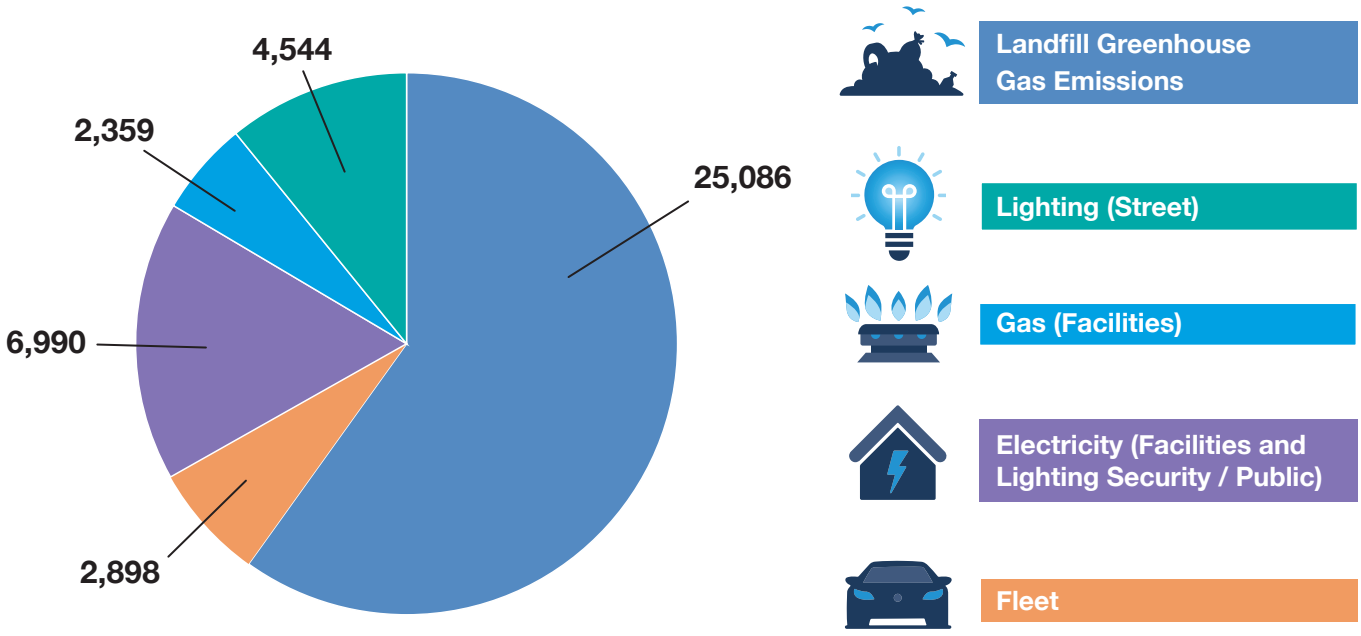
Corporate emissions profile and key reduction strategies

At 30 June 2018 City of Ballarat's corporate emissions were 39,000 tonnes per annum of carbon dioxide equivalent (t/Co2e). This includes emissions from the direct and indirect use of energy (reportable Scope 1 and 2 emissions) and from our Street Lighting (Scope 3 emission).

It should be noted that Council has chosen to exceed the National Carbon Offset Standard (NCOS) by including the non-reportable Scope 3 emission of Street Lighting due to its scale in the emissions profile and because City of Ballarat has influence of its management.

Ballarat is a major urban growth centre with population growing at 1.9% per annum, Our municipal services such as waste management, sports and recreation and social services are also increasing in-line with city growth. **City of Ballarat's emissions are estimated to grow from 39,000t/Co2e at 2018 up to 41,877t/Co2e at 2025 under business-as-usual.**

Estimated business-as-usual emissions profile at 2025 (t/Co2e) Incl. scope 1 and 2 and street lighting (scope 3)



Corporate emissions profile and key reduction strategies
(continued)

Avoid and Reduce

The following five outcomes have been identified to reduce greenhouse gas emissions. Against these outcomes there are almost 60 specific actions created to achieve the desired emissions reduction and provide community support.

Outcome 1 A culture of sustainability within City of Ballarat

Outcome 2 Maximise energy resource efficiency

Outcome 3 100% renewable energy City of Ballarat operations

Outcome 4 Reduced emissions from waste

Outcome 5 Community carbon emissions reduction

Offset

A carbon offset is any project that indirectly reduces greenhouse emissions at one source by investing in greenhouse gas emissions reductions elsewhere. Offset mechanisms are rapidly evolving, therefore in 2025 City of Ballarat will investigate and implement the best offset solutions available to ensure the environmental benefits are maximized for the lowest possible cost.

Whilst it is not possible to reduce the City of Ballarat's energy consumption to zero, after it has been minimised as far as practically possible the City of Ballarat will undertake carbon offset initiatives to reduce emissions to zero. The primary focus of this strategy is to focus on the 2025 target. Once this is achieved the total carbon offset figure can be ascertained and actions to offset these developed.

Measure, Report and Improve

The City of Ballarat engages an external 'environmental scorecard' to consolidate more than 600 individually metered connection points for gas, electricity and water, as well as the recording of fuel consumption data, landfill volumes and reporting of data against a range of measurement matrices. Several reports are provided which present energy and emissions data with comparisons of performance against previous years. This system is also used to develop business cases to facilitate emissions reduction and sustainability initiatives at City of Ballarat assets or for major projects, and will become an even more vital tool in driving commitment to the Carbon Neutrality and 100% Renewables Action Plan.

Audit emissions

The Action Plan proposes that the City of Ballarat independently audit its full corporate emissions inventory every five years to ensure continued accuracy and best practice. The development of this plan included an independent review of landfill emissions due to its significance within the emissions profile, and street lighting due to the choice to exceed the National Carbon Offset Standard standard by including this Scope 3 emission and its significance within the emissions profile.

Principles for the prioritising of actions

With a list of almost 60 actions identified through the strategy development process, the actions were reviewed against 3 key criteria to priotritise the list and identify the high priority actions. The 3 criteria for prioritising actions are,

Easy wins – the projects with good reductions in emissions that are straightforward projects with minimal or no budget requirements,

The big-ticket items – the initiatives with low risk and present strong inroads toward carbon neutrality and the 2025 target,

Enabling factors – the initiatives required to unlock the potential of other high-ranking actions within the Strategy

The key actions to support community were also signified by a 4th criteria,

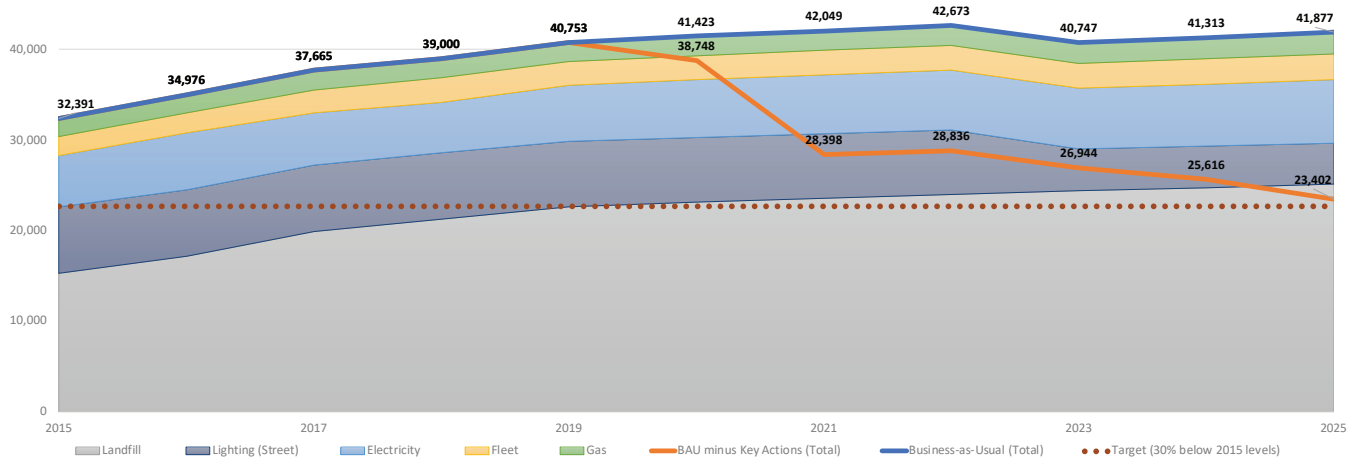
Partnership priorities – key mechanisms for City of Ballarat to support vulnerable sectors of community and city prosperity in terms of emissions reduction and/or cost savings.

The Target

Victoria's Climate Change Act 2017 establishes a long-term target of net zero greenhouse gas emissions by 2050. As an interim target (not yet legislated), the Victorian Government has committed to reduce emissions specifically from government operations by 30% below 2015 levels by 2020.

The analysis below models the 'big ticket items' in the Action Plan that have an immediate high impact on City of Ballarat's corporate emissions by 2025 and have a relatively high level of certainty because they strongly overlap existing strategic priorities of Council, an ability to integrate with existing capital works programs, and/or they are well progressed projects which already have a sound business case.

City of Ballarat corporate emissions 2015–2018 (t/Co2e) and forecast emissions to 2025 with key mitigation actions. Includes Scope 1 and 2 and Street Lighting (Scope 3)



Note: City of Ballarat's data systems for Corporate Social Responsibility reporting are constantly improving, which may result in slight variation to the historic emissions presented above.

Below is the annual emissions reduction potential at year 2025 from the key Big Ticket Items identified in the Action Plan.

Electricity	6,990	Includes key actions from past energy audits, then drop to 0 (t/Co2e) in 2020 with purchase of certified green power (with assumed purchase and retire of large-scale generation certificates).
Landfill	5,474	Diversion of waste from landfill of 70% at 2022 and 85% from 2028, with a key action underpinning this being the development of the All Waste Interchange in the Ballarat West Employment Zone.
Street Lighting	4,544	Migration of Mercury Vapour residential lighting to LED at next scheduled change in 2022, and purchase of green power from 2020 (with assumed purchase and retire of large-scale generation certificates).
Gas	1,387	Includes key actions from past energy audits and then reduce Aquatic Centre to 0 (t/Co2e) in 2025 from initiative yet to be identified (e.g. biomass or biogas fuelled, or heat pump technology with purchase of green power).
Fleet	80	Conservative estimate of 30,000L/year less diesel with consolidation to All Waste Interchange (Note: migration to hybrids and possibly electric vehicles may occur, but not to a significant level by 2025).
Carbon Offset	TBD	Carbon emission offsets from expansion of Urban Forest from 17% canopy cover to 40% cover by 2040.

The Actions

A culture of sustainability within the City of Ballarat	
1.1 Behaviour change	
1.1a  Enabling Factor	City of Ballarat to appoint a Sustainability Officer to drive carbon reduction and renewable energy activities. This action supports many targets/actions in this Action Plan which are not currently resourced.
1.1b	Sustainability Officer to Monitor, Evaluate, Report and Improve (MERI) energy and emissions, including periodic independent audit of data.
1.1c	Create an internal "Green Team" for positive behaviour change and resource reduction activities.
1.1d	Develop Environmental Management Awareness training, including Emissions and Renewables, to be delivered in staff and Councillor Inductions.
1.1e	Identify and lobby for Council staff to attend appropriate forums to gain exposure to best-practice energy efficiency and renewable energy options and foster corporate relationships.
1.2 Green purchasing	
1.2a  Enabling Factor	Pilot a reciprocal fund with savings from an easily measurable project (e.g. solar electricity installation) reinvested in further initiatives, with a view to expand the recipricol fund.
1.2b  Easy Win	Update City of Ballarat tender schedules to include provision for an environmental purchasing policy with a rating scale for assessing green component of contract (e.g. energy, recycling etc.).
1.2c	Periodically review capital works programs and factor budget to implement key energy audit recommendations, actions wihtin this plan, and other opportunities as they arise.
1.3 Infrastructure upgrades to support reduced carbon emissions	
1.3a	City of Ballarat to be future focussed and investigate options for Ballarat to become a leader in the field of sustainability, and be adaptable with City of Ballarat infrastructure to ensure it can take up new technologies in the future (eg. Smart Cities Concept, Hydrogen City, Internet of Thing's (IoT), District Heating, etc.).
1.3b	Work with large community partners for funding applications on cost efficiency and renewable energy programs (e.g. Ballarat Health Services, Federation University).

Maximise energy resource efficiency	
2.1 New buildings to be carbon neutral	
2.1a  Enabling Factor	Major refurbishments and new constructions to be designed and constructed to high Ecologically Sustainable Design (ESD) principles, with ESD consultant engaged as part of design team to set the applicable standard for the development (e.g. 6 Green Star).
2.1b	Investigate business case for "getting off-gas" in new (and existing) City of Ballarat facilities from solar electricity, battery storage, biomass or solar heating, heat pump technology, hydrothermal (for example).
2.1c	Immediately stop installing air-condition systems in new construction projects that are subject to the Australian phase-down of hydro-fluorocarbon (HFC) based refrigerants.
2.2 High Efficiency Lighting	
2.2a  Big Ticket	Accelerate rate of LED upgrades to streetlights and public lighting, including controllable 'smart' lighting (e.g. dimmable and timers).
2.2b  Easy Win	All flood lighting and hi-bay to install or retrofit LED (typically best businees-case of domestic lighting types), subject to any occupation specific standards.
2.2c	Use Powercor and City of Ballarat GIS inventory to monitor compliance with Energy Efficient Public Light Policy 2014 for new installations of public lighting and street lighting.
2.3 City of Ballarat's fleet to be low carbon	
2.3a	Partner with Greenhouse Alliances of Victoria to conduct Local Government (and broader public sector) fleet assessment for potential bulk-buy of Electric Vehicles commencing approx. 2020–2022
2.3b  Easy Win	Undertake training for improved driver practices for fuel use minimisation (known as eco-driving), with savings of 5% to 15% common.
2.3c	Council keep abreast of emerging technologies and position themselves to act on purchasing alternative fuel/renewable energy medium-heavy rigid, also looking for opportunity to integrate with public transport and infrastructure.
2.3d  Big Ticket	Reduce diesel use with the waste collection fleet by consolidating waste services to All Waste Interchange (AWI) at Ballarat West Employment Zone, with conservative estimated savings of 30,000L/ year.
2.4 Existing City of Ballarat facilities to achieve world class efficiency	
2.4a  Big Ticket	Complete outstanding actions from previous energy audits, focussing on the actions with greatest emissions reduction potential and ROI <10years).
2.4b	Review the summer indoor pool temperature requirements for Ballarat Aquatic and Lifestyle Centre, and review previous business cases for alternative energy and continue to look for new options, plus benchmark against other councils.
2.4c	Install Building Management System at Library and continue to upgrade existing BMS to modern standards, linking all BMS in real-time to Council and contract staff.
2.4d  Enabling Factor	Complete energy audits for sites >100,000 kilowatt hour of electricity per year and/or >750,000 megajoules of gas per year. Sites of this scale not audited previously include Phoenix, Eureka Centre, Operations and Environment Depot and Morsehead Park.
2.4e	For smaller buildings where the cost of the BMS cannot be justified by the savings, investigate and install more economic measures to reduce operating costs and carbon footprint.
2.4f	Complete a risk assessment of the Australian phase-down of hydro-fluorocarbon (HFC) based refrigerants on key infrastructure and integrate adaptive strategy through planned refurbishment and renewals programs.

100% renewable energy City of Ballarat operations	
3.1 Move towards 100% renewable energy by 2025	
3.1a	Continue to research previously identified renewable energy opportunities and dedicate time to explore new innovative areas to establish Ballarat as a renewable energy destination (e.g. Hydrogen City, district heating, micro-grids, industrial climate innovation hubs etc.).
3.1b Big Ticket	Investigate feasibility of Power Purchase Agreement, or other energy procurement strategy, to purchase energy from a large scale renewable energy facility (e.g. wind, solar project, waste-to-energy, landfill electricity generator) which best suits councils needs and objectives. Consider the purchase and retire of Large-scale Generation Certificates (LGC) for certified neutrality.
3.1c	Investigate upscale potential from existing renewable energy generation at the Smythesdale Regional Landfill and Ballarat Airport, and opportunity for other City of Ballarat land to support renewable energy generation.
3.1d	Continue to support Hepburn Shire and Central Victorian Greenhouse Alliance with pilot project of biological Waste to Energy from municipal and commercial organics sources.
3.2 City of Ballarat buildings to incorporate renewable energy to offset the building energy consumption	
3.2a Easy Win	Install Solar panels on Wendouree Childcare and Girrabanya (2 most feasible sites from 2015 study), expand existing solar at Lucas Communtiy Hub, and revise the 2015 study to include the mandated minimum feed-in tarrif (2017) and recent retail price increases (2018).
3.3 Leadership	
3.3a	City of Ballarat to undertake/advocate for a large showcase project which achieves significant carbon emissions and cost savings (City of Ballarat as lead or stakeholder) to encourage Ecologically Sustainable Design assessment during planning phase (e.g. GovHub, Bakery Hill Urban Renewal Precinct and La Trobe Street former Saleyards).
3.3b	Advocate for significant energy contracts in Victoria, especially by Victorian Government, to procure renewable energy.
3.3c Partnership Priority	Continue to work with stakeholders to facilitate the creation of additional renewable energy generation projects in western Victoria, including grid upgrades as a key enabler to project development.
3.3d Partnership Priority	Work with Distribution Network Service Providers to facilitate renewable energy projects that provide grid stability and have potential to increase the fraction of renewable energy within the grid locally within Ballarat (e.g. Warrenheip battery storage complex, distributed battery storage across city etc.).
3.3e	Work with the commercial sectors to investigate potential of energy options from processing refuse derived fuels such as wood chip, wood pellets, pelletised plastics and paper.
3.3f	Continue to work with the Central Victorian Greenhouse Alliance to share and showcase best practice climate and energy projects across local government.
3.3g	Council consider mechanisms to create carbon neutral events in Ballarat (Council run and private events)

Reduced emissions from waste	
4.1 Capture gas emissions from landfill and generate electricity	
4.1a	City of Ballarat to maximise efficacy of landfill gas capture infrastrcuture, ensuring fugitive emissions are minimised and renewable energy generation maximised.
4.1b	Work with the electricity generation company at the Smythesdale Regional Landfill to place 2nd generator (planned) taking capacity to approx. 12,000 megawatt hours per year.
4.2 Maximise resource recovery	
4.2a Big Ticket	Support and ensure resource recovery is fully maximised via the All Waste Interchange (AWI) at the Ballarat West Employment Zone.
4.2b Big Ticket	Work with Waste to Energy (WtE) service providers to build and implement the Waste to Energy plant in Ballarat West Employment Zone.
4.3 Minimise household waste to landfill	
4.3a Big Ticket	City of Ballarat to consider kerbside Food Organics (FOGO) collection and processing, subject to outcomes of the Waste to Energy feasibility study.
4.4 Minimise Commercial and Industrial (C&I) waste to landfill	
4.4a Big Ticket	Further investigate sorting facility for commercial and industrial (C&I) waste at later stages of developing All Waste Interchange, subject to outcomes of the Waste to Energy feasibility study.

Community carbon emissions reduction	
5.1 Future generations	
5.1a	Facilitate energy efficiency/renewables/climate change awareness workshops for schools, and continue to sponsor Smart Living Ballarat to deliver sustainability education to community.
5.1b  Partnership Priority	Continue to support Federation University endeavours to establish a state-of-the-art Renewable Energy training facility in Ballarat West Employment Zone.
5.1c	Investigate opportunities to connect energy reduction with other community priorties. Eg. Active transport, food security, parking. Alignment with Ballarat Strategy to ensure active transport modes are supported.
5.1d  Partnership Priority	Work with the state government to improve public transport services and mode share in Ballarat, including transitioning to low emission buses and public transport.
5.1e	Become Electric Vehicle and eBike ready in large public carparks, further considering possibility for solar panels shading and incentive mechanisms to support delivery of the CBD Smarter Parking Plan.
5.2 Provide efficient facilities for City of Ballarat tenants	
5.2a	Facilitate energy efficiency/renewables/climate change awareness education for tenants of City of Ballarat facilities, and assist them to identify energy or water saving initiatives.
5.3 Climate resilient local environments.	
5.3a	Continue implementing Urban Forest Strategy to reduce heat island effect and associated emissions savings from building Heating Ventilation and Air Conditioning systems and vehicle Air Conditioning etc.
5.3b  Partnership Priority	City of Ballarat to advocate for and achieve regulation for greater housing and commercial building efficiency standards on 3 fronts: 1. City of Ballarat to consider Local Planning Policy for Ecologically Sustainable Design (ESD) 2. Ecologically Sustainable Design improvements to the Victorian Planning Scheme 3. Ecologically Sustainable Design improvements to the National Construction Code of Australia (NCC).
5.3c	Local Builders, home owners, City of Ballarat and Regional Sustainability Alliance Ballarat to be included in a developer forum to develop local efficiency standards.
5.3d	City of Ballarat to find local champion developer to consider an Ecologically Sustainable Design display home in Ballarat West (e.g. Sustainability Victoria's 0 net carbon home program).
5.3e	Continue as partner to the Ecologically Sustainable Design for Subdivisions in Victoria – Proof of Concept, aspiring to identify precinct scale Ecologically Sustainable Design improvements.
5.4 Empowered communities	
5.4a	City of Ballarat to develop Community Greenhouse Gas Emissions profile succinct with Global Protocol for Community-Scale Greenhouse Gas Emission Inventories, and set aspirational targets for whole of the city and monitor progress.
5.4b	Continue to work with the Central Victorian Greenhouse Alliance and Ballarat Community Power Hub to understand opportunities for City of Ballarat to support community renewables projects (e.g. community investment in renewables infrastructure, direct offset PPA) that are best for further investigation.
5.4c	City of Ballarat work with relevant partners to facilitate knowledge to businesses on Ecologically Sustainable Design support mechanisms such as Victorian Energy Efficiency Target, Energy Upgrade Agreements, Energy Performance Contracts, Grants (when available), Rates Rebates Schemes etc.
5.4d	Continue delivery of the CBD Smarter Parking Plan, including data gathering of transport patterns, provision of pedestrian and cycling facilities, and community education and support, therefore resulting in reduced carbon miles.
5.4e	City of Ballarat develop local policy, or lobby for state policy, for multi-unit dwellings (small to medium rise) with communal car parking to be Electric Vehicle and eBike ready at time of construction.
5.4f	Continue current Solar Savers program for low Income households, and continue lobbying with Greenhouse Alliances of Victoria for extending duration of this program and to further include solar hot water, efficient circulation pumps and storage batteries to the scheme.

ballarat.vic.gov.au

info@ballarat.vic.gov.au 03 5320 5500

February 2019