

# **Annual Environment Report 2022-23**

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## **Acknowledgement of Country**

## **Acknowledgement of Country**

The City of Greater Bendigo is on Dja Dja Wurrung and Taungurung Country. We acknowledge and extend our appreciation to the Dja Dja Wurrung and Taungurung People, the Traditional Owners of the land.

We pay our respects to leaders and Elders past, present and future for they hold the memories, the traditions, the culture and the hopes of all Dja Dja Wurrung and Taungurung Peoples.

We express our gratitude in the sharing of this land, our sorrow for the personal, spiritual and cultural costs of that sharing and our hope that we may walk forward together in harmony and in the spirit of healing.

## **Acknowledgement of First Nations People**

The City recognises that there are people from many Aboriginal and Torres Strait Islander communities living in Greater Bendigo.

We acknowledge and extend our appreciation to all First Nations Peoples who live and reside in Greater Bendigo on Dja Dja Wurrung and Taungurung Country, and we thank them for their contribution to our community.

## **Executive Summary**

This Annual Environment Report provides the opportunity for Council to report on progress with implementing the organisation's key environment strategies and plans including the *Climate Change and Environment Strategy 2021-2026*.

The report provides an overview of key achievements, areas for improvements as well as progress towards achieving Council's environment objectives which are measured using a set of indicators. These indicators and the associated targets were reviewed for the 2022/23 Annual Report to ensure they are relevant and measurable.

#### Achievements 2022/23

The highlights for the 2022/23 financial year include:

#### Zero Carbon

- Reduction in landfill emissions by 11,500 tCO2e due to the reduction in general waste received at Eaglehawk Landfill, including a reduction in commercial and industrial waste.
- Reduction in greenhouse gas emissions by 430 tCO2e due to the progressive electrification of buildings and fleet.
- Removal of gas from 6 Council facilities to make them all electric.
- Increase in Council's electric passenger fleet from 6 to 10 vehicles.
- Delivery of a Climate Summit through the Greater Bendigo Climate Collaboration which was attended by approximately 680 community members.
- Development of the draft Greater Bendigo Zero Emissions Roadmap which was since adopted in September 2023.
- Adoption of the Zero Carbon Net Zero Emissions Plan for Council Operations 2023-2030.

#### Biodiversity and regeneration

- Development of the draft Biodiversity Strategy and Action Plan which was since adopted in September 2023.
- Planting of 3,376 urban trees.
- Reduction in removal of native vegetation from Council operations.
- Introduction of a 24-hour cat containment requirement.

#### Active and sustainable transport

Installation of 18.5km of footpaths.

#### Sustainable food systems

 Participation of approximately 168 landholders in the Healthy Landscapes: Practical Regenerative Agricultural Communities Program.

#### Circular economy

- The reduction of waste collected per capita across all waste streams and the increase in diversion of organic waste from landfill.
- Establishment of soft plastics recycling drop off points.

## **Areas for Improvement**

Key areas for improvement include:

- Data collection processes and practices.
- The speed of electrification of Council facilities.
- Facilitating a mode shift from car use to walking, cycling and public transport use through investment in strategic infrastructure, programs and advocacy.
- Developing a strategic approach to managing stormwater to achieve water quality and flood mitigation outcomes.
- Developing a strategic approach to management of Council's natural reserves.
- Assessment of generated waste at Council owned facilities with a dedicated strategy to reduce waste where possible and increasing use of reused and recycled content, products and materials in Council operations.
- Supporting the community to adapt to climate change.

## **Current priorities**

Current work underway to improve performance includes:

#### Zero carbon

- Delivery of a program of electrification works for Council facilities.
- Development of feasibility studies and detailed design for electrification of Council's larger facilities such as the Bendigo Library and Council's aquatic centres.
- Development of a fleet transition strategy as a part of the Fleet Asset Management
   Plan
- Participation in the North Central CMA's Community Carbon local carbon offsets program.
- Development of a Public Electric Vehicle Charging Framework and Implementation Plan in collaboration with the Central Victorian Greenhouse Alliance (CVGA).

#### Active and public transport

- Development of a Zero Emissions Transport Framework and Implementation Plan that identifies the most cost efficient interventions that will achieve the highest mode shift to walking, cycling and public transport use.
- Progression of the "Low Line" shared trail along Bendigo Creek.

#### Biodiversity and regeneration

- Delivery of a biodiversity engagement program.
- Delivery of the Rural Regeneration Grants program.
- Delivery of a Sustainable Land Management Program comprising workshops and individual on-farm advice as well as the Healthy Landscapes regenerative agriculture program.

#### Water

- Development of a Stormwater Management Strategy.
- Development of an implementation plan for Reimagining Bendigo Creek in collaboration with Djandak.

#### Circular economy

- Continued review of long-term resource recovery planning such as Circular Economy Hubs.
- Continued waste education across industry and the community.
- Changes to kerbside collection schedules to facilitate the continued reduction in waste to landfill i.e. collection of organics weekly and general waste fortnightly.

#### Other

- Exploration of opportunities to represent Council's environmental data on an interactive online porthole.
- Working with the community to build their resilience to the changing climate, including across the areas of heat waves, natural disasters, extreme weather events and drought.

## Introduction

This Annual Environment Report provides an overview of Council's environmental performance against:

- 1. Greater Bendigo Climate Change and Environment Strategy 2021-26
- 2. Greater Bendigo Biodiversity Strategy and Action Plan 2023-33
- 3. Greater Bendigo Zero Emissions Roadmap
- 4. Zero Carbon: Net Zero Emissions Plan for City Operations 2023-2030
- 5. Be the Change Action Plan
- 6. Greater Bendigo Walking and Cycling Strategy (outcomes only)
- 7. Greening Greater Bendigo (outcomes only)

Implementation of other relevant documents such as the Greater Bendigo Food Systems Strategy will be assessed separately.

The report provides an assessment of Council's environmental performance against the indicators, goals and targets contained in these documents. All indicators have been mapped to the *Climate Change and Environment Strategy 2021-26* themes.

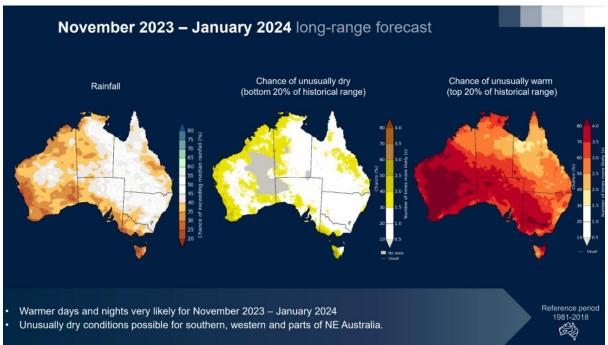
The body of the report includes a summary of achievements, areas for improvement and future work for each theme. The full table of goals and indicators is provided at **Appendix 1**. A snapshot of progress with implementation of the abovementioned strategies is provided at **Appendix 2**.

## Context

## Climate and biodiversity crisis

During 2022/23 the City of Greater Bendigo experienced the impacts of climate change. The flood event of October 2022 directly impacted parts of the municipality, and our neighbouring council experienced devastating impacts across the region.

In contrast Bendigo is staring at a long hot summer with El Nino being declared by the Bureau of Metrology. We also know that the climate is getting hotter and drier Australia's temperature has warned by 1.48° since 1910 and ten of the hottest years on record have taken place between 2013 and 2020.



Source: BOM Long-range forecast for rainfall, usually dry and usually water conditions.

The hot and dry weather coupled with the higher fuel load from consecutive La Nina events points to an increased risk of bushfires for the latter half of 2023/24.

Biodiversity in Victoria continues to decline. Greater Bendigo is currently home to 92 threatened plants and 67 threatened animal species. Redressing biodiversity loss is a long term program for the City and the Strategy is a big step in the City's leadership and commitment towards a renewed natural environment.

## Changing policy context.

Since the last Annual Environment Report the following changes have occurred at the State and Federal level:

#### Australian policy context

- Release of the National Electric Vehicle Strategy.
- Release of the <u>Threatened Species Action Plan 2022-2032</u>.

#### Victorian policy context

- Brought forward the state's net zero target from 2050 to 2045.
- Recycling Victoria commenced operations on 1 July 2022 with mandated policy Building Victoria's Circular Economy
- Victoria's Gas Substitution Roadmap Update was released and legislation was introduced requiring new subdivisions to be all electric from 1 January 2024.

#### Local policy context

 In December 2022 DJAARA and the City signed a unique agreement called "Yilingga Marna" (which in the Dja Dja Wurrung language means "shake hands"). The agreement streamlines procedures for the delivery of outcomes and benefit to community, while also building on the Dja Dja Wurrung Recognition and Settlement Agreement.

## **General**

## Achievements 2022/23

- Transition of the Sustainability and Environment Advisory Committee to the Greater Bendigo Environment Partnership.
- Delivery of an environment volunteers "thank you" breakfast during National Volunteer Week.
- Completion of the *Be the Change Action Plan* which sets out priority actions for internal initiatives that reduce the organisation's environmental footprint.

## Theme 1: Biodiversity and regeneration

#### Achievements 2022/23

- The draft Biodiversity Strategy and Action Plan was released for public consultation which has since been adopted. Through the development of the Strategy over 500 residents were engaged.
- Reduction in native vegetation removed as a result of Council operations by 3.7 hectares to 1.6 hectares.
- Checking over 600 nestboxes across eight reserves with local groups to monitor mammal populations. Successful breeding of Powerful Owl in one nestbox.
- Planting 3,376 urban trees as a part of Greening Greater Bendigo.
- Delivery of a successful National Tree Day planting event with Friends of Ironbark Gully, where over 100 community members planted native seedlings.
- 24-hour cat containment introduced across the municipality.
- Monitoring creeks around fish reintroduction creeks and basins, where we have recorded Southern pygmy perch and Southern purple-spotted gudgeon.
- Flowering of *Banksia marginata* in the 1ha Council seed production area (330 trees from twelve provenances).
- Trialling native grass nature strips at multiple sites, including at the front of the City's nursery, which are proving resilient and productive.



Senior Biodiversity Officer Mark Hall Mark showing Healthy Landscapes participants how traps can be used to identify the types of pollinators that are present in the landscape and how to use nets to capture insects.

## **Areas for improvement**

- Collection of data on the outputs and outcomes, including for community engagement and on-ground conservation works in Council managed natural reserves.
- Community education about Council's cat curfew and the importance of containing domestic cats (cats surrendered to BARC increased from 1,544 to 1,676 over 2022/23).
- Establishing ongoing resources for biodiversity engagement and support for community groups.
- Establishing a strategic approach to planning and management of conservation reserves.
- Ensuring planning permit applications for native vegetation removal implement the three step approach (avoid, minimise, offset) and collection of data on native vegetation removal from development for future reporting.
- Ensuring resourcing matches demand for conservation reserve management as Council's portfolio of reserves grows and as community expectations increase.

## **Current priorities**

The current priority involves implementation of Council's *Biodiversity Strategy and Action Plan 2023-33* including:

- Development of a biodiversity monitoring program.
- Development of management plans for Council's conservation reserves starting with Riley Street, Kennington Reservoir and the Crosby and Huntly Plantations.
- Implementation of a biodiversity engagement program in collaboration with other government organisations and community groups aimed at increasing the community's connection with nature.

## **Theme 2: Zero Carbon**

#### Achievements 2022/23

#### Engagement and advocacy

- Delivery of community forums and engagement on renewable energy, sustainable transport and sustainable agriculture as well as a climate summit attended by over 670 people.
- Co-delivery of a Regional Zero Emissions Forum in collaboration with the Central Victorian Greenhouse Alliance
- Submission of feedback to the *Australian Carbon Credit Units Review* and the Australian Government's *National Electric Vehicle Strategy*.

#### Strategies and plans

• Release of the *Greater Bendigo Zero Emissions Roadmap* for public consultation which has since been adopted.

#### Operational emissions

- Reduction in landfill emissions at Eaglehawk by 11,500 tCO2e due to improved waste management and less waste sent to landfill (see **Figures 1, 2 and 3** below).
- Reduction in Council's corporate emissions by 430 tCO2e due to reductions in gas and fuel use.
- The removal of gas appliances from 6 Council facilities to make them all electric.
- Installation of 8kW of solar at the former Heathcote Town Hall, 70kW at the Bendigo Library and programming of a 250kW rooftop solar system on Gurri Wanyarra which will be installed in early 2024.
- Increase to Council's solar generation across all Council buildings to a total of 680kW, generating annually an average of 1.142 megawatts of electricity, with an annual reduction in power costs of approximately \$146,000 for Council.
- Purchase of 4 additional electric vehicles to increase Council's electric passenger fleet to 10.
- Leasing an all-electric street sweeper.
- Commencement of the Community Carbon Pilot Program which is trialling local revegetation-based carbon offsetting.
- Installation of rooftop solar panels, batteries and a back-up generator at the Heathcote RSL to increase renewable energy use at the site and provide electricity in the event of power disruptions during an emergency.

#### Community emissions

- Reduction in community emissions by approximately 132,000 tC02e (between 2020/21 and 21/22) mainly due to the growth of renewable electricity in the grid
- Commencement of the Sustainable Subdivision Advisor role within Council works across 7 local governments to progress development of the sustainable subdivisions assessment framework and to build capacity of council staff and developers.

## **Areas for improvement**

- Data collection and consistency across different data sources. Community data on emissions is harder to obtain and not aligned to Council's current reporting timelines.
- Acceleration of the energy transition across households and businesses.

Confirming the pipeline of electrification works for Council facilities.

## **Current priorities**

Current and future work is focused on implementation of Council's Zero Carbon: Net Zero Emissions Plan for Council Operations 2023-2030 and the Greater Bendigo Zero Emissions Roadmap including:

- Delivery of a program of electrification works at Council facilities.
- Development of feasibility studies and detailed design for electrification of Council's larger facilities such as the Bendigo Library and Council's aquatic centres.
- Development of a fleet transition strategy as a part of the Fleet Asset Management
- Participation in the North Central CMA's Community Carbon local carbon offsets program.
- Development of a *Public Electric Vehicle Charging Framework and Implementation Plan* in collaboration with the Central Victorian Greenhouse Alliance (CVGA).
- Development of a solar farm feasibility study.
- Facilitation of discussions about a program to support low-income homes with energy efficiency works.
- Finalisation of the Loddon Mallee Zero Emissions Roadmap in collaboration with the Central Victorian Greenhouse Alliance.

## Council's corporate emissions

Figure 1 – Council's corporate emissions **including** landfill.

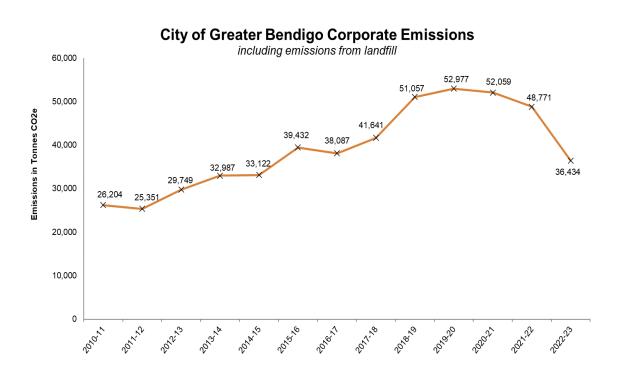


Figure 2 – Council's corporate emissions including landfill.

#### City of Greater Bendigo Corporate Emissions by Type including emissions from landfill 60,000 50,000 40,000 30,000 Tonnes CO<sub>2</sub>e 20,000 10,000 0 2011-2021-2022-2010-2012-2013-2014 2015-2016-2017-2018 2019-2020-11 12 13 14 15 16 17 18 19 20 21 22 23 ■ Estimated Landfill 16,754 20,277 23,516 24,071 30,690 28,775 31,780 37,357 38,943 31,093 ■ Natural Gas 2.549 2,494 524 744 698 748 631 615 1.000 891 929 2,071 1,971 ■ Fuel (Diesel+Petrol) 2,585 3,131 2,917 3,032 3,140 3,135 3,231 3,000 3,284 3,585 2,943 3,583 2,847

Figure 3 – Council's corporate emissions excluding landfill.

6,363

5,921

31,714

6,239

5,857

35,988

6,305

5,691

39,292

6,373

5,280

39,495

4,631

4,992

44,063

3,918

5,081

42,005

3,962

5,970

45,603

3,422

8,581

53,573

3,615

8,378

56,592

3,752

8,581

55,811

0

0

48,771

0

0

36,434

6,283

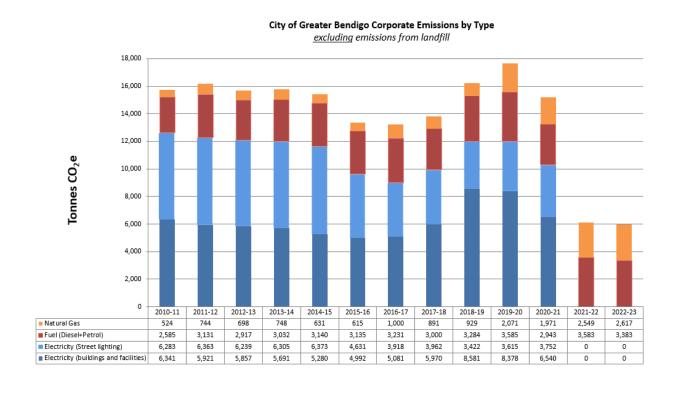
6,341

32,487

Electricity (Street lighting)

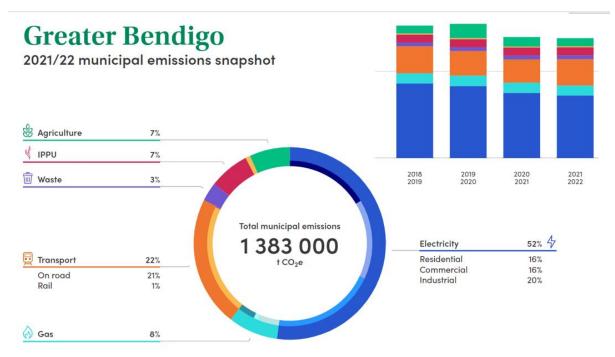
Total emissions (t/CO2-e)

■ Electricity (buildings and facilities)



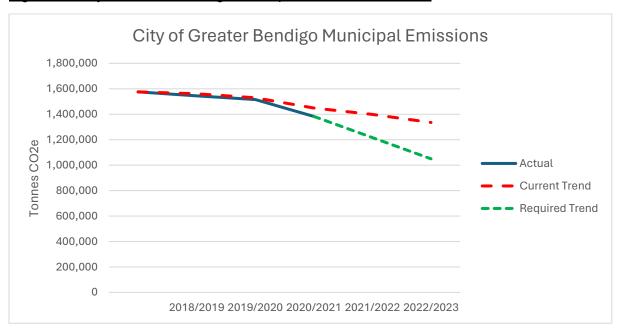
## **Community emissions**

Figure 4 - City of Greater Bendigo municipal emissions by source



Source: Snapshot tool

Figure 5 – City of Greater Bendigo municipal emissions forecasts



Source: Snapshot tool

Percentage of solar in the local grid 100 90 80 70 60 50 40 30 20 10 2016/2017 2017/2018 2018/2019 2019/2020 2020/2021 2021/2022 2022/2023

Current Trend

Figure 6 - City of Greater Bendigo percentage of solar in the grid

Source: Powercor

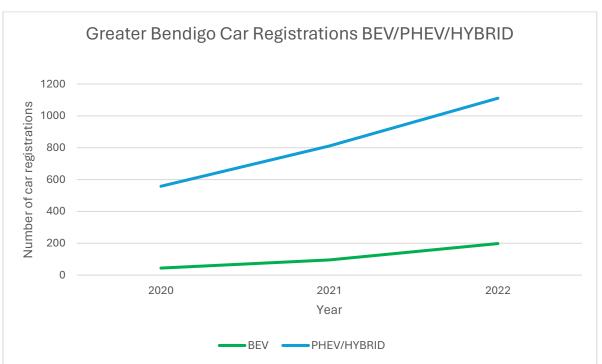


Figure 7: City of Greater Bendigo car EV, PHEV and Hybrid registrations

Actual Solar %

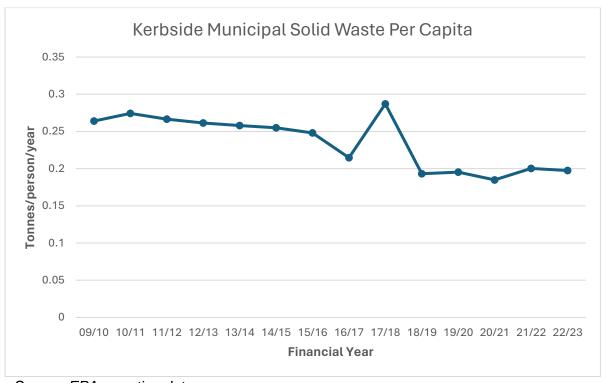
Source: Australian Automobile Association

## **Theme 3: Circular Economy**

#### Achievements 2022/23

- From the 21/22 reporting year the City has seen a reduction in 22/23 of 12,652 of material received at the Eaglehawk Landfill. This includes all waste from residential and commercial drop off at the site, kerbside collection (not including recycling), and general waste collected from the City's three operated transfer stations.
- Reduction in the kerbside municipal solid waste per capita from 0.2 tonnes per person to 0.19 tonnes per person
- Establishment of free soft plastic drop off points at Strathfieldsaye, Goornong and Heathcote transfer stations, and the Eaglehawk Recycle Shop.
- As of May 2023, Greater Bendigo residents can recycle their unwanted textiles for free at new drop off points located at the Strathfieldsaye, Heathcote and Goornong Transfer Stations. Textiles accepted include clean clothing such as pants, skirts, jackets etc and linen items such as sheets, pillow-cases blankets, towels, cushions and pillows, doonas, pairs of shoes and material and yarn off-cuts.

Figure 8: Kerbside collection of waste sent to landfill per capita.



Source: EPA reporting data



Circular Economy Coordinator Scott Bryant and Transfer Station Manager Mick Aylett with the soft plastics recycling station established by the City of Greater Bendigo

## **Areas for improvement**

- Data collection for different material and product use from Council owned operations.
- Use of reused and recycled content, products and materials in City operations and projects.
- Continued work in increasing diversion of organic waste from landfill from food generating commercial facilities.

- Continued review of long-term resource recovery planning such as Circular Economy Hubs.
- Continued engagement with the community and commercial industry about waste minimisation.
- Expansion of the organic collection to 5,500 rural households in November 2023
- Changing the collection frequency of household red general waste bins and green
  organics bins. General waste collections will move from weekly to fortnightly and
  organics bin collections will move from fortnightly to weekly in early 2024. The
  change is to increase the amount of organic food and other matter being diverted
  from landfill.

## Theme 4: Active and Sustainable Transport

#### Achievements 2022/23

- Total of 18.5 km length of new footpaths constructed.
- Council funded a separate shared path of 1.6km length at Sheepwash Creek.
- Internal engagement to increase staff utilising active travel especially with the move to Galkangu and new facilities.
- Delivery of a Ride to Work Day event attended by 60 staff.

#### Council staff travel

In late September 2023 the City conducted a travel survey to assess how staff travel to work, and to understand the barriers to sustainable travel. The survey recorded 199 responses from City of Greater Bendigo staff. The key findings from the survey were:

- 17.5% of trips were via active transport and 4% via public transport.
- 76 staff travel 0 5 km to get to work, which is 38% of all trips. 36% of these trips were via active travel, biking or cycling and 56% of these trips are by car (this analysis did not include working from home days).
- 509 staff or 25% of trips were counted as a non-working day or working from home, saving on emissions from travel.



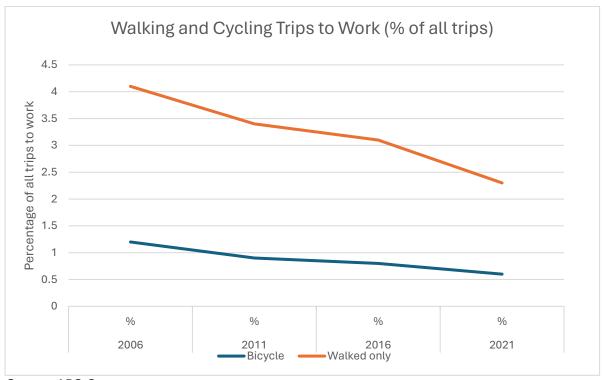
City of Greater Bendigo participating in national Ride and Walk to Work day in 2022.

## **Community travel**

- Emissions from transport are the second highest source of emissions for the greater Bendigo community at 303,000 tCO2e.
- The graphs below show an increase in the use of protected cycle paths across the municipality. Even so, at the same time there has been a decrease in active travel

commuting suggesting that the increase in use of shared trails has been primarily for recreation.

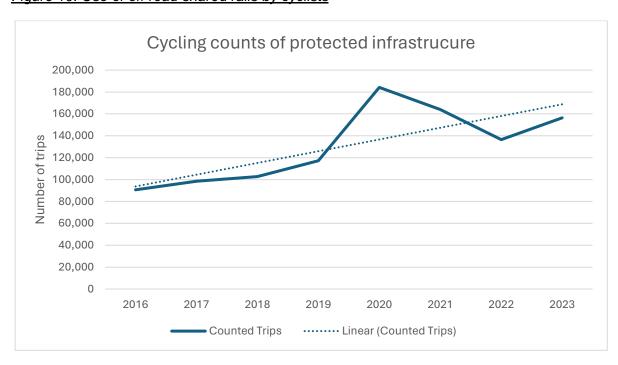
Figure 9: Journey to work by walking and cycling.



Source: ABS Census

Note: The decline in walking and cycling trips to work for 2021 aligns with the COVID pandemic when most people were working from home.

Figure 10: Use of off road shared rails by cyclists



Note 1: The data represents the number of trips counted by 4 embedded counters on Cashens Rd Okeefe Rail Trail, Hargreaves St Bendigo Creek Trail, Havlin St Back Creek Trail, Knight S Bendigo Creek Trail

Note 2: The increase in cycling counts in 2020 aligns with the COVID pandemic.

Figure 11: Journey to work by public transport



Source: ABS Census.

Note: The decline in bus and train trips aligns with the COVID 19 pandemic.

## **Areas for improvement**

- Acceleration of delivery of walking and cycling infrastructure, particularly infrastructure that supports active travel commuting.
- Data collection related to staff and community modes of travel.

- Progressing development of a shared path along Bendigo Creek, often referred to as the "Low Line". This shared path will create a cycling "highway" through the City, significantly increasing the safety, accessibility, and connectivity of Bendigo's cycling network.
- Delivery of additional programs and events for staff in Galkangu (Bendigo GovHub) to support a mode shift to walking, cycling and public transport use.
- Development of a *Zero Emissions Transport Framework and Implementation Plan* co-funded by the Victorian Government.

## **Theme 5: Sustainable Food Systems**

#### Achievements 2022/23

- Approximately 168 Greater Bendigo landholders participated in the Healthy Landscapes: Practical Regenerative Agricultural Communities Program which included 13 property visits, 2 discussion groups and 3 field days.
- 3 schools participated in a kitchen garden program.
- 70 household or community gardens were registered in the City with Grow it Local.

## **Areas for improvement**

- Identifying and progressing projects that support broad food system changes in terms of local food production and reduced emissions from agriculture and food manufacturing.
- Increasing support for sustainable land management outcomes across the City's rural land.

- Implementation of a sustainable land management program to complement the existing Healthy Landscapes program, including the Rural Regeneration Grants.
- Continued implementation of Council's Food Systems Strategy.
- Establishing the Healthy Kids Advisor initiative to offer sponsored membership options for schools to join the kitchen garden program across the municipality.



Participants attending the field day, looking at preparation for a multi species cover crop. The presenter mentioned the paddock was browned out to break the life cycle of red legged earth mite before the plants commence growing.

## **Theme 6: Water Sensitive Bendigo**

#### Achievements 2022/23

- Continued administration of the Water Sensitive Bendigo Partnership
- Progression of the Bendigo Creek Instream Works project.

## **Areas for improvement**

- The strategic collection of water quality data.
- Establishing a Water Monitoring Program in collaboration with other agencies that enables the strategic and consistent collection of water quality data across the municipality's catchments.
- Reducing potable water use from Council operations.

- Review of the Water Sensitive Bendigo Partnership priorities and implementation plan.
- Development of a Stormwater Management Strategy that sets out priority interventions that will improve water quality and asset management.
- Continued implementation of the Reimagining Bendigo Creek Plan in collaboration with key stakeholders, including Djandak.
- Finalisation of the Stormwater Developer Contributions Offsets Policy.
- Development of a Water Quality Monitoring Plan in collaboration with NCCMA.

## Flagship Projects

## Be the Change

The purpose of the Be the Change flagship project is to reduce the environmental footprint of the organisation through changes to staff behaviour and work practices. The Climate Change and Environment Unit recently prepared the 'Be the Change Action Plan' which sets out a prioritised program of actions to achieve this goal.

An Action Plan was finalised in late 2022 to guide and identify actions staff wanted to see across the City. **27 workshops** were held with departments across Council at **11 different sites.** Each team's achievements and ideas were collected and synthesised and prioritised through a staff survey.

A series of 'lunch and learns' commenced in March 2023 to update the organisation on the Action Plan and will focus on the action areas outlined above. The initial lunch and learns reached around 60 staff on the following topics:

- · What goes in, what bin?
- How to keep warm in winter
- Learn more about walking or riding to work.

## **Greater Bendigo Climate Collaboration**

The Greater Bendigo Climate Collaboration has hit the ground running this year, including developing the *Greater Bendigo Zero Emission Roadmap* and hosting a Climate Summit in May.

The *Greater Bendigo Zero Emissions Roadmap* brought together stakeholders from across the City to identify project and advocacy initiatives to achieve zero emissions by 2030. The development of the Roadmap including input from over 1,500 people.

The Climate Summit at Ulumbarra Theatre was attended by approximately 670 people. Highlights included:

- Natasha Mitchell from ABC Radio National's Big Ideas hosting a debate about how regional cities can revolutionise transport systems for zero emissions and make them more liveable, healthy and effective.
- An insightful panel discussion about climate justice that covered gender, health, energy poverty and place-based change.
- Performances and presentations by young people from across Bendigo.
- Bendigo's religious and interfaith leaders signed a statement in support of the Greater Bendigo Zero Emissions Roadmap.
- A special screening of Damon Gameau's Regenerating Australia movie.
- Electrify Everything guru Saul Griffith stole the show encouraging people to act now and to advocate for greater investment at all levels of government to electrify everything.
- 27 stallholders, ranging from energy-efficient building designers to home energy assessors, an e-bike retailer, mending circle, solar system installers and others offered climate-friendly products and services.

## **Reimagining Bendigo Creek**

Over 2022/23 and until the time of reporting Council has progressed the Bendigo Instream Works waterway restoration project which will rehabilitate the section of Bendigo Creek between Weeroona Avenue and the train line. Development of a Reimagining Bendigo Creek Implementation Plan is also underway in collaboration with Djandak.

## **Showcase Sustainable Developments**

The City is encouraging its residents to implement sustainable design through the Elevating ESD planning Scheme Amendment and Sustainable Subdivision Framework.

## **Building a Circular Greater Bendigo**

A number of steps have been taken to progress towards a Circular Greater Bendigo. These were recognised by the 2022 Premier's Sustainability Awards. The City was one of 12 award winners taking out the Industry Leader Award for circular economy innovation.

## **Healing Country Together**

Council is working with DJAARA and Djandak on development of a coordinated program of waterway restoration works focusing on Bendigo Creek with the intent to support Djandak to progressively take the lead with delivery according to their resources and capacity. Discussions are also continuing about joint management opportunities at other sites with natural and cultural values.

## **Appendix 1: Table of goals and indicators 2022/2023**

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
1. Biodiversity					
Goal A. Council projects regenerate landscapes and ecosystems  Goal B. Native habitat and areas of important biodiversity are protected for future generations	General Habitat Units of native vegetation removed as a result of Council operations*.	150% net increase in biodiversity value based on the General Habitat Score of the offset compared to the vegetation removed.	Data not collected	Data not collected	To be reported in future years.
	Total General Habitat Score of native vegetation offsets secured on Council managed land to compensate for removals*	Matches losses	2.02	.50	On track
	Ha of native vegetation removed from Council operations*	Declining	5.337 hectares	1.648 hectares	On track
	# medium and large trees removed from Council operations*  *Includes permitted and exempted removal under the planning scheme	Declining	74	26	On track
	Ha weed control on Council managed land.	N/A	Data not collected	Data not collected	To be reported in future years.
	% of Council managed Natural Reserves subject to weed control	Declining	Data not collected	Data not collected	To be reported in future years.
	Ha revegetation on Council managed land.	N/A	Data not collected	Data not collected	To be reported in future years.

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
	Ha of enhancement plantings on Council managed land.	N/A	Data not collected	Data not collected	To be reported in future years
	Habitat quality / condition scores for selected Council managed natural reserves	Baseline assessments complete	NA	NA	To be reported on from 23/24
	Application of environmental overlays where needed	Completion of the review of environmental planning overlays	Review process commenced.	Review process commenced.	On track
	# cats brought in to BARC	Declining	1,544	1,676	Not on track
	# cats and foxes sighted in Council reserves.	Declining	Data not collected	Data not collected	To be reported on from 23/24
	# properties accessing the rate reduction for Trust for Nature covenants.	Increasing	52	54	On Track
	Number and status of endangered species in the City listed under the FFG or EPBC Acts	No increase in number or status of listed species	Data not collected for 22/23	Data not collected for 22/23	To be reported on from 23/24
Goal C. Connected and flourishing urban and rural landscapes and ecosystems  Goal E. Respectful and effective partnerships with Traditional Owners	Presence and abundance of indicator species, including fish	Increase from baseline condition assessment at each Council managed natural reserve	Data not collected	Data not collected	To be reported on from 23/24
	Number of "significant roadsides"	Increase from last survey in 2009	Data not collected	Data not collected	To be reported on from 24/25
	# reserves managed by Traditional Owners	Two additional reserves (from 2021 baseline)	Data not collected	Data not collected	To be reported on from 23/24
	Number of disconnected patches of native vegetation over 20ha in area.	Declining	Data not collected	Data not collected	To be reported on from 23/24

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
Goal C. Connected and flourishing urban and rural landscapes and	% tree cover in urban areas	23% increase from 2019 baseline	Data not collected	Data not collected	To be reported on from 23/24
ecosystems	% tree cover across Greater Bendigo	Increasing	Data not collected	Data not collected	To be reported on from 23/24
Goal D. Strong community connection to, awareness of and care or our ecosystems and biodiversity	# attendees at environment events (Council run events only until additional data is available)	Increasing	Data not collected	Data not collected	To be reported on from 23/24
	# new participants at environment events	Increasing	Data not collected	Data not collected	To be reported on from 23/24
	# collaborative projects underway.	N/A - Relevant collaborations underway	Data not collected	Data not collected	To be reported on from 23/24
	# people who are members of Landcare or Friends groups	Increasing	Data not collected	Data not collected	To be reported on from 23/24
	# Number of school programs/events on biodiversity	Increasing	Data not collected	Data not collected	To be reported on from 23/24
	# advocacy submissions, letters and other initiatives		Data not collected	Data not collected	To be reported on from 23/24
2. Zero Carbon					
Goal F: Net zero carbon from Council operations by 2030	CO2e emissions from Council operations, broken up by scope and source	Declining	48,771	36,434	On track
	% of Council facilities which are all electric	60%	Data not collected	Data not collected	To be reported on from 23/24
	% of Council energy use from renewable energy, gas and LPG.	Declining	Data not collected	Data not collected	To be reported on from 23/24

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
	Litres diesel and petrol use from Council fleet and plant	Declining	3,585	2,847	On track
	# and % of passenger electric vehicles in Council's fleet	35%	25 19.70%	32 25.02%	On track
	# and % of heavy vehicles and plant which are zero emissions	5	3	6 2.49%	On track
	% of Council funds invested in financial institutions that do not lend to fossil fuel industries, as of June each year	60%	ТВА	45.67%	On track
	% of the City's 2030 residual carbon emissions that will be offset by biodiverse revegetation projects established through the NCCMA's Community Carbon	5%	Project not commenced	Project not commenced	To be reported on from 24/25
#Goal G: Zero carbon across Greater	tCO2e emissions for the City	Declining	138,400	Not yet available	On track
Bendigo community by 2030	% of households with rooftop solar	40%	27%	1,358 units were installed	On track
	% of commercial buildings with rooftop solar	Increasing	Data not yet available	Data not yet available	N/A
	% of local solar energy in the local distribution network in CoGB	Increasing	10.4%	Not yet available	On Track
	# business who participate in Council's business emissions reduction program	Increasing	Project not commenced	Project not commenced	To be reported on from 23/24
	# of electric hot water units installed to replace gas since 1 Jan 2018	Increasing	N/A	1,410	On track
	# of energy efficient split systems installed since 1 Jan 2018	Increasing	Data not yet available	Data not yet available	To be reported on from 23/24
	# of Victorian energy certificates created from appliance upgrades.	Increasing	Data not yet available	Data not yet available	To be reported on from 23/24
	# attendees at climate change related workshops, webinars and events	Increasing	Data not collected	~ 900	On track

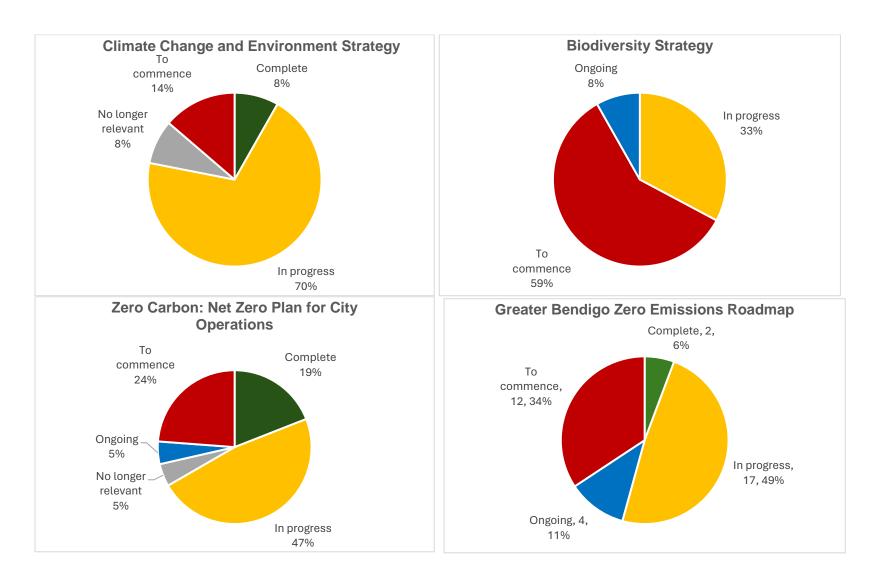
CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
3. Circular Economy					
Goal H: Zero recoverable waste from	Tonnes of waste collected across all waste streams from Council facilities	35% reduction from 2020 baseline year	1,689 tonnes	1,787 tonnes	Not on track
	% of recoverable waste from Council facilities diverted from landfill (or contamination rate)	Increasing	Data not collected	Data not collected	To be reported on from 23/24
Goal I: A well-established circular economy with zero recoverable waste	Tonnes of waste collected across all waste streams from the community per capita.	Decreasing	0.6806	0.57	On Track
to landfill	% of recoverable waste diverted from landfill (or contamination rate)	72%	50.5%	52%	On Track
4. Transport					
Goal J: Council staff use active, public and low carbon transport	% of staff trips to work by walking, cycling, carpooling or public transport	20%	Data not collected	Data not collected	To be reported on from 23/24
Goal K: Greater Bendigo has a safe and well connected active transport	Km of new footpaths constructed (developer and Council funded)	Increasing	13km	18.5km	On Track
network	# footpath projects completed.	5 per year = 15 between 1 July 2023 and 30 June 2026	6	4	Not on track
	Km of new separated / protected cycling lanes constructed	Increasing	NA	1.6km	On Track
	Km of new on-road cycling lanes installed	Increasing	Data not collected	Data not collected	To be reported on from 23/24
	% of houses within 500m of separated / protected cycling network	Increasing	NA	65%	On Track
Goal L: Greater Bendigo community uses active, public and low carbon	Overall Transport Emissions	Decreasing	303, 000	Not yet available	To be reported on from 23/24
transport network	% of community who walk or cycle to work	Increasing	2.9%	Not yet available	Not on Track
	% of community who use public transport to get to work	Increasing	1%	Not yet available	Not on Track

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
Goal M: Greater Bendigo has a safe and well connected active transport network	# cycling trips on separated / protected trails with counters	Increasing	136,439	156,336	On Track
	# cycling trips on on-road cycling lanes (commuter)	Increasing	NA	NA	To be reported from 23/24
	# pedestrian trips on shared trails	Increasing	50,041	Complete data not available	To be reported in future years
	# and % of vehicles registered in the City which are battery electric	Increasing	.05%	.11%	On track
	Car ownership data based on registrations	Decreasing	83684	86098	Not on Track
	Public transport use	Increasing	.2%	Data not yet available	To be reported in future years
5. Sustainable Food Systems					
Goal N: Council is a leader in sustainable food procurement, practices and policy	No data available.	NA	NA	NA	NA
Goal O: Sustainable food production systems are viable, resource efficient	% of Sustainable Land Management Grant funds which are allocated	100%	Project not commenced	Project not commenced	To be reported from 23/24
and regenerate natural ecosystems	Number of grant recipients who implement additional sustainable land management changes on their properties	50%	Project not commenced	Project not commenced	To be reported from 23/24
	# of farm rated properties that have participated in the Healthy Landscapes or a similar extension program	50	~90	~168	On Track
Goal P: Communities are aware of the resources required to produce food and know how they can influence the food system	# schools delivering a kitchen garden program (e.g. Stephanie Alexander Kitchen Garden Program)	Increasing	Data not collected	3	On Track
	# patches registered in the City with Grow it Local	Increasing	Data not collected	70 registered patches	On Track

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
Goal O: Enable Traditional Owners to grow and harvest indigenous food and fibre plants	No data available.	NA	NA	NA	NA
6. Water					
Goal R: Council operations are water efficient and utilise diverse water supplies	ML of potable, recycled and rural water used in Council facilities	3% reduction in potable water use from 2016 baseline (307ML)	297 ML potable water used	299 ML	Not on Track
Goal S: Flood risk in Greater Bendigo is reduced through flood mitigation infrastructure and planning	Implementation of the following flood mitigation projects:  Racecourse Creek Levy  Bendigo Creek Levy (Howard St to Leans Rd)  Total Flood Warning System  Crusoe Reservoir Flood Mitigation Project	Racecourse Creek Levy and Bendigo Creek Levy (Howard St to Leans Rd): Detailed design complete. Total Flood Warning System: Implemented Crusoe Reservoir: Feasibility Study complete		Racecourse Creek Levy – Detailed design complete. Advocacy to VLine required for works on railway. Subject to future construction funding bid external funding.  Bendigo Creek Levy (Howard St to Leans Rd) – Detailed design, survey and project planning ongoing as a \$720,000 project. Anticipated to be completed in the next 12 months (design project) Total Flood Warning System – Not an active project, no funding	On Track

CC&E Strategy Goal	Indicator	2026 Target or trend	2021/22 Figure	2022/23 Figure	Status (on track, not on track)
				Crusoe Reservoir Flood Mitigation Project – Not an active project, no funding	
Goal T: Investment in water projects is secured through collaborative partnerships	\$ leveraged for water initiatives through the Water Sensitive Bendigo partnership	\$0.5M	\$583,000 for Bendigo Creek	0	On track
Goal U: Waterways in Bendigo are healthy, connected and nurturing places	Mg/L Reactive Phosphorous measured at key sites	Declining	Data not collected	Data not collected	NA
Goal V: Waterways in Greater Bendigo are collectively managed by Traditional Owners, agencies and community	# waterway reserves co-managed by DJAARA or Taungurung	2	0	0	Not on track

## **Appendix 2: Status of Actions**



Clima	te Change and Environment Strategy 2021-2026	
Biodiv	versity and Regeneration	
#	Actions	Status 2022/23
1.1	Develop an ecological baseline and mapping to determine the extent and condition of existing biodiversity and remnant vegetation in Greater Bendigo	To commence
1.2	Investigate and progress potential nature corridors between remnant vegetation, and commence developing partnerships and implementation arrangements to facilitate corridors	In progress
1.3	Investigate and develop stronger planning controls to protect native vegetation under the Planning Scheme	In progress
1.4	Implement the Sustainability and Environment recommendations of the 2019 Planning Scheme Review	In progress
1.5	Review and update the Rural Roadside Management Plan 2005	To commence
1.6	Implement a program to monitor and maintain Council's 300 environmentally sensitive water sensitive urban design assets	To commence
1.7	Employ an Environmental Education and Community Liaison Officer	Complete
1.8	Establish a Gardens for Wildlife program to support and empower the community to actively store biodiversity	To commence
1.9.1	Develop a local planning policy to increase tree canopy and vegetation cover in subdivision design	To commence
1.9.2	Develop a biodiversity management policy and investment plan	Complete
1.10	Implement the City's Invasive Plants and Animals Policy and Procedures	Complete
1.11	Establish a rare and threatened species collection and research program at the Bendigo Botanic Gardens	To commence
1.12	Join ICLEI's Cities with Nature program	No longer
		relevant
Zero d	arbon	
2.1	Purchase all electricity used by Council owned and operated facilities from 100% renewable energy via VECO (2022).	Complete
2.2	Support community groups operating from Council owned facilities to access 100% renewable energy via VECO.	In progress
2.3	Facilitate and plan for the transition to locally generated renewable energy power supply.	In progress
2.4	Install solar panels on Council owned buildings via Power it from the Rooftop program.	In progress
2.5	Progressively remove existing gas appliances from Council owned buildings and replace them with electric alternatives.	In progress
2.6	Develop a policy mandating no new gas connections installed in Council owned and operated buildings.	In progress
2.7	Progressively replace Council's lightweight vehicle fleet to be electric vehicles.	In progress
2.8	Investigate options and costs to transition Heavy Fleet away from fossil fuels	In progress
2.9	Install Electric Vehicle charging stations at selected Council sites powered by renewable energy.	In progress
2.10	Purchase offsets for other emissions to reach 2026 Target, including offsetting emissions from fleet, landfill and gas.	No longer relevant
2.11	Develop a shadow carbon price to better account carbon emissions in Council's investment decisions	No longer relevant
2.12	Raise awareness and support community groups to prepare for climate change and create zero carbon homes and lifestyles	In progress
2.13	Audit and retrofit Council owned buildings to maximise energy efficiency.	To commence

Clima	te Change and Environment Strategy 2021-2026	
2.14	Develop a baseline of energy intensity across all Council's assets and operations	No longer relevant
2.15	Partner with North Central Catchment Management Authority and other stakeholders to explore and develop local carbon offset schemes	In progress
2.16	Advocate in partnership with CVGA for upgrading inefficient street lights on major roads (cost shared lights)	In progress
	ar economy	
3.1	Evaluate options and implement solutions to address the closure of Eaglehawk Landfill	In progress
3.2	Revise design and procurement approaches for new and existing projects that require the use of reused and recycled products and ensure product recyclability at end of life.	In progress
3.3	Provide all Council facilities with access to organic recycling options	In progress
3.4	Implement the single use plastics policy	In progress
3.5	Reduce general waste to landfill by implementing the Circular Economy and Zero Waste Policy	In progress
3.6	Quantify the City's embodied carbon emissions (e.g. scope 3 emissions)	In progress
3.7	Engage with businesses and residents to support the adoption of reused and recycled materials	In progress
3.8	Establish 'Circular Economy Hubs' that act as physical material hubs for the drop-off and recirculation of materials and products from and for both commercial and residential activities	In progress
3.9	Support the establishment of Tool Libraries, Repair Cafes, Library of things to facilitate the repair and sharing of products and goods rather than the need to buy new	In progress
Susta	inable and active transport	
4.1.1	Develop a 10 year walking and cycling infrastructure prioritisation plan	Complete
4.1.2	Develop an activation plan to increase community capacity to use active transport	In progress
4.1.3	Develop a budget bid to increase the funding for new footpaths	In progress
4.2	Design and construct the Mundy Street and Hargreaves Street separated cycleway infrastructure to enable better connections to the City Centre	In progress
4.3	Deliver priority works to reduce gaps and barriers within the walking and cycling network (including building underpasses and road crossings)	In progress
4.4	Deliver sustainable transport education program promoting low carbon modes of transport	To commence
4.5	Update the Environmentally Sustainable Design policy and deliver increased bicycle parking and change room facilities for new developments	In progress
4.6	Advocate for additional and more frequent public transport options that meet growing community needs	In progress
4.7	Advocate for bike sharing and car sharing programs	In progress
4.8	Advocate for the Greater Bendigo commuter rail service	In progress
4.9	Advocate for Public Transport to be powered by renewable or sustainable fuel sources	In progress
Susta	inable food systems	
5.1	Implement Greater Bendigo's Food System Strategy	In progress

Clima	te Change and Environment Strategy 2021-2026	
5.2	Progress the City of Gastronomy, including promoting and supporting sustainable food production	In progress
5.3	Provide financial incentives for producers to transition to sustainable agricultural practices including applying for the sustainable agriculture rate	In progress
5.4	Improve the City's procurement practices by preferencing caterers who source locally produced food	In progress
5.5	Support schools and early education centres to incorporate sustainable food education into the curriculum, including kitchen garden programs	In progress
5.6	Enable Traditional Owners to grow and harvest traditional food and fibre plants	To commence
5.7	Support local businesses and the community to avoid food and packaging waste	To commence
5.8	Partner with North Central Catchment Management Authority and Landcare groups to promote and deliver sustainable agricultural practices	In progress
5.9	Advocate for greater incentives for primary producers to transition to regenerative / agro-ecological practices, including carbon sequestration	In progress
5.10	Advocate to State and Federal government to create more sustainable food systems	In progress
Water	Sensitive Bendigo	
5.1	Develop a policy for the water quality reserve that advances Water Sensitive Urban Design outcomes for new developments and stormwater offsets	In progress
3.2	Develop the Central Bendigo and Heathcote flood mitigation studies	In progress
5.3	Evaluate and secure funding for highest priority flood mitigation options for Greater Bendigo	In progress
6.4	Partner with Coliban Water to install digital meters on Council's water connections and implement water efficiency measures	In progress
3.5	Investigate and evaluate alternative water supply infrastructure for Council's assets	In progress
6.6	Develop a policy to promote alternative water supply options (includes stormwater harvesting) for new sporting fields and recreational reserves	No longer relevant
3.7	Implement Council's Domestic Wastewater Management Strategy	In progress
6.8	Facilitate the Water Sensitive Bendigo Partnership including shared decision making for integrated water management outcomes.	In progress
5.9	Support and facilitate relevant agencies to undertake water security planning including investigating alternative supply options	In progress
5.10	Advocate for and enable Traditional Owners to heal Country and actively manage waterways	In progress
5.11	Partner with North Central Catchment Management Authority to implement the Waterwatch program including citizen science program for Bendigo Creek	In progress
5.12	Partner with DELWP to identify a long-term solution for the Bendigo Groundwater project	Complete
5.13	Partner with Coliban Water to improve household and business water use efficiency	No longer relevant
5.14	Advocate for investment for priority water initiatives via the Water Sensitive Bendigo Partnership & Reimagining Bendigo Creek Prospectus	In progress
Reima	ngining Bendigo Creek	

Climat	e Change and Environment Strategy 2021-2026	
7.1	Finalise and implement the integrated water quality monitoring plan for Bendigo Creek	No longer relevant
7.2	Commence creating chain of ponds on Bendigo Creek	In progress
7.2.1	Obtain approvals and funding for instream works downstream of Kings Bridge	In progress
7.2.2	Construct instream works downstream of Kings Bridge	In progress
7.2.3	Establish and maintain instream works downstream of Kings Bridge	In progress
7.3	Establish priority constructed wetlands	To commence
7.3.1	Obtain & funding approvals for Long Gully constructed wetlands (stage 1)	To commence
7.3.2	Construct Long Gully constructed wetlands (stage 1)	To commence
7.3.3	Establish and maintain Long Gully constructed wetlands (stage 1)	To commence
7.3.4	Design and seek approvals for later stages of the Long Gully constructed wetlands	To commence
7.4	Investigate and prioritise channelised sections of the urban creeks to renaturalise	To commence
7.4.1	Design and seek approvals for priority renaturalisation sections	To commence
7.5	Assess the catchment and identify potential interventions to reduce sediment and retain water in the landscape	To commence
7.6	Co-develop a video with Dja Dja Wurrung to celebrate the creek's heritage and future aspirations	To commence
7.7	Plan cycling and walking infrastructure along the creek lines including low line.	In progress
7.7.1	Obtain funding to undertake design and approvals for the Low Line trail	In progress
7.7.2	Plan and detailed design of the low line trail from Golden Square to Lake Weeroona	In progress
7.7.3	Obtain approvals and funding for the low line trail from Golden Square to Lake Weeroona	In progress
7.7.4	Construct the low line trail from Golden Square to Lake Weeroona	To commence
Healin	g Country Together	
8.1	Facilitate a co-design process with Taungurung and Djaara, Council and relevant agencies to identify public land of interest, management aspirations, opportunities to foster community stewardship	To commence
8.2	Partner with communities, Traditional Owners, Parks Victoria, DELWP and NCCMA to identify opportunities to better connect people with natural places through regeneration	To commence
8.3	Support community groups, agencies, Taungurung and Dja Dja Wurrung to connect with nature and do healing works on Country	In progress
8.4	Restore and nurture Country by planting native species, including bush tucker and medicine plant species	In progress
8.5	Monitor the current condition of waterways, landscapes, flora and fauna using both Western Science and Traditional Ecological Knowledge	To commence
Be the	Change	
9.1	Develop a project plan including communications and engagement approach to implement 'Be the Change'	Complete
9.1.1	Develop and deliver an internal training program to raise awareness and drive behaviour change to deliver goals of Climate Change and Environment Strategy	In progress

Jiiiia	te Change and Environment Strategy 2021-2026	
).1.2	Collaborate with 'Change Champs' to deliver drive behaviour change activities to deliver goals of Climate Change and Environment Strategy	In progress
9.2	Develop a capability framework for climate change and environmental responsibilities	No longer relevant
9.2.1	Develop climate change and environment related Key Performance Indicators for relevant Directors and Managers	No longer relevant
9.2.2	Develop standard Key Performance Indicators that progress climate change and environment actions to be included in all performance development plans	No longer relevant
9.3	Review budget decision making principles and assessment metrics to increase climate change considerations in investment decisions	In progress
9.4	Review procurement assessment metrics to increase climate change considerations in purchasing decisions	In progress
9.5	Audit and assess Council's buildings and infrastructure from climate resilience, climate adaptation and sustainability perspectives	To commence
9.6	Undertake a climate risk and vulnerability assessment for all Council buildings and infrastructure and identify necessary adaptation actions.	To commence
).7	Plan, design and implement buildings and infrastructure retrofits	To commence
9.8	Assess Council's systems and policies to identify improvements and efficiencies in line with the goals of this strategy	Complete
The G	reater Bendigo Climate Collaboration	
10.1	Secure financial partners to support the Greater Bendigo Climate collaboration	Complete
0.2	Develop project approach including education program, monitoring and evaluation and project governance	Complete
10.3	Facilitate 1000 households & 100 businesses to develop zero carbon plans	No longer relevant
10.4	Facilitate Greater Bendigo's sectors of the economy to co-design and deliver city-scale projects that will achieve zero carbon economy	In progress
0.5	Host a Greater Bendigo Climate Summit	Complete
0.6	Partner with Loddon Campaspe regional councils to collectively design and advocate for the top ten regional projects to	In progress
	support zero carbon	
	case Sustainable Developments	
1.1	Advocate for the Big Housing Build partners, affordable housing providers, developers and government agencies to deliver environmentally sustainable housing projects	In progress
1.2	Investigate and progress partnership opportunities for the Bendigo Regional Employment Precinct to create a framework for an environmentally sustainable industrial estate	In progress
1.3	Facilitate a co-design approach to the planning and design of the identified projects	In progress
1.4	Develop a manual to guide the design and construction of Environmental Sustainable Developments	To commence

Clima	te Change and Environment Strategy 2021-2026	
12.1	Establish monitoring arrangements so each indicator is embedded within corporate monitoring systems	In progress
12.2	Establish the working group to implement the Strategy	No longer
		relevant
12.3	Complete OPEX bid to secure adequate resources for the Strategy's implementation	In progress
12.4	Complete annual report	Complete
12.5	Undertake mid-term evaluation of strategy implementation in 2023	In progress
12.6	Develop a communications and engagement plan to implement the strategy	No longer
		relevant

#	ty Strategy and Action Plan Actions	Status 2022/23
BDS 1.1	Review the planning scheme provisions relating to biodiversity in the Greater Bendigo Planning Scheme (GBPS). This	
DUS 1.1	should include a review of the effectiveness of current planning policies and overlays and implementation of necessary	In progress
	changes, considering (amongst other things): • Potential policy gaps • Protecting urban vegetation • The preliminary	
	'Potential Biolink Areas' mapping (Fig. 17) and proposed habitat connectivity plan Action 3.1) • The degree to which the	
	Urban Forest Interface Policy achieves its goals.	
BDS 1.2	Investigate all available options for establishing an Environmental Planner position responsible for providing internal and	In progress
DDS 1.2	external education, advice and assessments of planning applications and projects which have environmental impacts,	iii piogress
	including compliance for native vegetation removal.	
BDS 1.3	Ensure land management plans are submitted with planning permit applications in the farming zone (FZ) and rural	To commence
DDO 1.5	conservation zone (RCZ) that propose effective actions that support biodiversity values and limit impacts to them.	TO COMMICTICE
BDS 1.4	In City's Managed Growth Strategy, direct new development toward areas that avoid unacceptable biodiversity outcomes.	In progress
BDS 1.4	Explore development of Biodiversity Sensitive Urban Design (BSUD) principles for Greater Bendigo.	To commence
BDS 1.6	Review the City's implementation of planning provisions related to native vegetation removal, including compliance	In progress
1.0	processes and the City's in-house native vegetation offsets program.	in progress
BDS 1.7	Continue to provide input into Environmental Effects Statements as appropriate to minimise and manage biodiversity	Ongoing
	impacts from mining and other activities.	
BDS 1.8	Ensure large native trees are properly protected through the GBPS or local laws, potentially through the implementation	To commence
	and promotion of a Significant Tree Register. Investigate integration of data collected in the Large Old Tree Project across	
	Greater Bendigo.	
BDS 1.9	Conduct regular condition / health assessments of native vegetation in City managed land and along waterways, potentially	To commence
	incorporating citizen scientists, and report the outcomes in City's Annual Environment Report.	
BDS 1.10	Support the establishment of a threatened plant collection at Bendigo Botanic Gardens.	To commence
BDS 1.11	Increase awareness of the City's domestic cat policy (i.e., 24 hr curfew) and ensure adequate enforcement to protect native	In progress
	wildlife.	
BDS 1.12	Develop an agreed service level for water levels in City managed waterbodies (e.g., Crusoe Reservoir) to best protect	To commence
	native species and processes while balancing the community's desire for passive recreation.	
BDS 1.13	When developing Environment Management Plans for City managed reserves, work with Traditional Owners, agencies,	Ongoing
	and the community to support and strengthen strategic and coordinated pest plant and animal control programs across land	
	tenures in the vicinity.	
BDS 1.14	Review approval processes for biodiversity enhancement projects that trigger permit applications under the GBPS and	To commence
	explore opportunities to streamline and simplify it.	
BDS 1.15	Ensure precinct planning undertaken as part of Greening Greater Bendigo adequately promotes the retention and	Ongoing
	connection of native vegetation to support urban biodiversity.	
BDS 1.16	Continue to collaborate with other local government areas including the Council Alliance for a Sustainable Built	In progress
	Environment (CASBE) to incorporate native vegetation and biodiversity outcomes into new developments and subdivisions	

Biodiversit	y Strategy and Action Plan	
	via planning scheme mechanisms including: • Elevating Environmentally Sustainable Design (ESD) targets Planning Scheme Amendment and • Advancing the Sustainable Subdivisions Framework documentation for Planning Scheme Amendment consideration	
BDS 1.17	Collaborate with groups and agencies to determine the completeness and adequacy of existing biodiversity data, extend existing programs across Greater Bendigo (e.g., nestboxes, bird surveys, waterbugs, large 'hero' trees project), and identify additional monitoring and evaluation needs.	To commence
BDS 1.18	Establish a monitoring program that is representative, robust, and strategic in the species and communities it monitors closely to measure against actions taken to protect and enhance biodiversity and biocultural values.	To commence
BDS 1.19	Review current enforcement procedures for infringements related to biodiversity and identify potential pathways to increase compliance (e.g., vegetation removal, firewood collection, rubbish dumping and pollution).	To commence
BDS 1.20	Reduce the number of displaced, injured and killed wildlife through human activities (e.g., vehicle strikes) through:  Partnering with Wildlife Victoria, wildlife rescue and care agencies, other councils and transport authorities on education and mitigation programs • Assisting in reviewing the Greater Bendigo Road Safety Action Plan (as necessary) to incorporate wildlife strikes.	In progress
BDS 2.1	Conduct a service review of the City's natural reserve management functions taking into account implementation of this strategy and future environmental management plans.	To commence
BDS 2.2	Work with Traditional Owners, agencies, groups and the community to develop and implement Environmental Management Plans / Action Plans for City managed nature reserves, including an assessment of conservation values and threats and a set of actions to enhance their natural, recreation and cultural values, including water quality and flood and erosion control. Align these with Traditional Owner rights, obligations, and priorities. Prioritise plans for: • Kennington Reservoir • Crusoe Reservoir • Crosbie Regenerative Forest • Huntly Regenerative Forest • Victoria Hill	In progress
BDS 2.3	Work with Traditional Owners, agencies, groups (particularly Landcare) and the community to develop and implement waterway restoration plans that promote biodiversity and cultural values and supports the rights and obligations of first nations peoples (e.g., restoring chain-of-ponds). Prioritise a review the Implementation Plan for Reimagining Bendigo Creek to help inform the sequencing and scheduling of conservation works.	In progress
BDS 2.4	Continue to conduct strategic pest plant and animal management works within City managed reserves in accordance with the requirements of the CALP Act, the City's Invasive Plants and Animals Policy and Procedure and any site-specific management plans.	Ongoing
BDS 2.5	Complete an audit of all City owned and managed nature reserves, ensuring each has been adequately classified according to their primary purpose.	To commence
BDS 2.6	Maximise opportunities to restore diverse groundcover and shrub vegetation on council owned and managed land and waterways and through council programs (e.g., Greening Greater Bendigo), including increasing populations of threatened plant species or communities and Traditional Owner priority species.	To commence
BDS 2.7	Support Djaara and Taungurung to increase connection to country and cultural practices (e.g., food and fibre plants, cultural burns), working towards sole management of public land where appropriate and partnering in stewardship across multiple land tenures where biodiversity values can also be enhanced through joint action.	Ongoing

Biodiversit	y Strategy and Action Plan	
BDS 2.8	Increase populations of all species, with particular attention on threatened species and communities, on City managed land, through targeted habitat restoration, enhancement and monitoring of populations, in line with Traditional Owner, federal, state, and regional priorities.	In progress
BDS 2.9	Work with other local government areas, agencies, Traditional Owner Groups and commercial native nurseries to prepare a feasibility study for establishment of an additional native nursery and indigenous seed collection and propagation program, targeting locally rare species to increase genetic diversity, bolster resistance and resilience to climate change and meet growing demand for indigenous plants.	To commence
BDS 2.10	Increase and improve significant roadside vegetation across Greater Bendigo through strategic management. Review:  Strategic Directions Urban Roadside Vegetation Management 2011-2015 • Strategic Directions Rural Roadside Conservation 2011-2015 • Roadside Weed and Pest Animal Plan	To commence
BDS 2.11	Create a series of "Tiny Forests" on City managed land at key locations in urban areas and townships across Greater Bendigo that align with Djaara's Forest Gardening priorities to restore important native and cultural habitat and engage the community in their conservation value.	To commence
BDS 2.12	Support habitat restoration on private land by: • Promoting local carbon offset projects, including the program being developed by the North Central CMA • Connecting landholders with funding streams such as the Victorian Government's Bushbank Program and others as appropriate • Connecting landholders with Landcare and other groups • The City's Sustainable Land Management Grants program* • Applying for funding to implement the Habitat Connectivity Plan (Action 3.1). • Collaborating with Djaara to integrate actions from Galk-galk Dhelkunya Forest Gardening Strategy 2022 -2034 *included in the 2023/24 Council budget	In progress
BDS 2.13	Increase participation of Bendigo landholders in the Healthy Landscapes project and seek to extend the program to the cropping and horticulture industries. Aim to include Djaara as a partner and to expand the program to other local government areas.	In progress
BDS 2.14	Increase the number of properties with conservation covenants, particularly in potential biolink areas, by actively promoting the City's applicable Bushcare Incentive rate rebate.	To commence
BDS 2.15	Explore options to support the current community run Common Myna control program.	To commence
BDS 2.16	Track the effectiveness of programs such as the Spring Plains Watershed Repair project and, if highly effective, support similar programs to restore ecological function at appropriate strategic sites.	To commence
BDS 2.17	Review the management plans for Crosbie and Huntly Regenerative Forestry programs with the aim of maximising biodiversity outcomes while achieving financial cobenefits from forestry products. Investigate opportunities to collaborate with Djaara to integrate Forest Gardening principles into the management of these sites.	In progress
BDS 2.18	Develop a planned burn policy with Traditional Owner Groups to enhance the natural and cultural values of City managed nature reserves and roadsides where appropriate and investigate the need for additional resources to deliver an ecological and cultural burn program.	To commence
BDS 2.19	Finalise preparation of a Storm Water Management Strategy that, amongst other things, aims to enhance the quality of water entering Greater Bendigo's creeks and rivers through sediment and pollution control.	In progress
BDS 3.1	Develop and implement a detailed 'Habitat Connectivity Plan' based on the Potential Biolink Areas Plan (Fig. 17) included in this strategy. The plan will be developed in partnership with Traditional Owners and land management agencies and	To commence

incorporate current conservation efforts, interrogate modelled biodiversity and cultural values (Fig. 16), build adaptive	
	To commence
	To commence
	In progress
	p. og. occ
Explore opportunities to utilise regenerative forestry on council managed land to improve habitat and cultural connectivity	To commence
across the landscape and provide opportunities for more sustainable firewood practices – i.e., in addition to Crosby and	
Huntly Regenerative Forestry programs. Integrate Djaara's Forest Gardening principles where possible and appropriate.	
	To commence
	To commence
	To commence
	To commence
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	To commence
are non-competitive.	
	In progress
	To commence
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	In progress
	T
Continue to develop guides on the natural values of Greater Bendigo and how best to support them on private land (e.g., weeds guide, species guides).	To commence
Consider establishing community environment programs that fall under the "Gardens for Wildlife" banner (e.g., pollinator	
	capacity to climate change, and engage local landholders to help create a series of biolinks to aid species diversity and movement on land and in waterways across Greater Bendigo.  Develop a program that supports renaturalisation of nature strips, particularly in urban areas and townships, to increase mostly ground cover and shrubby native plant species diversity, improve habitat for wildlife and neighborhood character (e.g., pollinator corridors project). Encourage the community to apply for a community grant or partner with a corporate sponsor that would support its implementation.  Work with North Central Catchment Management Authority and other stakeholders on a local carbon offset program, ensuring offset sites align with priority areas for habitat enhancement and connectivity.  Explore opportunities to utilise regenerative forestry on council managed land to improve habitat and cultural connectivity across the landscape and provide opportunities for more sustainable firewood practices – i.e., in addition to Crosby and Huntly Regenerative Forestry programs. Integrate Djaara's Forest Gardening principles where possible and appropriate.  Advocate for 1) the return of land to Djaara and Taungurung for sole management; and 2) for the extension of protected land, through the state purchase and registration of significant bushland areas not currently protected (e.g., application for National Park classification for the Wellsford Forest).  Advocate for stronger biodiversity controls in state and federal legislation as appropriate.  Advocate for victorian and Australian listing of threatened species, pest plants and animals and threatening processes as needed. Support delisting of species that have recovered and are no longer threatened as appropriate.  Advocate for a review of funding to catchment management authorities (CMAs) to allow them to actively protect and restore riparian habitats.  Advocate for Victorian and Australian government funding programs that are long term, support scaling of existing successfu

Biodiversit	y Strategy and Action Plan	
BDS 5.6	Assist in the development, promotion and distribution of a bushwalking guide to Bendigo (tracks and trails) with other groups and agencies (e.g., CVACF, Spring Plains Steering Committee), including the Bendigo Bushland Trail, outlined for reinstatement in the Greater Bendigo Public Space Plan.	In progress
BDS 5.7	Increase environmental awareness of City staff, including training on significant natural values of Greater Bendigo. Provide specific training for on-ground staff on natural values protection when conducting work.	To commence
BDS 5.8	Investigate implementing the Nature Stewards program run by the Victorian National Parks Association to help build capacity amongst interested individuals and environmental groups across Greater Bendigo.	In progress
BDS 5.9	Celebrate and recognise the contribution community groups make to the environment and biodiversity conservation.	In progress
BDS 5.10	Utilise citizen science programs to train the community to help deliver the Biodiversity Monitoring Program included in this Strategy.	To commence
BDS 5.11	Provide education and support to the community for online data recording and management tools (e.g., Fulcrum, iNaturalist, Victorian Biodiversity Atlas).	To commence
BDS 5.12	Increase inter-agency and community group data sharing across Greater Bendigo (e.g., use of shared platforms such as iNaturalist and the Victorian Biodiversity Atlas) and ensure data is effectively managed to allow for appropriate analysis of trends.	To commence
BDS 5.13	Establish an annual BioBlitz across Greater Bendigo, engaging relevant land management agencies, groups, Landcare, and the public.	To commence

Zero Carb	on: Net Zero Plan for Council Operations	
#	Actions	Status 2022/23
ZEP 1	The City will implement an emission tracking program, using the Trellis web-based emission tracking software to collect,	Complete
	interpret and act on data within its emission boundary.	·
ZEP 2	The City will develop a multi-year capital program for both energy efficiency works and for sustainable technologies such	In progress
	as solar PV and batteries, including for community managed facilities	
ZEP 3	The City will finalise the 2023 update of the Sustainable Buildings Policy and promote it across the organisation.	Complete
ZEP 4	The City will finalise strategic planning for City and community facilities and will develop a related (draft) ten-year capital	In progress
	program	
ZEP 5	The City will complete a review of the condition of our plant and equipment at key sites to inform project prioritisation and	In progress
	future budget requests and allocations.	
ZEP 6	The City will develop a capital program budget for the electrification upgrade of large gas consuming sites, that includes	In progress
	upgrades to electrical capacity where needed and will ensure that opportunities to package projects (i.e., codeliver multiple	
	upgrades concurrently) are realised to achieve cost efficiencies.	
ZEP 7	The City will develop a capital program budget, for the electrification of small and medium gas consuming sites	In progress
ZEP 8	The City will review its Fleet Policy and other relevant documents to enable the transition to electric vehicles.	To commence
ZEP 9	The City will develop business cases for electric vehicle charging infrastructure at relevant Council facilities, prioritising	To commence
	Galkangu (in consultation with the Victorian Government) and the depot. This includes working with Powercor to determine	
	the current electricity supply, spare capacity, constraints, and opportunities.	
ZEP 10	The City will seek to optimise its fleet and plant and commence transitioning where suitable electric or zero emissions	In progress
	options are available, This includes seeking quotes for electric or zero emissions options as a part of future procurement	
	processes	
ZEP 11	The City will engage industry experts to help plan and implement the transition to zero emission vehicles to help reduce	In progress
	the risks and optimise the financial outcomes.	
ZEP 12	The City will work with expert consultants to better understand its current emissions liability from the Eaglehawk landfill,	Complete
	and to forecast this liability into the future taking account of planned operational changes including the closure and	
755.40	capping.	_
ZEP 13	The City will quantify its annual material consumption and scope 3 emissions and identify and implement priority actions to	To commence
7ED 4.4	reduce these emissions to net zero.	0
ZEP 14	The City will promote its vision of 'electrifying everything' to become an all-electric, zero carbon, healthy workplace that is	Ongoing
7ED 45	leading by example to achieve net zero e.g., in prospectus documents and public communications.	T
ZEP 15	The City will identify expenditures as they relate to the environment. This 'green tagging' will become part of the annual	To commence
7FD 46	budget process and will be reported in budget documents and in the Annual Environment Report.	Nolongor
ZEP 16	The City will develop governance arrangements, composed of new and existing small working groups, to coordinate the	No longer
ZEP 17	transformation to net zero emissions.	relevant
ZEP 1/	The City will utilise its internal change management expertise to assist with the transformation, and to relate the	In progress
	transformation to the City's staff values and behaviours i.e., through the Be the Change flagship project.	

Zero Carbo	Zero Carbon: Net Zero Plan for Council Operations	
ZEP 18	The City will participate in a pilot project in collaboration with the North Central Catchment Management Authority and	In progress
	other councils to test the feasibility of a local carbon offset program that achieves biodiversity co-benefits.	
ZEP 19	The City will develop an offset policy to guide decisions about purchasing offsets.	To commence
ZEP 20	The City will purchase carbon offsets as required, from FY2029/30 to achieve its net zero goal and will provide the	In progress
	necessary evidence that these offsets have been retired to achieve Climate Active carbon neutral certification.	
ZEP 21	The City will review and update the monitoring, reporting, and learning framework for its Zero Carbon journey as part of a	Complete
	larger review of the monitoring, reporting, and learning framework for the Climate Change and Environment Strategy.	

#	Bendigo Zero Emissions Roadmap Actions	Status 2022/23
1	Continue the Climate Collaboration - Continue the Collaboration and seek collective funding for projects as needed	Ongoing
2	<b>Partnerships -</b> Continue to actively seek out opportunities to collaborate with other agencies and organisations and to collectively resource organisations such as the Bendigo Sustainability Group, Central Victorian Greenhouse Alliance, Bike Bendigo and DJAARA to deliver programs that progress shared priorities.	Ongoing
3	<b>Local community leadership and action -</b> Support local initiatives that build community based climate leadership and action. This may include education, schools, engagement or art programs that target different demographics and / or neighbourhood and township scale climate action planning	In progress
4	Regional Zero Emissions Roadmap - Continue to work with the Central Victorian Greenhouse Alliance and other stakeholders to finalise and implement the Regional Zero Emissions Roadmap currently in development.	In progress
5	<b>Dja Dja Wurrung self determination</b> - Support and help resource DJAARA to deliver their Climate Change Strategy and Renewable Energy Strategy and to participate fully in climate action on Djandak, including in participating in the actions in this Roadmap.	Ongoing
6	<b>Community engagement</b> - Deliver an engagement program in collaboration with the Bendigo Sustainability Group that builds awareness of how to electrify homes and access renewable energy.	In progress
7	<b>Sustainable Design Advisory Service</b> - Refocus existing Council resources on providing sustainable design advice to residents planning on building or renovating outside of the planning permit application process.	In progress
8	<b>Funding mechanisms</b> - Work with lenders to develop and promote low and no interest loans, mortgage-based products and other financial mechanisms to help fund retrofitting initiatives.	To commence
9	<b>Low-income homes electrification and retrofitting</b> - Codesign and deliver a financially sustainable, ongoing program with welfare agencies to finance, support, electrify and retrofit low-income homes	In progress
10	<b>Energy Efficiency and Resilience Service</b> - Investigate implementation of a pilot project working with the CVGA, Bendigo Sustainability Group, neighbourhood houses, CVGT Employment, Bendigo TAFE, DJAARA and Mens Sheds to retrofit homes for energy efficiency and climate resilience while building skills in energy assessments and trades.	In progress
11	<b>Bulk buy programs -</b> Work with the CVGA and / or the Bendigo Sustainability Group to implement a bulk buy program for renewable energy and / or electric appliances prioritising programs that deliver savings to residents.	To commence
12	<b>Business support program -</b> Support businesses to create and implement their own zero emissions roadmaps to install solar, electrify and become energy efficient.	In progress
13	<b>Big business collaboration -</b> Bring together Bendigo's big businesses to collaborate on large scale solar and power purchase agreements.	In progress
14	Community Wealth Fund - Investigate establishing an independently managed fund to receive and democratically allocate funds from partners, donors and local renewable energy projects	To commence
15	Community Benefit Sharing Policy - Establish a policy that sets out Council and the community's expectations for benefit sharing outcomes from renewable energy developments	To commence
16	Collaboration with Powercor - Continue to develop a collaborative relationship with Powercor to enable Council and the community to create a 100% renewable energy grid.	To commence

	Bendigo Zero Emissions Roadmap	-
17	<b>Cycling revolution</b> - Accelerate implementation of the City's separated cycling network and develop an approach to filling in the network with a suite of temporary and permanent on road paths, "greenways" and end of trip and parking facilities.	To commence
8	<b>Walking revolution -</b> Accelerate the City's program of walking infrastructure, including footpaths, crossings and traffic calming interventions, that transform car dominated roads into pedestrian prioritised and friendly streets. Special focus on pedestrian priority around every school, park and shopping centre.	To commence
9	<b>Bus revolution</b> - Advocate for an overhaul of the City's bus services with the aim of delivering a rapid transit system that is direct, frequent, safe, electric, replaces thousands of car trips daily and integrated with walking and cycling.	In progress
20	<b>Metro rail commute</b> - Advocate for a frequent Bendigo metro rail commuter service an hour each side and inside Greater Bendigo.	In progress
<u>!</u> 1	<b>Electric vehicle charging</b> - Develop a policy that establishes Council's approach to supporting installation of charging infrastructure in strategic locations. Consider installing Council owned charging infrastructure if and when the business case is favourable.	In progress
2	<b>Electric vehicle bulk buy</b> - Investigate delivery of a bulk buy program for the community in collaboration with the CVGA, the Bendigo Sustainability Group and other stakeholders.	To commence
23	<b>Fleet and logistics collaboration</b> - Bring organisations in the city together to investigate opportunities for collaboration relating to the purchase and sharing of fleet, e-bikes, plant, freight and commercial electric vehicles.	To commence
24	Integrated Sustainable Transport Planner and Programs Officer - Establish a role in Council to lead strategic action, integrated transport planning, advocacy and behaviour change programs with schools and workplaces.	To commence
25	Sustainable Farming Systems - Build on the successes of the Healthy Landscapes program and similar regenerative agriculture initiatives in the region and work with key partners to expand programs to other council areas and sectors, including exploring a partnership with DJAARA and employing additional extension officers	In progress
:6	Sustainable Land Management Grants - Provide small grants to farmers to implement regenerative, sustainable farming techniques.	In progress
27	<b>Zero carbon farms program</b> - Work with Agriculture Victoria, NCCMA and other relevant stakeholders to expand their Community of Practise and deliver an advisory service that coordinates with other local and regional programs to support farmers account for and reduce their emissions	Complete
28	<b>Agribusiness Officer -</b> Maintain Council's Agribusiness Officer role to run capacity building programs support young farmers to enter the industry and provide the conduit for information to farmers and the community.	In progress
29	Food waste business programs - Deliver a food waste reduction program targeting businesses including farms, retail and hospitality.	To commence
30	<b>Urban food productio</b> n - Support and promote existing programs that increase local food growing and food literacy, such as community gardens, food redistribution programs, backyard and communal growing and school engagement. Investigate establishing an "edible streets" pilot program that involves supporting a street or neighbourhood to install edible gardens and swap produce.	Ongoing
31	<b>Local carbon offsets program -</b> Work with the NCCMA and other partners such as DJAARA, to establish a local carbon offsetting program that achieves local biodiversity, cultural and economic outcomes.	In progress

Greater Bendigo Zero Emissions Roadmap			
32	<b>Greater Bendigo Biodiversity Strategy</b> - Finalise and implement the Greater Bendigo Biodiversity Strategy that seeks to protect and enhance native vegetation across the City.	Complete	
33	<b>Support community enterprises</b> - Support local community circular economy enterprises with small grants and in-kind support to help them scale their impact.	In progress	
34	<b>Greater Bendigo Circular Economy Hub</b> - Finalise design and secure funding to develop a regional Circular Economy Hub to collect, sort and reprocess commercial and industrial resources, and enable local reprocessing enterprises to form.	In progress	
35	<b>Waste Education Action Plan</b> - Develop and implement a Resource Recovery Action Plan that continues to support the community, businesses and schools to reduce waste and consumption.	To commence	