



# Sustainability and Environmental Strategy

2023 - 2028





## Acknowledgement of Country

The City of Bunbury acknowledges the traditional owners of the land, the Noongar Wardandi people and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures; and to Elders past, present and emerging.



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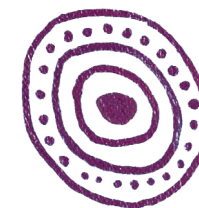
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## Accessibility

If you require the information within this document in an accessible format, such as large print or audio, please contact the City of Bunbury on (08) 9792 7000 or email [info@bunbury.wa.gov.au](mailto:info@bunbury.wa.gov.au)







## Introduction

Welcome to the City of Bunbury's Sustainability and Environmental Strategy 2023-2028. The purpose of the strategy is to support the community's vision and aspirations for a more sustainable Bunbury.

This strategy provides objectives and targets for both the organisation and community, with the overarching goal of achieving sustainable outcomes to meet the needs of current and future generations. It aims to align the City with Australia's commitment to limit global temperature rise to 1.5°C above pre-industrial levels as part of the Paris Agreement<sup>a</sup> and contribute to the 2030 Sustainable Development Agenda<sup>1</sup>.

It provides desired outcomes, targets and objectives on eight focus areas:

- Governance
- Energy and emissions
- Sustainable water
- Circular economy and waste
- Sustainable transport and urban infrastructure
- Greening and biodiversity
- Climate resilience
- Community, culture and wellbeing

The implementation of the strategy will be supported through the development of a Sustainability and Environmental Action Plan (action plan). The action plan will address how the City will deliver the commitments within this strategy while empowering the community to take a shared leadership approach to sustainability challenges and opportunities.

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<sup>a</sup> The Paris Agreement is an international treaty on climate change adopted at the United Nations Climate Change Conference (COP21) in Paris, 2015.





## Artist's Message

**Artwork pictured above and throughout this document: 'Respect Boodja' by Melissa Gale Riley.  
Artwork photographed by Ben Yew.**

I am a Noongar woman who has been raised with strong culture and respect for the land. My paintings are greatly influenced by nature and the colours of nature - plants, elements and the skies, events that happened in my childhood - remembering hunting trips, stories told by grandparents, travelling back and forward to the country every chance I get, bush walking in springtime when all the wildflowers are out in abundance.

I will always continue to have a passion for Noongar art through stories, land, songlines and memories, that I will pass onto the younger generations.

My design is to represent how meaningful and important it is to respect and care for our boodja. When I see blossoms on the wattles and gum trees, I know that Djilba is here and all the wildflowers too are in abundance.

I love being able to do my part in making sure that I respect our boodja, so that the beauty of the boodja can always be there for our next generations to come.

These are the names of the natives I painted.

Dangalang - Pink Everlastings

Mudjar - Christmas Tree

Taaliny- Shy Sun Orchard

Yandjet- Water Bullrushes

Mindalong - Wattle

Balga - Grass Tree

Yonga Maar - Kangaroo Paw

Mari Blossoms and Leaves

(Noongar language courtesy of the South West Aboriginal Land and Sea Council<sup>2</sup>)

**Dangalang - Pink Everlastings**







## Mayor's Message

**On behalf of Bunbury City Council and our community, I am proud to present the City of Bunbury's Sustainability and Environmental Strategy 2023-2028.**

We know through our MARKYT Community Scorecard that sustainability and climate change are one of our community's highest priorities, so I'm thrilled to be able to present this document and to get to work on the actions identified.

Our community's sentiments towards sustainability and climate change are what prompted us as a Council to request the development of this Strategy, with a goal to identifying real climate change actions.

It follows the Council in 2022 signing the Western Australian Local Government Association (WALGA) Declaration on Climate Change along with adopting a Climate Change Policy, and a Council Sustainability Policy.

These steps along with this newly developed strategy demonstrate our commitment and aspirations to tackle climate change based on an informed corporate net zero emissions target.

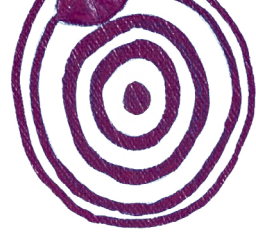
This strategy has been developed following extensive community consultation to help identify our community's priority focus areas and what actions they would like to see.

Thank you to everyone who has already contributed to this important project. I encourage everyone to have a read through of this strategy, to stay involved and make a commitment themselves, and to keep us accountable.

*Jaysen de San Miguel, Mayor*







## CEO Message

**The impacts of climate change are no secret, they are being felt across the world, and Bunbury is not immune.**

Regularly referred to as the City of Three Waters, it's vital the City puts in the processes, initiatives and facilities to address the challenges of climate change particularly those impacting our natural areas, our infrastructure that is public and privately owned, and our coastline.

The City has already started our journey to responding to climate change through initiatives such as diversion of household waste from landfill, supporting community environmental projects and groups, purchasing renewable energy for our 12 most energy intensive buildings and the prioritisation of greening the City.

Within the lifespan of this Strategy, the City has committed to an ambitious greenhouse gas emissions reduction target of 35 per cent on operational emissions from 2020/21 levels by mid-2026. We have also set an overarching target of net zero greenhouse gas emissions from operations by the year 2040 and we're aspiring to reach that target even earlier, by the year 2035. I am proud of these aspirations.

I would like to take this opportunity to congratulate and thank our Environment and Sustainability Team for not only putting this important Strategy together, but coordinating the community engagement, collating the information received and researching the trends.

This truly is a comprehensive plan to tackle an important issue being felt globally, and it's crucial that all levels of government – along with our communities – play their part to address it and provide a brighter future for our community and future generations.

Thank you to our Elected Members and community that have contributed to inform this Strategy. Now it is up to all of us to continue the work we've already started, and to action and champion the items identified in the City's Sustainability and Environmental Strategy 2023-28.

**Malcom (Mal) Osbourne, CEO**



## Youth Mayor's Message

**The City's 2021-2023 cohort of the Youth Advisory Council is glad to see Bunbury's Sustainability and Environmental Strategy be adopted.**

As we move through our lives, we'll live to see the benefit of this strategy and are appreciative of the action the City of Bunbury is taking to attempt to mitigate the impact of climate change. The legacy of this strategy will continue to benefit future generations, and the adoption of this strategy demonstrates the empathy and compassion of the city and broader community.

Personally, I'm looking forward to the strategic actions being promptly implemented to see broad impacts are actualised. As a community, we're able to best prepare for the increasing prevalence of crises by becoming familiar with our local assets and strengths and getting to know one-another more deeply. Check in with your neighbours, become involved with the community and look after yourself out there.

**Mikalea Kerwin, Mayor Youth Advisory Council**



**Mudjar - Christmas Tree**



## City of Bunbury at a Glance

With its coastal landscapes, working port, protected marinas and friendly climate, the City of Bunbury is a vibrant regional hub. The City's lifestyle, trade, recreation, arts and culture, together with its history and heritage, sets Bunbury apart. The seaside City has developed a diverse economic and cultural outlook. Its collection of street and public art is one of the largest and among the best in regional Australia.

Bunbury is located in the South West region of Western Australia (WA), 180kms south of the capital Perth. The Wardandi Noongar people have inhabited Bunbury and the region for more than 40,000 years. European settlement occurred in 1838 and by the 20th century Bunbury was an established import and export port, with a railway line to Perth. Today, Bunbury is an accessible, inclusive and cosmopolitan regional city.

Bunbury is also known as the City of Three Waters, located on a unique peninsular, facing west to Geographe Bay and the Indian Ocean. Nestling against the Leschenault Inlet and on the protected north facing waters of Koombana Bay, it extends easterly towards the harbour. The City's iconic waterways include the Leschenault Estuary, two rivers and many important wetlands.

Koombana Bay and the inlet and estuary are an all-year round home to about 50 resident dolphins, with up to 100 seasonal visiting dolphins. The City's iconic waterways and 1930 hectares of parks, recreation and conservation areas enhance the quality lifestyle enjoyed by locals and visitors. Kalgulup Regional Park is a high-quality example of the South West's biodiversity which includes the Maidens Reserve currently undergoing upgrades to include new trails and lookouts.

Bunbury was declared the State's second City in 1979 and supports and services more than 90,000 residents in the Greater Bunbury Metropolitan Area. The area has a target population of 200,000 people and the City's population is projected to double within



40 years. Bunbury is a major economic hub and service centre, due to its access to transport and export infrastructure.

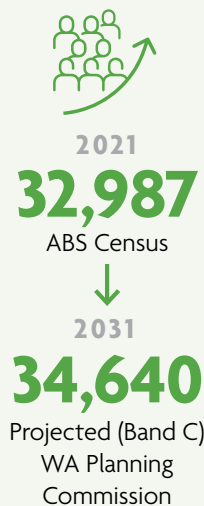
The sub-region has a thriving job market, with many employment opportunities in health care and social services, retail, education and construction. Under the State's Diversify WA economic development framework, Bunbury is poised to become a leader in regional innovation and technology, creating a Digital City for the future.

Bunbury is a beautiful place to live, work and visit. Its quality of life is one of the biggest attractions, offering local families all amenities including schools, shops, beaches and nightlife in easy reach. This includes a university and a regional TAFE, public and private schools, the South West Regional Health Campus and a range of high-quality health services. The City also hosts an extensive and diverse events calendar, including national and international shows, held at the award-winning Bunbury Regional Entertainment Centre. The City annually hosts two major events – Skyfest and Christmas in the City.

Rich in art, culture and heritage, Bunbury is the region's cultural and entertainment hub. Bunbury Regional Art Gallery is the largest A-class regional gallery in Western Australia and Bunbury has its very own Museum and Heritage Centre, documenting the City's rich history. Complementing the cultural and entertainment offerings are high-class sporting facilities, a nationally accredited speedway track, a motor museum, and many exceptional, award-winning cafés, restaurants and small bars. There is also the Bunbury Wildlife Park – home to native and farm animals.

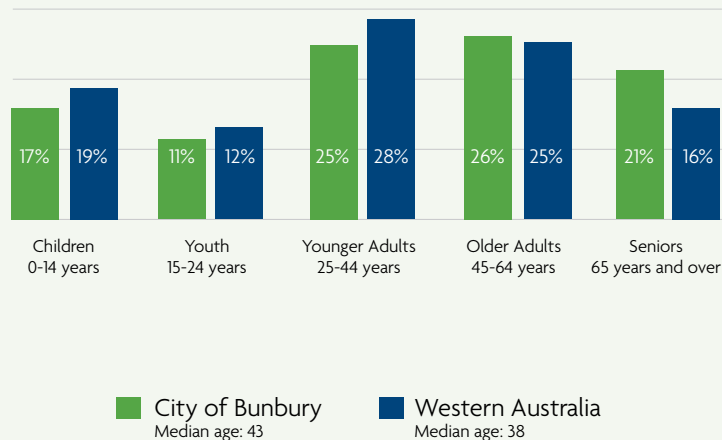


## POPULATION



## AGE PROFILE

2021, ABS CENSUS



## HOUSEHOLDS THAT SPEAK A NON-ENGLISH LANGUAGE



**8.6%**  
WA 18.6%  
2021, ABS CENSUS

## ABORIGINAL AND/OR TORRES STRAIT ISLANDER PEOPLE



**4.3%**  
WA 3.4%  
2021, ABS CENSUS

## DISABILITY

Needs assistance with core activities



**6.7%**  
WA 4.6%  
2021, ABS CENSUS

## PROXIMITY TO WATER

**100%**

of dwellings within a 5km radius of the coastlines of waterways

## TOTAL VISITORS

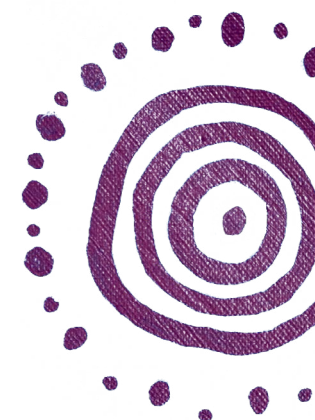
**363,000**3-year average 2019-2022  
TOURISM WA.

## BUSHLAND RESERVES AND WETLANDS

**193 ha**

managed by the City

## COUNCIL EMISSIONS

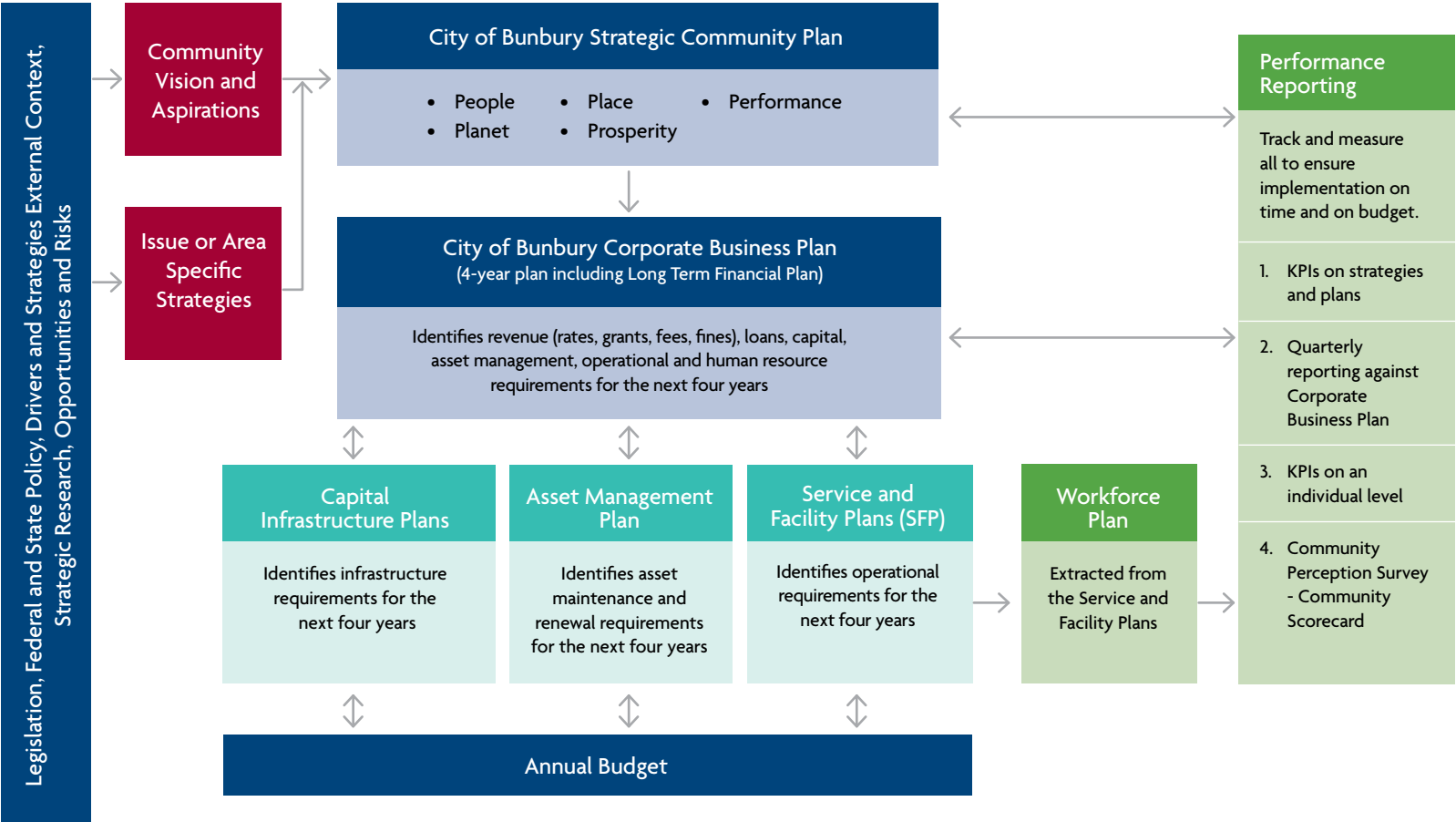
**6,926**tonnes (CO<sub>2</sub>e)  
2020/21





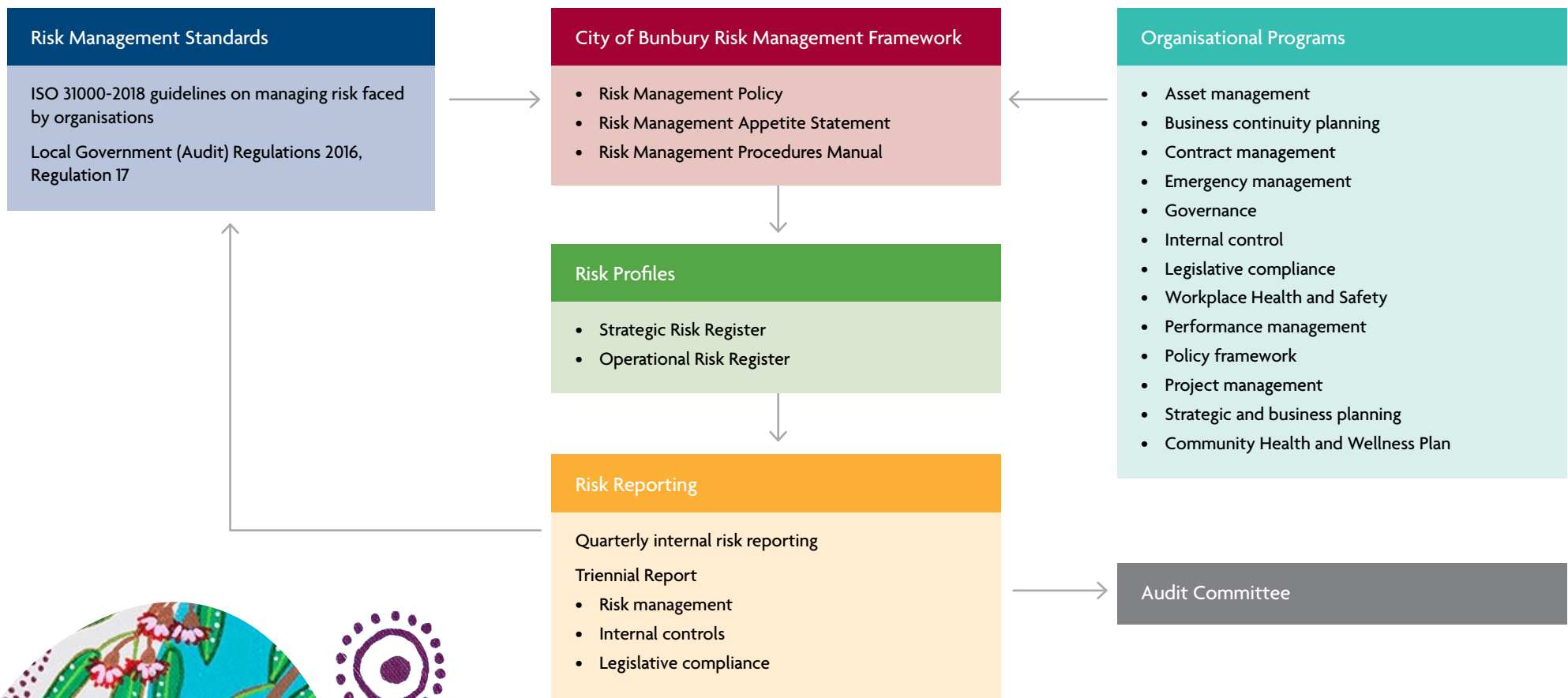
# Integrated Planning

The City adopts an integrated approach to strategic planning adhering to the requirements set out in the Local Government Act 1995. The Integrated Strategic Planning and Reporting Framework (ISPRF) is the City's way of making sure planning is holistic, integrated and driven by the community. The ISPRF directly links performance monitoring with planning, so the City can adapt and respond to changes in community needs and the business environment. The approach ensures community input is reliably gathered, provides long-term strategic direction and objectives in line with these inputs, identifies the resourcing and performance reporting required and clearly conveys long term financial implications.



# Managing Risk

Risk management creates value for the City and our local community by effectively managing business systems and processes to realise the balance between opportunities for gain and minimisation of adverse impact. Strong risk management is a critical component of good governance. The City's Risk Management Framework outlines how we assess exposure to risk as well as the administrative, human and financial resources required to manage our risks while meeting the outcomes and objectives of our planning.







# Purpose

The City of Bunbury exists to build a better Bunbury for our community. We lead, enable, plan and deliver services, infrastructure and opportunities for Bunbury.

We fulfil our purpose through the following roles:



## Fund

We help to fund organisations to deliver essential community services.



## Advocate

We are a voice for the local community on key issues.



## Partner

We form strategic alliances in the interests of the community.



## Facilitate

We help to make it possible or easier to meet community needs.



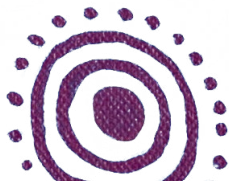
## Provide

We directly provide a range of services and facilities to meet community needs.



## Regulate

We regulate compliance with legislation, regulation and local laws.



## Priorities

Priorities shift over time in response to what is happening locally and globally. To provide quality of life outcomes, the City must stay up-to-date and adapt to changes in the political, environmental, social, technological, economic and legal landscape. We must also respond to changing community expectations.

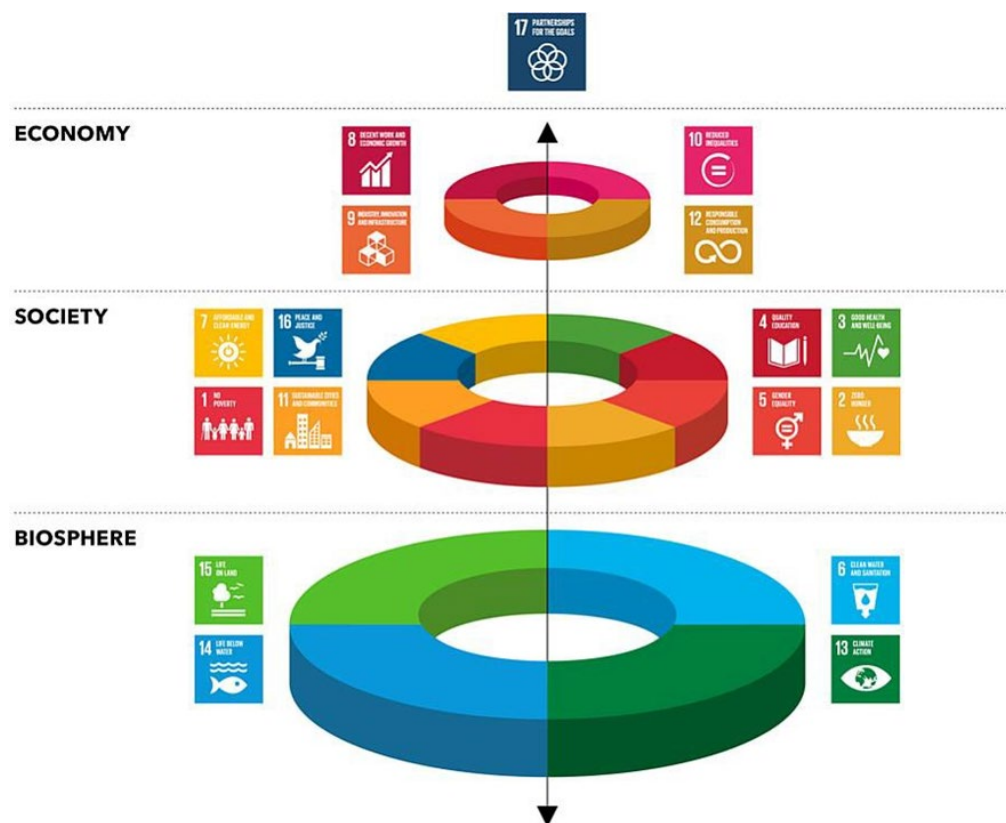


Figure 1 The SDG Wedding Cake. Credit: Azote for Stockholm Resilience Centre, Stockholm University CC BY-ND 3.0.

## Global Priorities

The United Nations Sustainability Development Goals<sup>3</sup> (SDGs) provide a global roadmap for sustainability. They are 17 interlinked goals for increasing prosperity, ending social injustice and poverty, and improving health and wellbeing, all while protecting the environment for current and future generations. The 17 goals were agreed by all United Nations member states, including Australia. The City will be a catalyst for change; promoting and facilitating the achievement of the goals and relevant targets in the community.

## Visualising the interconnected global goals

The Stockholm Resilience Centre's SDG Wedding Cake<sup>4</sup> illustrates the interconnectedness of the 17 goals by organising the goals into a tiered cake, where the cake foundation is the biosphere, supporting society, which in turn supports economic development (Figure 1). Seventeen of the goals fit into these three main categories, supported by leadership, partnerships and good governance.

The SDG Wedding Cake shows how societies, and their economies should be seen as embedded parts of the biosphere. This vision is a move away from the sectorial approach where social, economic, and ecological development are seen as separate parts<sup>4</sup>.

### For the City, sustainability means,

'Meeting the needs of the current and future generations through the integration of environmental protection, social advancement, economic prosperity and accountable and transparent governance.'

Amended from the *Local Government Act 1995* Section 1.3







State Priorities

The Western Australian State Government has committed to achieving the Paris Agreement’s objective of net zero emissions by 2050 and supporting Australia’s pursuit of the objectives of the SDGs. In addition, the WA Government has committed to an interim emissions reduction target of 80% below 2020 levels by 2030. Legislation will be introduced in 2023 to establish a framework for responsible emissions reductions to meet these targets. Along with the climate action outlined in the State Climate Change Policy<sup>5</sup>, Shaping Western Australia’s Low Carbon Future<sup>6</sup> and Climate Adaptation Strategy<sup>7</sup>, State environmental priorities<sup>8</sup> include:



Carbon transition

- Clean manufacturing and future industries
- Transforming energy generation and use
- Renewable energy precincts
- Storing carbon
- Lower-carbon transport
- Government leadership



Water management

- Security of supply and quality
- Education and efficiency
- Recycling and waste water management



Waste and pollution

- Waste
- Pollution








Conservation and rehabilitation

- Biodiversity management
- Mining rehabilitation
- Sustainable fisheries and aquatic resources management

## Local Priorities

The City's Strategic Community Plan (SCP) 2032 was developed with more than 1,000 community members and key partners. It was informed by their priorities, and sustainability and climate change action was revealed as the fourth highest priority by the 2021 MARKYT® Community Scorecard survey. The SCP is the City's highest level strategic planning document and sets out a vision and aspirations to guide Council's strategic priorities and direction. There are five core performance areas in the SCP - People, Planet, Place, Prosperity and Performance. These areas are interrelated, and each must be satisfied to deliver excellent quality of life in the City of Bunbury. Below we summarise several overall aspirations and desired outcomes of the SCP.

					
	<b>People</b>	<b>Planet</b>	<b>Place</b>	<b>Prosperity</b>	<b>Performance</b>
ASPIRATION	A safe, healthy and connected community.	A healthy and sustainable ecosystem.	An integrated, vibrant and well planned City.	A strong and diversified economy.	Leading with purpose and robust governance.
DESIRED OUTCOMES	<ol style="list-style-type: none"> <li>1. A safe community.</li> <li>2. A growing hub of culture and creativity.</li> <li>3. A healthy and active community.</li> <li>4. A compassionate and inclusive community.</li> </ol>	<ol style="list-style-type: none"> <li>5. A natural environment that is cared for and preserved.</li> <li>6. An aware and resilient community equipped to respond to natural disasters and emergencies.</li> </ol>	<ol style="list-style-type: none"> <li>7. A community with high quality urban design and housing diversity.</li> <li>8. A place with attractive and welcoming community spaces, where people want to live.</li> <li>9. A city that is easy to get around safely and sustainably.</li> </ol>	<ol style="list-style-type: none"> <li>10. The premier city of regional Western Australia.</li> <li>11. A strong, resilient and diverse economic hub for the South West.</li> <li>12. A unique and desirable destination within the South West region.</li> </ol>	<ol style="list-style-type: none"> <li>13. A leading local government.</li> <li>14. A well-informed community that is deeply engaged in decision making.</li> </ol>

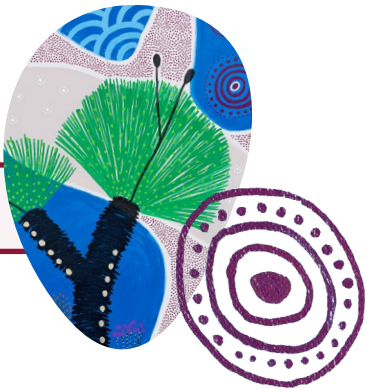


The Sustainability and Environmental Strategy is an informing strategy for the achievement of the outcomes and objectives under the core performance area of *Planet*:



**Planet Aspiration:** A healthy and sustainable ecosystem

Balga - Grass Tree



**Outcome:** A natural environment that is cared for and preserved.

**Objectives:**

- 5.1 Sustainably manage, conserve and enhance our natural habitats
- 5.2 Encourage the adoption of sustainable practices
- 5.3 Develop a sustainable, low waste, circular economy
- 5.4 Conserve and manage water resources
- 5.5 Move to net zero gas emissions



**Outcome:** An aware and resilient community equipped to respond to natural disasters and emergencies.

**Objectives:**

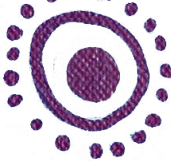
- 6.1 Minimise risks and impacts from fires, floods, heat waves, and other natural disasters
- 6.2 Improve community readiness and resilience when preparing for and responding to natural disasters.



## This strategy works towards these Sustainable Development Goals:







# How this Strategy was Developed



Engaged the community to find out what is important to them when it comes to improving sustainability and responding to climate change.



Identified the priority focus areas where the City has the opportunity to make change.



Identified initiatives for delivering the aspirations and the vision for a sustainable Bunbury.



Engaged staff and the community by workshopping ideas and aspirations for improving environmental outcomes within the priority focus areas.

Calculated quantifiable baselines to measure progress and established corporate and community targets to ensure accountability.



The draft strategy was peer-reviewed by staff and then released for community feedback to inform the final strategy.





## Community Engagement

In early 2022, the City invited the community to share their priorities for improving sustainability and responding to climate change. The survey results showed the community strongly prioritise renewable energy to mitigate climate change, followed by greening the city and regenerating natural areas to support local biodiversity and reduce urban heat. The results assisted us to identify draft focus areas for the strategy, providing a framework for further community engagement.

In October 2022, the City facilitated community workshops, called the *Sustainability Community Cafés*. The workshops provided an opportunity for discussion on what actions the community would like to see the City take to improve sustainability. The outcomes guided the development of the strategy along with expert advice from City Staff. The priority themes that emerged from the community engagement are noted within each strategy focus area to continue guiding the City. More information on community engagement can be found on the City's Community Connect website.



Taaliny- Shy Sun Orchard

Some themes that emerged from the community engagement require action from Federal and State Government. The City can play an advocacy role to influence change in these areas. The key advocacy themes that emerged from the community engagement were:












- Energy providers increase the efficiency of street lighting and renewable energy generation and storage in the community.
- State Government mandate increased energy performance standards in new developments.
- Federal and State Government implement higher sustainable building design standards for new builds and retrofits.
- Federal and State Government incentivise the transition to electrification.
- State Government implement higher water performance standards and the use of alternative water sources in new developments.
- Water providers better enforce water restrictions and utilise (fit-for-purpose) alternative water sources.
- Local businesses implement product stewardship schemes and litter reduction initiatives.
- Schools, businesses and community hubs develop community-sharing initiatives and local repair initiatives.
- State Government support product stewardship schemes.
- State Government increase investment in footpaths and cycleways.
- State Government improve public transport services within Bunbury and to surrounding regions.
- State Government promote electric vehicle charging infrastructure in new developments.
- Federal and State Government increase greening requirements for new builds and development.
- State Government implement stronger policy and regulations to retain native vegetation and trees on private land.
- Federal and State Government increase action on climate change mitigation and adaptation across all levels



# Strategy Overview










**Vision: The City is a leader in sustainability and empowers the community to live in an environmentally sustainable way.**

To achieve the vision, the community helped shape a plan for the future. Below we summarise the focus areas and desired outcomes. Over the following pages, for each of the focus areas we describe the current situation, recent achievements, and what we plan to do.

Focus Area	SDGs	Desired Outcomes
<b>Governance</b> Leadership and governance for embedding sustainability into the organisation and ensuring accountability.	    	The City of Bunbury is a leader in sustainability and considers the environment, community, culture and economy in all decision-making processes.
<b>Energy and Emissions</b> Electricity and natural gas used by the City and community to power stationary activities such as heating, lighting and appliances and the associated greenhouse gas emissions; emissions associated with the City's projects and operations.	 	Increased energy efficiency and renewable energy used by the City's operations and the community, resulting in reduced fossil fuel derived energy.  Significant reductions in greenhouse gas emissions from energy used by the City's operations.  The community is supported to implement energy efficiency measures and adopt renewable energy technologies.
<b>Sustainable Water</b> Scheme water and groundwater used by the City and community; environmental water (rivers and wetlands) within the City's municipal boundaries, plus any associated contamination and pollution.	 	Improved efficient use of scheme water and groundwater used by the City's operations and the community.  Increased use of alternative (fit-for-purpose) water sources.  Increased water sensitive urban designs.
<b>Circular Economy and Waste</b> All material used and disposed of or discarded within the City's municipal boundaries, plus any associated contamination, pollution, and greenhouse gas emissions.	  	A sustainable low waste, circular economy.  Reduced waste generated and increased resource recovery.  Reduced landfill and greenhouse gas emissions from landfill.  Reduced litter and dumping.





Focus Area		SDGs	Desired Outcomes
<b>Sustainable Transport and Urban Infrastructure</b>	Low and zero emission modes of transport such as active transport, public transport and electric vehicles (EVs) used by the City and community, plus any associated greenhouse gas emissions; urban infrastructure to facilitate sustainable transport within the City's municipal boundaries.	 	<p>Increased use of active and public transport systems.</p> <p>Increased use of renewable energy powered vehicles.</p> <p>Increased access to electric vehicle charging stations.</p>
<b>Greening and Biodiversity</b>	Biodiversity, vegetation, and green spaces within the City's municipal boundaries, plus any associated contamination and pollution.	  	<p>A natural environment that is cared for, preserved and enhanced.</p> <p>Increased tree canopy on public and private land.</p> <p>Improved biodiversity rehabilitation and protection.</p> <p>Improved public open space and park amenity.</p> <p>Biosecurity threats are minimised, identified and managed.</p>
<b>Climate Resilience</b>	Identification of climate-related risks and vulnerability and strengthening the capacity of the City and the community to mitigate and adapt to a changing climate.	 	<p>An aware and resilient City and community equipped to respond to natural disasters and emergencies.</p>
<b>Community, Culture and Wellbeing</b>	Environmental outcomes for improved health, happiness, culture, wellbeing, and satisfaction.	 	<p>Improved employee and community satisfaction and engagement in sustainability initiatives.</p> <p>Higher quality of life.</p> <p>More inclusive and equitable communities.</p>

*A reduction in the City's operational greenhouse gas emissions is an important outcome for several of the focus areas within this strategy, including energy and emissions, circular economy and waste, and sustainable transport and urban infrastructure.*

**The City has set an overarching target of net zero greenhouse gas emissions from its operations by the year 2040 and is aspiring to reach the target earlier by the year 2035.**





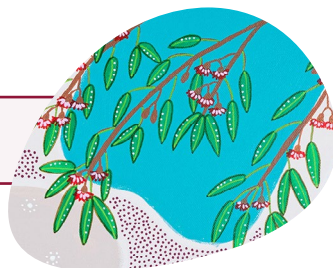
## Focus Area: Governance

This focus area refers to leadership and governance for embedding sustainability into the organisation and ensuring accountability.

### Key themes from the community:

- Demonstrate leadership and transparency.
- Prioritise sustainability in decision making and resource allocation.
- Take action to contribute to a viable future for next generations.

Mari Blossoms and Leaves



### Current situation

Good governance is essential for achieving sustainable development. It is embedded within the United Nations Sustainable Development Goals (SDGs), the City's Governance Framework and is one of the strategic principles of the Council Sustainability Policy<sup>9</sup>. Good governance ensures that the City is able to manage its many complex responsibilities effectively and in the best interests of the community. Good governance is also required to ensure that sustainability principles are considered and adopted across the organisation, becoming an integral part of daily operations and culture.

### Some recent achievements

- **Climate Change Declaration:** Bunbury City Council signed the Western Australian Local Government Association (WALGA) Climate Change Declaration to declare Council's position on climate change, high-level commitments and support for WALGA to advocate for funding and development of legislative mechanisms to support local government climate change management.
- **Climate Change Council Policy:** Bunbury City Council adopted a policy on climate change to acknowledge the projected impacts to Bunbury, make further commitment to climate change management and support WALGA's Policy Statement on Climate Change 2018.
- **Sustainability Council Policy:** Bunbury City Council adopted a policy on sustainability to provide a definition and model for sustainability; and sustainability principles to guide decision-making and prompt consideration of sustainability across all areas of the organisation.
- **Cities Power Partnership:** The City is a signatory of the Cities Power Partnership program, pledging action on climate, public transport advocacy, collaboration and investigating emission reduction initiatives.

### What we plan to do

The City aims to become a recognised leader in sustainability, demonstrated through our progress towards achieving this strategy's outcomes, targets and objectives in alignment with the SDGs.

# Governance commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- The City of Bunbury is a leader in sustainability and considers the environment, community, culture and economy in all decision-making processes.



## Objectives

1. Ensure the City's governance practices support improved sustainability outcomes.
2. Improve the sustainability outcomes of the City's procurement process and supply chain.
3. Ensure sustainability is considered for all new City projects and policies.
4. Communicate, monitor and evaluate the City's progress in sustainability performance.



## Corporate targets

- Track and report progress against all targets annually.



## Indicators of success

- Progress towards this strategy's desired outcomes, targets and objectives in alignment with the SDGs.

## The Council Policy on Sustainability includes the following sustainability principles:

1. Inter and intra-generational equity.
2. Precautionary principle.
3. Integrated and long-term decision-making.
4. Biological diversity and ecological integrity.
5. Leadership in innovation and sustainable practices.
6. Strive for a circular economy.
7. Protect and conserve water.
8. Action on climate change.
9. Environmental lifecycle costing and planning for reduced impact and quality of life.
10. Inclusion and diversity for sustainability.
11. Good governance.
12. Support the City's Strategic Community Plan Aspirations.







## Focus Area: Energy and Emissions

This focus area refers to electricity and natural gas used by the City and community to power stationary activities such as heating, lighting and appliances and the associated greenhouse gas emissions; emissions associated with the City’s projects and operations.

**Key themes from the community:**

- Council buildings powered with renewable energy, including installing rooftop solar.
- Promotion and incentives for energy efficiency and renewable energy standards for new developments.
- Support and incentives for renewable energy within the community.

### Current situation

Energy production is the largest contributor to Australia’s greenhouse emissions, contributing to 54% of national emissions<sup>10</sup>. Australia has committed to achieve net zero emissions by 2050, with an interim target of 43% emissions reduction by 2030<sup>11</sup>. In addition, the WA Government has committed to an interim emissions reduction target of 80% below 2020 levels by 2030<sup>12</sup>. Ambitious emission reduction targets are essential to keeping global warming levels at or below 1.5C and limit climate change impacts<sup>13</sup>.

Within Bunbury, electricity accounts for about 62% of total municipal emissions (2020/21), with the majority from industry (Figure 2), while gas accounts for about 5%<sup>14</sup>. In 2022, 34.3% (5,304) of all Bunbury dwellings had solar panels installed (compared to state average of 37.5% of dwellings)<sup>15</sup>.

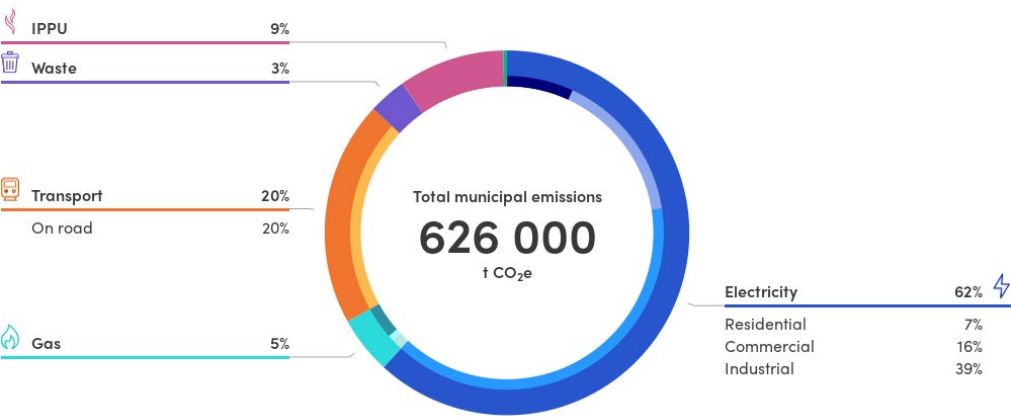


Figure 2 Snapshot Community Climate Tool: Bunbury 2020/21 municipal emissions snapshot (IPPU refers to Industrial Processes and Product Use)

The City of Bunbury's largest source of emissions is from electricity use in its buildings, accounting for 46% of its total emissions (Figure 3). Natural gas in City buildings is the second highest source of emissions, accounting for 16% of the City's total emissions (Figure 3). In total, 4,294 tonnes of CO2 equivalent were emitted from electricity and gas use through City operations in year 2020/21. This contributes to climate change, poor air quality and is costly for the City.

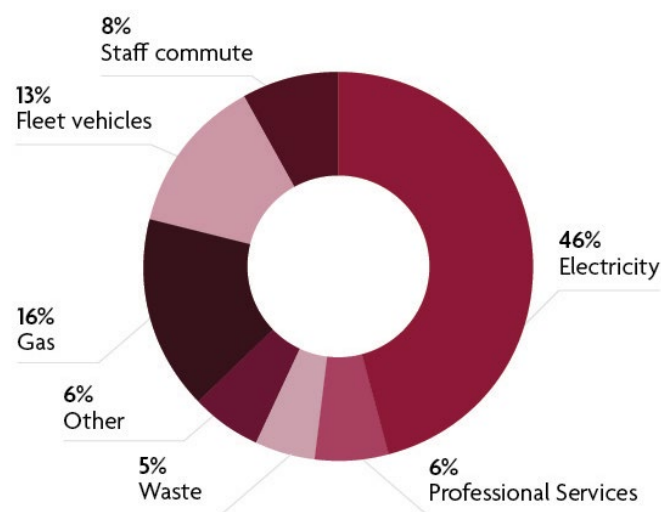


Figure 3 Operational greenhouse gas emissions for the baseline year of 2020/21

In addition, heatwaves have been intensifying and lasting longer in the South West region of WA due to the effects of climate change. This puts pressure on electricity systems due to both increased demand for electricity to power air conditioning for cooling, and because fossil-fuel power stations struggle to operate in the heat.

### Some recent achievements

- **Energy efficiency upgrades:** The City proactively reduced its energy derived from fossil fuels through energy efficiency upgrades to City-owned buildings and public lighting, as well as utilising solar photovoltaics to power our works depot.
- **Natural power purchase:** The City entered a three-year power purchasing agreement (PPA) with Synergy in 2022, as part of the Western Australian Local Government Association (WALGA) Energy Sustainability and Renewables Energy Project. The PPA involves a staged natural power purchase, replacing fossil fuel electricity in the City's 12 most energy intensive buildings with renewable energy, reaching 100% renewables by 2025. This will reduce fossil-fuel derived electricity from City operated buildings by 75%, reducing corporate emissions by about 34% by 2025 compared to 2020/21 emissions.

### What we plan to do

The City understands its potential to contribute towards reducing emissions on a local level and contribute towards a healthier and cleaner environment for the community and visitors. The City has developed corporate targets to reduce fossil fuel derived energy and natural gas used by City-owned buildings and transition to renewable energy. The City also has a role to play in encouraging and supporting the community to uptake renewable energy and reduce grid electricity use, through community education and empowerment. To ensure that new private developments meet best practice energy efficiency standards and adopt renewable energy where appropriate, the City will continue to encourage and promote best practice to further promote sustainable energy use within the community.



# Energy and emissions commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- Reduced fossil fuel derived energy used by the City and the community through increased energy efficiency and renewable energy use.
- Significant reductions in greenhouse gas emissions from energy used by the City's operations.
- The community is supported to implement energy efficiency measures and adopt renewable energy technologies.



## Objectives

1. Maximise energy efficiency of City owned lighting, buildings and operations.
2. Transition City owned buildings to renewable energy and electrification.
3. Support and promote energy efficiency within the community and local businesses.
4. Support and promote the transition to renewable energy and electrification within the community and local businesses.
5. Measure the City's corporate emissions profile and monitor progress in reducing emissions.
6. Seek opportunities to collaborate on emissions reduction and capture with key stakeholders and adjoining local governments.



## Corporate targets

- Reduce fossil fuel derived grid supplied electricity in City-owned buildings by 75% by 2025/26.
- Transition City-owned buildings to 100% renewable energy by 2035 and aspire to transition by 2030.
- Phase out natural gas in City-owned buildings by 2040 and aspire to transition by 2035.
- Meet targets outlined in a Renewable Energy and Electrification Plan, to be developed by 2025/26.
- Reduce corporate emissions (from the 2020/21 baseline) by 35% by 2025/26 and aspire for 60% reduction by 2030.
- Reach corporate net zero emissions by 2040 and aspire for 2035.



## Community targets

- Reduce fossil fuel derived grid supplied electricity use in Bunbury (from the 2020/21 baseline) by 10% by 2028.
- 40% of dwellings have small-scale PV systems installed in Bunbury by 2028.



## Indicators of success

- Percentage of energy use from fossil fuels versus renewable energy.
- Greenhouse gas emissions from energy.



## Focus Area: Sustainable Water

**This focus area refers to scheme water and groundwater used by the City and community; environmental water (rivers and wetlands) within the City's municipal boundaries, plus any associated contamination and pollution.**

### Key themes from the community:

- Improving the understanding of water management through smart metering and audits.
- Support and incentives for water efficiency measures in the community and industry.
- Implementation and promotion of water sensitive urban designs.
- Water authorities enforcing water restrictions.

### Current situation

Clean, reliable water is essential for plant, animal and human life. Bunbury, along with many other cities in Australia and around the world are experiencing challenges, such as a growing population with changing lifestyles and values, a changing climate and challenging economic development. This impacts the management of water resources and natural water systems<sup>16</sup>.

Since the 1970s, rainfall in the South West region of WA has reduced by around 20%, and according to future predictions, the drying trend will continue with winter rainfall forecasted to decrease a further 15% by 2030<sup>17</sup>. This can impact the health of bushland and wetlands, streetscapes and green public open spaces (i.e., parks, gardens, recreation areas, playing fields), which all depend on a stable water cycle to support them.

Declining rainfall also means less runoff into streams and dams and has resulted in an increased dependency on limited groundwater for human consumption. Over consumption of groundwater, along with declining rainfall to recharge the aquifers, impacts the underground aquifer system. Therefore, State Government reductions in the amount of groundwater allocated are expected within the South West region of WA over the coming years<sup>18</sup>. Efforts to increase the sustainable management of water through increased efficiency measures and use of alternative (fit-for-purpose) water sources (i.e. recycled water or harvested rainwater) to irrigate greenspaces are needed.

In 2022, the average person in Bunbury used 136kL of scheme water per year<sup>19</sup>, which is sourced from treated groundwater and a total of 3,897ML of groundwater was consumed from domestic bores.

The City's main use of water is for the irrigation of public open spaces using groundwater, consisting of 87% of total water used for City operations (Figure 4). Scheme water includes potable water used in City buildings for uses such as drinking, flushing toilets and showers. It is also used in the construction of projects and for irrigation around buildings.



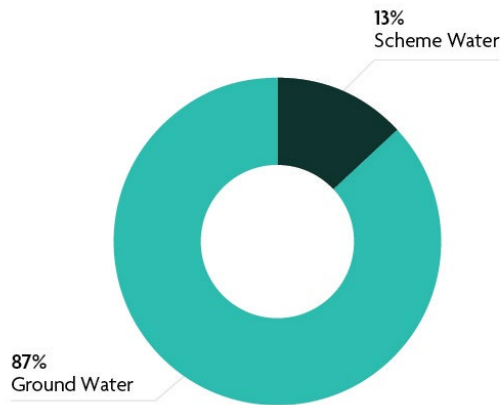


Figure 4 City of Bunbury operational water use

Some recent achievements

- **Water efficiency:** The City has been working on reducing water consumption through water efficiency upgrades to City-owned buildings and public open space.
- **Irrigation improvements:** The City’s irrigation systems are regularly audited and monitored remotely to increase groundwater savings. The City has also been improving soils in new gardens to increase soil moisture retention.

What we plan to do

Corporate targets to reduce total water usage have not been included due to a projected increase in City development, greening and public open spaces to support a growing population and community expectations for high quality services. Instead, a focus on innovative practices is needed to increase efficiency measures and utilise alternative (fit-for-purpose) water sources (i.e. recycled water or harvested rainwater).

The City is aiming to achieve the Water Corporation Waterwise Council endorsement<sup>b</sup> by 2025/26, which supports councils in improving water efficiency and adopting waterwise practices in their operations and communities. In addition, the City will benchmark itself against the Water Sensitive Cities Index as an essential step for understanding water management in Bunbury and begin mapping the path toward becoming a water sensitive city, Figure 5.

The *Kep Katitjin – Gabi Kaadadjan – Waterwise Perth Action Plan 2<sup>20</sup>* is the new waterwise plan for Perth and Peel regions. While it is not specifically for the South West region of WA, it demonstrates leadership for implementing a water sensitive approach in WA. This section aims to bring the City and the community closer to alignment with *Waterwise Perth Action Plan 2*.

Water sensitive cities minimise the use of freshwater resources through increasing efficiency and the use of alternative and recycled water sources. They enhance community connection to the local water cycle, improve the quality of stormwater and groundwater and protect the health of rivers, wetlands, estuaries and the ocean. Figure 5 shows the transition from a water supply city to a water sensitive city.

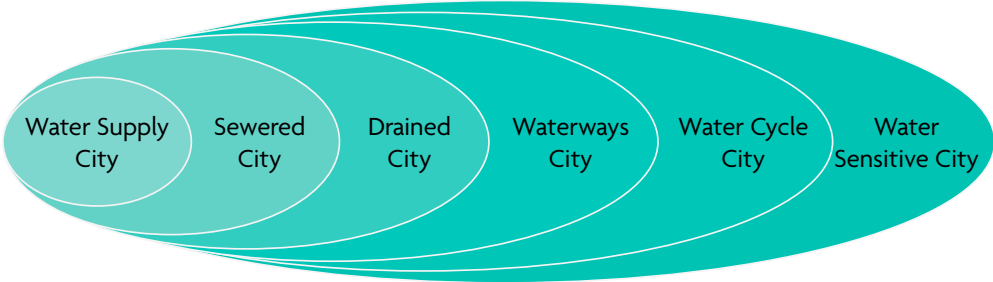


Figure 5 The City State Continuum - Water Sensitive City Transitions (Brown, Keith and Wong (2009), Wong and Brown (2009))

<sup>b</sup> Water Corporation and Department of Water and Environmental Regulation (DWER) program



# Sustainable water commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- Improved efficient use of scheme water and ground water used by the City's operations and the community.
- Increased use of alternative (fit-for-purpose) water sources.
- Increased water sensitive urban designs.



## Objectives

1. Maximise water efficiency in City owned buildings and operations.
2. Utilise alternative (fit-for-purpose) water sources for City operations and irrigation where possible.
3. Support and promote sustainable water management and efficiency within the community, local businesses and educational and health institutions.
4. Support and promote the use of alternative (fit-for-purpose) water sources within the community and local businesses.
5. Expand the City's knowledge and monitoring of water consumption, management and quality.
6. Continue to increase the amount of Water Sensitive Urban Design (WSUD) initiatives within the City.
7. Increase community education and awareness on sustainable water management.



## Corporate targets

- Meet targets identified through achieving Waterwise Council endorsement by 2025/26 and Gold Council Status by 2030.
- Meet targets as identified by completing the Water Sensitive City benchmarking assessment by 2025/26.



## Community targets

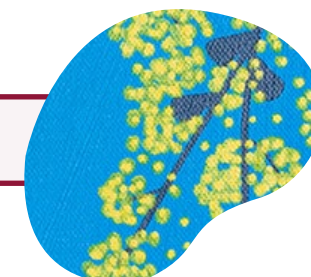
- Reduce community scheme water use in Bunbury (from 2020/21 levels) by 8% per person by 2028.
- Reduce community groundwater use in Bunbury (from the 2020/21 baseline) by 7% by 2028 and 10% by 2030.



## Indicators of success

- Percentage of scheme and groundwater use versus alternative (fit-for-purpose) water.
- Water consumption per capita or hectare.
- Waterwise Council status.
- Water Sensitive City Index score.

Mindalong - Wattle







## Focus Area: Circular Economy and Waste

This focus area refers to all material used and disposed of or discarded within the City's municipal boundaries, plus any associated contamination, pollution, and greenhouse gas emissions.

### Key themes from the community:

- Smaller general waste bins to households.
- Extend FOGO collection services to schools and more public spaces.
- Promote reuse of construction and demolition waste.
- Support and guidance for sustainable and zero waste events.
- Encourage producers on implementing buy-back schemes, using consistent recycling labels and recyclable materials.
- School waste education.
- Support for repair cafes and tool and equipment library.
- Support community clean-up events and litter prevention innovation.

### Current situation

The environment or biosphere's capacity can be measured by planetary boundaries<sup>c</sup>. When societies use natural resources faster than they can be replaced and generate waste and pollutants faster than they can be recycled or absorbed, they exceed planetary boundaries. This is occurring in many developed countries, including Australia. According to the Earth Overshoot Day calculator, if everyone on the planet lived like the average Australian in 2023, four and a half planet Earths would be needed to support the current global population per calendar year<sup>21</sup>.

To reduce the consumption of virgin natural resources and materials disposed as waste, there is a need to transition towards a circular economy. Circular economy complements the waste hierarchy concept of avoiding waste as the most preferred option, followed by recovering value from materials and disposal as the least preferred option. A circular economy refers to the system flow of materials and energy – it moves away from the linear 'take, make, use and dispose' model to one which keeps materials and energy circulating in the economy for as long as possible, presenting opportunities for increased local recycling activity<sup>22</sup> (Figure 6).

The City has a long history of being a leader in progressive waste management through introducing the three-bin system in 2013 and its leading waste education services. Waste collection services are performing well with a performance index score of 76 out of 100, 11 points above the industry average.

The City has a Waste Plan 2021-2026 that provides actions that work towards achieving waste avoidance and reduction through community education and engagement, increasing waste recovery and reducing litter and illegal dumping for the protection of the environment and human health.

<sup>c</sup> The planetary boundaries concept presents a set of nine planetary boundaries that regulate the stability and resilience of the Earth system. Crossing these boundaries increases the risk of generating large-scale abrupt or irreversible environmental changes ([Planetary boundaries - Stockholm Resilience Centre](#)).

## What is a circular economy?

The 2018 National Waste Policy defines a circular economy as a principle where the value of materials is retained in the economy for as long as possible and landfill is seen as the last resort. A circular economy has economic benefits, creating new industries, markets and products, and leading to new revenue streams and creation of jobs.



Figure 6 Circular economy model (WARR Strategy 2030)

## Some recent achievements

- 10 years of FOGO:** The City is celebrating a decade of diverting Food Organics and Garden Organics (FOGO) from landfill. The City was the first local Government in Western Australia to introduce the three-bin FOGO system in 2013, marking 10 years of turning waste into compost. Thanks to a generous grant from Waste Authority WA, the City celebrated the 10-year anniversary with a range of events, workshops and initiatives in 2023.
- Containers for Change:** The City supported the launch of Containers for Change WA. In the first year of operation, 4.3 million containers were returned and more than 50 schools, community groups and charities signed up to the Containers for Change Partnership program.
- Adopt-A-Spot program:** To reduce litter around Bunbury, the City partnered with the Keep Australia Beautiful (KABC) in support of the Adopt-a-Spot program, where Individuals, community groups, businesses or school communities can Adopt-a-Spot and volunteer to help keep the spot litter-free. There are a number of Bunbury groups and individuals involved and the City is encouraging more community members to get involved to contribute to a cleaner environment<sup>d</sup>.
- Harris Road seal reuse:** The City reused 750 cubic metres of road seal on site during an upgrade to Harris Road in Picton, which supports the City's intention to develop a sustainable, low waste circular economy as outlined in the Strategic Community Plan.

## What we plan to do

Opportunities for reducing waste are currently pursued through providing incentives for opting to a smaller general waste bin, and community education on managing the three bins and avoiding waste generation.

In addition to the City's Waste Plan 2021-2026 targets, this circular economy and waste section includes a focus on improving the City's consideration of circular economy during the planning phases for projects and our use of sustainable materials.

<sup>d</sup> Find out more here: [Waste Education Programs - City of Bunbury](#)



# Circular economy and waste commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- A sustainable low waste, circular economy.
- Reduced waste generated and increased resource recovery.
- Reduced landfill and greenhouse gas emissions from landfill.
- Reduced litter and dumping.



## Objectives

1. Avoid and reduce waste generation from the City's projects, operations, events and owned buildings.
2. Apply a sustainability and circular economy lens to the renewal, upgrade and construction of City assets and buildings.
3. Avoid and reduce community and local business waste generation.
4. Increase resource recovery and reduce contamination within waste streams.
5. Promote and encourage sustainable low waste private developments.
6. Investigate and support the development of new alternative waste technologies.
7. Encourage and support litter prevention and clean up initiatives.



## Corporate targets

- Reduce paper used by Council and Committee meetings by 100% by 2024/25.
- Reduce corporate paper used (from the 2022/23 baseline) by 75% by 2025/26.
- 100% of City operations and projects consider circular economy principles and promote sustainable outcomes by 2023.
- City operations and events are single-use plastic free in alignment with phase 1 and phase 2 of WA Plan for Plastics<sup>e</sup>.



## Community targets

- Aspire to align with WA's Waste Strategy 2030 targets.
- Reduce overall number of littering complaints (from the 2020/21 baseline) by 15% by 2028.



## Indicators of success

- Diversion of waste from landfill versus recycled or composted.
- Greenhouse gas emissions from landfill.

<sup>e</sup> [Western Australia's Plan for Plastics | Western Australian Government \(www.wa.gov.au\)](https://www.wa.gov.au/government/publications/western-australias-plan-for-plastics)



## Focus Area: Sustainable Transport and Urban Infrastructure

This focus area refers to low and zero emission modes of transport such as active transport, public transport and electric vehicles (EVs) used by the City and community, plus any associated greenhouse gas emissions; urban infrastructure to facilitate sustainable transport within the City's municipal boundaries.

### Key themes from the community:

- A pedestrian-friendly City.
- Interconnected cycle paths between suburbs.
- Electric vehicle charging stations.
- Public transport improvements within Bunbury and connecting Bunbury to Perth.
- Community education on road safety, including the use of dual-use paths.

### Current situation

The transport sector is the second largest contributor to Australia's greenhouse emissions after energy generation, contributing to 18% of national emissions<sup>23</sup>. Cars and other light vehicles make up more than half of transport emissions – equal to around 10% of Australia's total emissions<sup>24</sup>. Achieving emission reduction targets requires a transition from fuel cars to people walking, bike-riding, rolling (for people using wheelchairs), zero-emissions public transport and zero emission vehicles, such as electric vehicles (EVs) and hydrogen vehicles.

EVs are an important part of sustainable transport, however emission reduction targets can't be achieved with zero emission vehicles alone. Organisations such as the Climate Council are advocating for 'people-centred transport' where people can get around safely and conveniently on foot or wheels<sup>25</sup> (Figure 7). Active transport also greatly contributes to good health and wellbeing. In fact, research shows that cycling is the happiest mode of transport<sup>26</sup>.

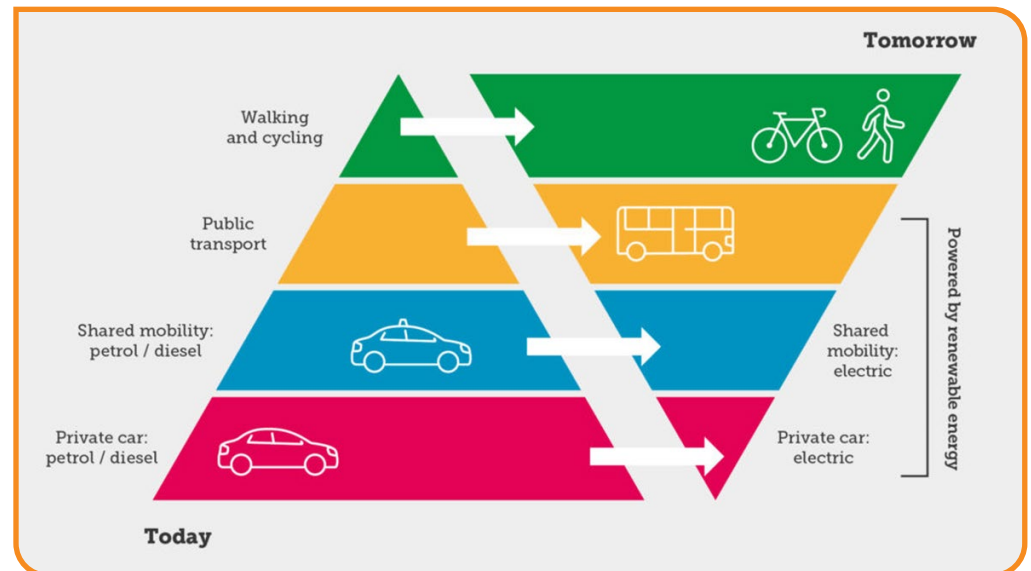


Figure 7 Sustainable transport modes (Climate Council)



Sustainable transport is one of Bunbury’s biggest challenges. Bunbury has an average walk score of 30<sup>27</sup>, which means most trips require a car to get around. Additionally, as a regional city, commuters come from far and wide. Only 2.7% of commuters use public transport, and 4% either cycle or walk<sup>28</sup> (Figure 8). Even with improved public transport and cycling infrastructure, reliability on private passenger vehicles will remain high<sup>29</sup>. This contributes to poor air quality from tailpipe emissions, and to a more sedentary and unhealthier lifestyle.

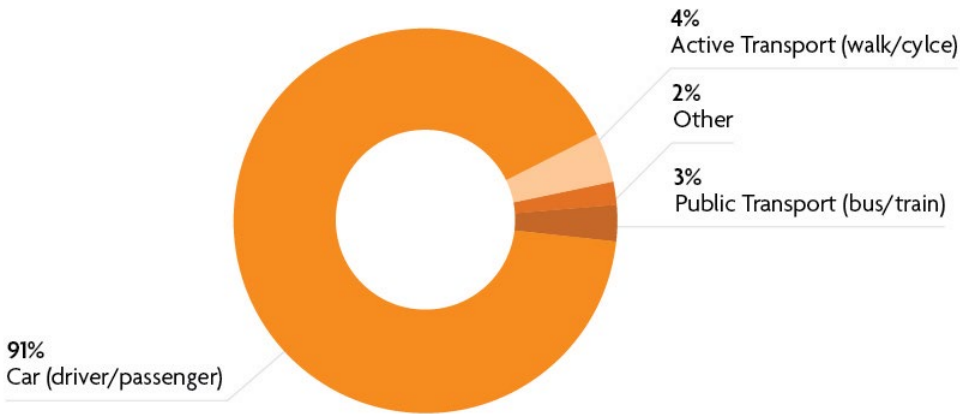


Figure 8 Transport modes used by commuters in Bunbury (ABS 2021 Census data)

Some recent achievements

- **Planning for the future:** The City of Bunbury’s Local Planning Framework<sup>30</sup> and other City plans such as the City Centre Action Plan 2020<sup>31</sup> provide direction on improving sustainable public transport systems and infrastructure within Bunbury.

- **Bicycle friendly Bunbury:** The City completed the South-Western Highway shared path, new cycle lanes on Washington Avenue and upgrades to Estuary and Koombana Drives’ cycleways and Ocean Drive.
- **Electric fleet vehicle:** The City added its first 100% electric vehicle to its fleet in 2022, which quickly became the preferred vehicle of choice as a pool car among City staff. The City added two more electric vehicles to its fleet in 2023 to reduce its corporate transport emissions.

What we plan to do

This section relates to infrastructure at City-owned buildings, City operational fleet and encouraging City staff and the community to commute via active transport where possible.

A transition to a low and zero emission vehicle fleet is required to reduce the City’s corporate emissions. Further forward planning is required for transitioning the City’s fleet to low and zero emission vehicles, along with planning for installation of electric vehicle charging stations at City buildings. Emissions from City staff commute to work are calculated in the City’s corporate carbon footprint (Figure 4); therefore, this section includes targets to reduce emissions from staff commute through encouraging car-pooling, active transport and uptake of zero emission vehicles.

Community members would like improved train services between Bunbury and Perth, as well as more frequent and reliable bus routes. See the City’s Corporate Business Plan which outlines the City’s actions for achieving a City that is easy to get around safely and sustainably Corporate Business Plan<sup>32</sup>.



## Sustainable transport and urban infrastructure commitments

This section will improve the City's performance in SDGs:



### Desired outcomes

- Increased use of active and public transport systems.
- Increased use of renewable energy powered vehicles.
- Increased access to electric vehicle charging stations.



### Objectives

1. Transition to a low and zero emission vehicle fleet.
2. Drive and support the development of electric vehicle fast charging infrastructure in Bunbury.
3. Promote and facilitate active lifestyles and public transport use within Bunbury.



### Corporate targets

- Transition to zero emissions passenger vehicle fleet by 2035 and low and zero emissions fleet by 2040.
- Meet targets outlined in a Fleet Electrification Plan, to be developed by 2025/26.
- One or more charging stations are installed at City-owned buildings by 2025.
- 10% of City employees commute to work actively or via public transport by 2028.



### Community targets

- 0.7% electric vehicles ownership by 2028 and 1% by 2030.
- 2% of Bunbury residents commute via cycling, 4% walking and 4% public transport by 2028.



### Indicators of success

- Staff and community using public and active transportation.
- Adoption of low and zero emission vehicles.

Yandjet - Water Bullrushes







## Focus Area: Greening and Biodiversity

This focus area refers to biodiversity, vegetation, and green spaces within the City's municipal boundaries, plus any associated contamination and pollution.

### Key themes from the community:

- Link green corridors and enhance greenspaces.
- Introduce policies to protect and expand greening and biodiversity on private land.
- Promote the use of native species and increase awareness of weeds and invasive species.
- Map and monitor significant trees and canopy cover.
- Increase domestic cat regulations.
- Work with local community nurseries.
- Increase fauna habitat and food sources.
- Improve soil quality.
- Support sustainable and community agriculture.

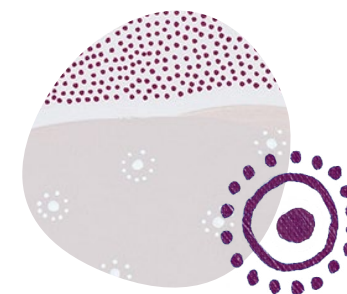
### Current situation


Bunbury boasts a rich ecosystem and biodiversity. The City is situated alongside the Leschenault Estuary and Inlet, multiple rivers, wetlands and over 924 ha of conservation reserves (City managed and Kalgulup Regional Park), which provide vital habitat for local wildlife and attracts many visitors.

Prior to colonisation, Bunbury was covered with coastal dunes, forest and woodlands of tuart, marri, jarrah, flooded gum and banksias, as well as low-lying wetlands of melaleucas and other species. With colonisation, land was cleared for agricultural use and native vegetation has become fragmented, with only 24% of native vegetation remaining and an average canopy cover level of 13.7%<sup>f</sup> across the City<sup>33</sup>. Currently, Bunbury has a lower canopy cover than many WA Local Government Areas (LGAs) and is below a measured median of approximately 20% across Perth LGAs. This low canopy level is a result of various factors, but is especially related to human activity in urbanisation, and industry<sup>33</sup>. Introduced species have also become problematic, competing with native species, and threatening the health of both native fauna and flora.

The City is responsible for the management of 41 bushland reserves (193 ha) and has several active community-based *Friends of* groups that aim to support and improve about 45 hectares of the City's natural bushland reserves. These dedicated groups are made up of volunteers from the community who work together to undertake various projects and initiatives, such as planting trees, cleaning up litter, and organising events and activities that promote community engagement and environmental education. *Friends of* groups play an important role in improving the local environment, fostering community engagement, and promoting sustainable living practices.

<sup>f</sup> All vegetation over 3m in height.





Urban vegetation and trees provide significant economic, social, health, visual and aesthetic benefits, through the provision of ecosystem services including air and water filtration, shade, habitat, oxygen production, temperature regulation, carbon sequestration and nutrient cycling.<sup>31</sup>

### Some recent achievements

- **Greening Bunbury:** The City developed a Greening Plan to help guide the City's greening policies and activities, to guide the protection of existing urban forest, and expand and improve them to ensure they remain resilient and sufficient to provide the benefits necessary for a liveable and sustainable city into the future<sup>33</sup>. The City's Greening Plan was released in November 2021 and sets targets for increasing the City's urban canopy cover on public land by 10% over the next 20 years, with an aspirational target of 20%. The City aims to achieve these targets through active planting programs within both public open spaces and natural bushland reserves.
- **Tree planting:** The City planted around 3,500 trees between 2018 and 2022 across the City of Bunbury.
- **Revegetation:** During the 2022 planting season, about 2000 seedlings were planted across natural bushland reserves through a combination of community public planting days, revegetation works completed by *Friends of* groups and through the City's natural areas management contract.
- **Habitat Bunbury:** The Habitat Bunbury program assists education institutes, community groups and not-for profit organisations to develop and implement environmental projects to address local needs.
- **Capping Big Swamp mound:** The City capped the contaminated site of Big Swamp mound (about 1 hectare) with mulch and is working to revegetate the area with native species.

### What we plan to do

The City will continue working towards the Greening Plan's targets of increasing canopy cover in Bunbury by 10%, however achieving the aspirational target of a 20% increase in canopy cover by 2040 will require encouraging residents, businesses, and industry to maintain and increase canopy cover on private land<sup>33</sup>. As in-fill development continues across the City, increasing urban canopy will be an ongoing challenge and requires the cooperation of the whole community. Without action to encourage greening on private land, Bunbury has a projected canopy loss of 3.38 hectares by the year 2031<sup>33</sup>.

The City is committed to undertaking revegetation works within natural bushland reserves every year and aims to continue improving planting techniques to increase plant success rates.

A number of implementation plans have already been developed to support the City to achieve a healthier and greener urban landscape, including the Parks and Playgrounds Action Plan and the Weed Management Plan. This section aims to improve the management and protection of biodiversity and wildlife in the City, as well as to improve the amenity of public open spaces.

The promotion and encouragement of private landowners to preserve and increase green spaces on their lands helps to:

- Develop greener and cooler urban landscapes.
- Prevent decrease in ecosystem function.
- Avoid high costs and resources associated with planting and maintaining new vegetation to offset the loss of established trees.



# Greening and biodiversity commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- A natural environment that is cared for, preserved and enhanced.
- Increased tree canopy on public and private land.
- Improved biodiversity rehabilitation and protection.
- Improved public open space and park amenity.
- Biosecurity threats are minimised, identified and managed.



## Objectives

1. Improve our understanding, management and monitoring of natural areas, public open space and urban canopy.
2. Protect, promote and facilitate the enhancement of Bunbury's urban forest and biodiversity.
3. Identify and prioritise locally significant natural areas to achieve the *greening and biodiversity* desired outcomes and targets.
4. Apply a framework that promotes sustainability outcomes for the City's landscaping projects and natural area management.
5. Increase community education and awareness on the protection and enhancement of natural areas and systems.
6. Support and partner with key stakeholders, including Traditional Owners, Knowledge Holders and Elders, to improve the protection and rehabilitation of natural areas, marine ecosystems and local wildlife.



## Corporate targets

- Increase urban canopy cover (from the 2020 baseline) by 5% by 2028, 10% by 2040 and aspire to increase by 20% by 2040.
- Meet and align with targets as outlined in the Weed Management Plan
- Meet targets outlined in a Natural Area Strategic Plan, to be developed by 2025/26.
- Meet targets outlined in a Public Open Space Strategic Plan, to be developed by 2025/26.



## Community targets

- Reduce rate of canopy loss on private land by 2025 and increase canopy cover on private land (from the 2020 baseline) by 2% by 2030 and 5% by 2040.



## Indicators of success

- Percentage of Tree canopy and vegetation cover.
- Biodiversity mapping and monitoring data.
- Community satisfaction with public opens space, park amenity and natural areas.



## Focus Area: Climate Resilience

This focus area refers to identification of climate-related risks and vulnerability and strengthening the capacity of the City and the community to mitigate and adapt to a changing climate.

### Key themes from the community:

- Improve sustainable building design principles in Council buildings and public facilities.
- Coastal erosion.
- Collaborate with Traditional Owners, Knowledge Holders and Elders on fire mitigation.
- Support the local bushfire brigade.
- Prioritise climate change in Council policy development.
- Support the community to improve the sustainability of housing.

### Current situation

Western Australians are already experiencing the impacts of climate change<sup>34</sup>, with projected increase in incidences of heatwaves, drought, flooding, erosion, sea level rises and bushfire weather<sup>35</sup>. See the West Australian State Government's projections for Perth's future climate in Figure 9.

Rising sea levels, storm events and coastal development have already resulted in more noticeable changes to coastline, including storm erosion, coastal flooding and long-term shoreline recession. This is a particular concern for the Capel to Leschenault coastal region, as it is relatively low lying, includes a number of waterways and is subject to ocean forces<sup>36</sup>. The City is a member of the Peron Naturaliste Partnership (PNP), which is an incorporated collective group of nine local governments between Cape Peron and Cape Naturaliste in the South West region of WA – Bunbury, Busselton, Capel, Dardanup, Harvey, Mandurah, Murray, Rockingham, Waroona. The PNP was formed in 2011 through a volunteer agreement but recognising the long-term benefits of the partnership and the importance of dealing with coastal matters, the PNP became an incorporated group in 2015. The vision of the PNP is to empower a resilient regional community to reduce risks and optimise opportunities presented by climate change.

### Perth's future climate

Confidence	Events
Very High	Average temperatures will continue to increase in all seasons Higher sea levels and more frequent sea level extremes
High	Hotter and more frequent hot days Less frost Less rainfall in winter and spring; changes in other seasons are unclear Increased evapotranspiration, reduced soil moisture and runoff Harsher fire weather climate
Medium	More intense extreme rainfall events

Figure 9 Western Australian Climate Projections Summary 2022







Some recent achievements

- **Coastal Hazard Risk Management and Adaptation Plan:** The Peron Naturaliste Partnership (PNP) and member local governments, including the City of Bunbury and Shires of Capel, Dardanup and Harvey have partnered with the Department of Biodiversity, Conservation and Attractions, the Department of Water and Environmental Regulation and the Southern Ports Authority to develop a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) to understand how these changes can be best managed into the future. The CHRMAP is expected to be completed in 2023 and will help inform the City’s future coastal adaptation planning.

What we plan to do

Despite global efforts to reduce emissions to date, the impacts of climate change will intensify<sup>34</sup>. This section focuses on increasing our understanding of specific local climate change impacts, reducing the City’s exposure to climate risk and increasing our capacity to adapt. The City plans to utilise the Western Australian Local Government Association’s (WALGA) Climate Change Action Framework<sup>37</sup>, which provides climate risk assessment and adaptation planning tools for local government authorities.

Climate resilience commitments

This section will improve the City’s performance in SDGs:



Desired outcomes

- An aware and resilient community equipped to respond to natural disasters and emergencies.



Objectives

1. Improve our understanding of climate change risks and impacts to the City’s services, operations, owned buildings, the community, and local businesses.
2. Increase the resilience of the City’s services, operations and owned buildings to climate change impacts.
3. Increase the resilience of our natural areas and coastline to the impacts of climate change.
4. Increase awareness and communication of climate change risks and impacts to the community and local businesses.



5. Increase the resilience of the community and local businesses to prepare, respond and recover from the impacts of climate change.
6. Seek opportunities to collaborate with key stakeholders, including Traditional Owners, Knowledge Holders and Elders, adjoining local governments and Federal and State government on climate adaptation.

Corporate targets

- Meet targets outlined in a corporate Climate Change Adaptation Plan, to be developed by 2025/26.



Indicators of success

- Implementation and effectiveness of adaptation measures outlined within the corporate Climate Change Adaptation Plan.



## Focus Area: Community, Culture and Wellbeing

This focus area refers to environmental outcomes for improved health, happiness, culture, wellbeing, and satisfaction.

### Key themes from the community:

- Collaborate with Traditional Owners, Knowledge Holders and Elders on sustainability and caring for country.
- Inspire and encourage collective action and sustainable living.
- Celebrate sustainability.



### Current situation

Culture and wellbeing are an important pillar of sustainability and actions such as greening the City, enhancing walkability and connectivity, designing better buildings and public open spaces are significant contributors to the community's health, culture, happiness and wellbeing.

The community's satisfaction with our performance and services are important indicators of how we are doing and what areas we need to work on. The Community Scorecard Performance Index Score on the objectives under the core performance area of *Planet* are averaging okay at 60.5 out of 100, with efforts to promote and adopt sustainable practices to combat climate change at 51 out of 100, 1 point below the industry average<sup>38</sup>.

### Some recent achievements

- **Planning for the future:** The City has existing plans that aim to increase the health and wellbeing of the community, such as the Community Health and Wellness Plan 2021 – 2026<sup>39</sup> and the Disability Access and Inclusion Plan 2023 – 2028<sup>40</sup>. New plans are in development to further improve community, culture and wellbeing in Bunbury, such as a Reconciliation Action Plan, a Cultural Heritage Plan, a Community Safety Plan and a Sport and Recreation Plan.

### What we plan to do

This section looks at how the environment relates to the community, culture and wellbeing and includes targets for improving the community satisfaction with the City's sustainability efforts. It includes measures of inclusivity and equitability tracked against the Index of Relative Socio-economic Disadvantage (IRSD) as it is important to acknowledge that access to sustainable lifestyle choices can be linked to social and economic wellbeing. The IRSD is derived from the Australian Bureau of Statistics (ABS) census, providing social and economic wellbeing of households within an area.

This section also looks at promoting a sense of shared responsibility for sustainability, which will include the establishment of the Bunbury Environmental Sustainability Advisory Committee to Council and engagement initiatives within the community.

# Community, culture and wellbeing commitments

This section will improve the City's performance in SDGs:



## Desired outcomes

- Improved employee and community satisfaction and engagement in sustainability initiatives.
- Higher quality of life.
- More inclusive and equitable communities.



## Objectives

1. Increase community satisfaction with the City's efforts to transition to a sustainable city.
2. Improve community resilience and liveability through increasing sustainable designs and greenery.
3. Increase equitable education and showcasing of sustainability initiatives and innovation within the City.
4. Empower the community to take a shared leadership approach to sustainability challenges and opportunities.



## Corporate targets

- Increase the Community Scorecard Performance Index Score on the objectives under the core performance area of *Planet* to above 70 by 2027.
- Achieve an Index of Relative Socio-economic Disadvantage (IRSD) score of at least 993 by 2028 (Southwest average score).



## Indicators of success

- Community Scorecard Performance Index Score.
- Index of Relative Socio-economic Disadvantage (IRSD) score.



Yonga Maar - Kangaroo Paw



## Closing

To achieve the Sustainability and Environmental Strategy's desired outcomes, targets and objectives, the City intends to lead by example in its operations and work collaboratively with the community and other key stakeholders.

A Sustainability and Environmental Action Plan (action plan) will be developed to address the strategy's commitments. The development of the action plan will involve collaborative engagement and participation from staff across the organisation and the community.

To support the delivery of this strategy, the action plan will include:

- Actions.
- Responsibilities.
- Estimated cost of implementation.
- Timeframes.

The action plan will be used to inform the City's Corporate Business Plan, Long Term Financial Plan and Annual Budgets for the period 2023-2028.

It is intended that the action plan is flexible and is reviewed annually to ensure it reflects the changing environment of the City, the broader region, emerging technologies and the latest climate science.

## Reporting on progress

This strategy will be reviewed and updated in 2026 and in 2028. The progress and performance of this strategy will be monitored annually and reported to Council at the end of each financial year. The community will be updated on the delivery of actions and progress toward targets through the City's Annual Report and community engagement initiatives.

### How to get involved

Want to help build a better, brighter Bunbury?

Please reach out to your Elected Member or the responsible officer at the City of Bunbury to share your thoughts and ideas.

**In person:** 4 Stephen Street, Bunbury, WA, 6230

**Phone:** 08 9792 7000

**Email:** [mayor@bunbury.wa.gov.au](mailto:mayor@bunbury.wa.gov.au)

[info@bunbury.wa.gov.au](mailto:info@bunbury.wa.gov.au)

**Web:** [www.bunbury.wa.gov.au](http://www.bunbury.wa.gov.au)

[City of Bunbury | Sustainability and Environmental Strategy](#)

**Socials:**



# References

- 1 [Transforming our world: the 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs \(un.org\)](#)
- 2 [Kaartdijin Noongar \(noongarculture.org.au\)](#)
- 3 [Goals Archive - The Global Goals](#)
- 4 [The SDGs wedding cake - Stockholm Resilience Centre](#)
- 5 [Western\\_Australian\\_Climate\\_Policy.pdf \(www.wa.gov.au\)](#)
- 6 [Shaping Western Australia's low-carbon future.pdf \(www.wa.gov.au\)](#)
- 7 [climate\\_adaption\\_strategy\\_220623.pdf \(www.wa.gov.au\)](#)
- 8 [Supporting Continuous Improvement in ESG Outcomes for Western Australia \(www.wa.gov.au\)](#)
- 9 [Council Privacy Policy \(bunbury.wa.gov.au\)](#)
- 10 [National Greenhouse Gas Inventory Quarterly Update: December 2021 - DCCEEW](#)
- 11 [Australia joins international Net Zero Government Initiative - DCCEEW](#)
- 12 [Government Emissions Interim Target | Western Australian Government \(www.wa.gov.au\)](#)
- 13 [Global Warming of 1.5 °C — \(ipcc.ch\)](#)
- 14 [Bunbury, WA :: Snapshot \(snapshotclimate.com.au\)](#)
- 15 [Australian PV Institute \(APVI\). \(2022, November 09\). Mapping Australian Photovoltaic installations. Retrieved from Australian PV Institute](#)
- 16 [What is a water sensitive city? - CRC for Water sensitive cities](#)
- 17 [Western\\_Australian\\_Climate\\_Projections\\_Summary.pdf \(www.wa.gov.au\)](#)
- 18 [Water Corporation, Western Australia |Southern WA & climate change](#)
- 19 [Aqwest 2022](#)
- 20 [KEP-Katitjin-plan-21102022.pdf \(www.wa.gov.au\)](#)
- 21 [How many Earths? How many countries? - Earth Overshoot Day](#)
- 22 [Strategic\\_Direction\\_Waste\\_Avoidance\\_and\\_Resource\\_Recovery\\_Strategy\\_2030.pdf \(wasteauthority.wa.gov.au\)](#)
- 23 [National Greenhouse Gas Inventory Quarterly Update: December 2021 - DCCEEW](#)
- 24 [Environment and sustainability \(pta.wa.gov.au\)](#)
- 25 [The Climate Council is campaigning for clean, sustainable transport - here's why | Climate Council](#)
- 26 [The happiest mode of transportation? That would be cycling. | University of Minnesota \(umn.edu\)](#)
- 27 [Bunbury - Walk Score](#)
- 28 [Australian Bureau of Statistics \(ABS\). \(2021\). 2021 Census employment, income and education. Method of travel to work.](#)
- 29 [Josh Byrne and Associates \(2022\). City of Bunbury Sustainability and Environmental Strategy Recommendations.](#)
- 30 [Local Planning Framework](#)
- 31 [City Centre Action Plan 2020](#)
- 32 [Corporate Business Plan](#)
- 33 [City of Bunbury. \(2021\). Greening Plan.](#)
- 34 [climate\\_adaption\\_strategy\\_220623.pdf \(www.wa.gov.au\)](#)
- 35 [Western\\_Australian\\_Climate\\_Projections\\_Summary.pdf \(www.wa.gov.au\)](#)
- 36 [Capel to Leschenault Coastal Hazard Adaptation Planning | Peron Naturaliste](#)
- 37 [Climate Change Templates and Tools | WALGA | WALGA](#)
- 38 [Catalyse. \(2021\). MARKYT Community Scorecard](#)
- 39 [City of Bunbury | Community Health and Wellness Plan](#)
- 40 [City of Bunbury | City's new Disability Access and Inclusion Plan 2023 – 2028](#)











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