



Colac Otway
SHIRE

Environmental Sustainability Strategy

2023-2033



Acknowledgement

The Colac Otway Shire proudly acknowledges the Gulidjan and Gadubanud peoples as the traditional custodians of the Colac Otway Region.

We acknowledge that the Colac Otway Shire is located and conducts business upon lands of the Gulidjan and Gadubanud people.

We pay our respects to their Ancestors and Elders, past, present and emerging.

We recognise and respect their unique cultural heritage, beliefs and relationship to their traditional lands, which continue to be important to them today and into the future.



Mayor's Message

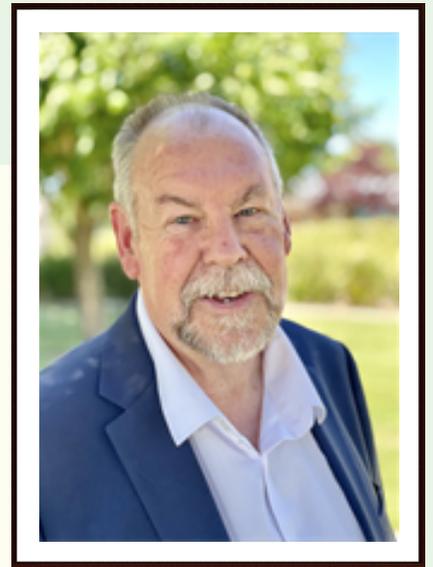
As Mayor of Colac Otway Shire, I am delighted to be part of delivering the Environmental Sustainability Strategy 2023-2033. This strategy outlines the ambitious environmental objectives that Council will strive to achieve over the next decade. It will guide our work as we contribute to the necessary efforts to address the environmental and sustainability challenges most prevalent at this time.

Colac Otway is a large and vibrant shire with invaluable natural assets, home to many thriving communities, which have long placed a high value on the environment, consistently identifying climate change and the environment as leading issues of concern. The Otway forests, wildlife, rivers, volcanic plains and abundant grasslands form part of who we are.

By continuing to implement improved environmental stewardship and sustainable management practices we recognise our environment as intrinsically valuable, as well as essential to our wellbeing.

Council has an impressive history of environmental work, particularly given its large geographic area and small rate base, including its strong support for the development of projects to enhance the environmental welfare of our shire, including: solar panel installations on all major Council facilities; biodiversity and species protection; supporting community uptake of solar; working towards integrated water management and improving water solutions for unserved areas; stewardship for our communities; and ongoing reduction of carbon emissions.

Colac Otway Shire Council is delivering this strategy and associated Climate Change Action Plan in order to continue our leadership and strong advocacy in this space. Council greatly looks forward to working with communities across the shire to achieve success through the framework of this plan. I hope you will join us as we work towards our goals.



Executive Summary

Colac Otway Shire's Environmental Sustainability Strategy 2023-2033 will guide Council's environmental management over the next 10 years and provides a framework for Council to maintain a thriving, sustainable municipality, with healthy natural environments and communities.

The Strategy builds on the achievements of the Colac Otway Shire Environment Strategy 2010-2018, and is strongly aligned to the Colac Otway 2050 Community Vision, the Council Plan 2021-25, and Council's Environmental Sustainability Policy and Framework 2021. It also reflects extensive feedback from our community and stakeholders received throughout the strategy development engagement activities.

The Strategy has a clear vision, underpinned by the six themes of Council's Environmental Sustainability Framework 2021 and forms the long-term strategic policy position on environmental management and sustainability for Council. The findings of the community and stakeholder engagement that preceded the drafting of this strategy were at the core of its development and defined its structure, focus and emphasis. Engagement discussions centred around the following areas of concern: climate change; natural environment; built environment; water; waste and pollution; and partnership, leadership and advocacy.

Six key goals have been formulated to capture the breadth of environmental sustainability responsibilities and aspirations of Council for the next ten years. The goals are:

- Goal 1** Protected and thriving natural landscapes, ecosystems and habitats
- Goal 2** Environmentally sustainable and climate resilient public infrastructure, open spaces and urban settlements
- Goal 3** An adaptive and resilient Council and Shire moving towards a zero-emission future and limiting the impacts of climate change
- Goal 4** Green and sustainable local economies, industries and growth that protect intrinsic environmental values
- Goal 5** Enhanced environmental stewardship through environmental awareness raising and education
- Goal 6** Strong and inclusive environmental leadership, collaboration and advocacy



The strategy outlines each goal, followed by multiple objectives that will assist Council in delivering on its aims in a targeted and strategic fashion. Because local government is responsible for a vast range of infrastructure and land management, including parks, reserves, leisure centres, libraries, roads and bridges, sustainable management of Council resources is highly complex. In order to maximise efficacy of the strategy, Council has focused on areas directly within the control of the organisation, and matters it can effectively influence. Issues of major concern to the community over which Council has limited influence will continue to be acknowledged and addressed through targeted advocacy.

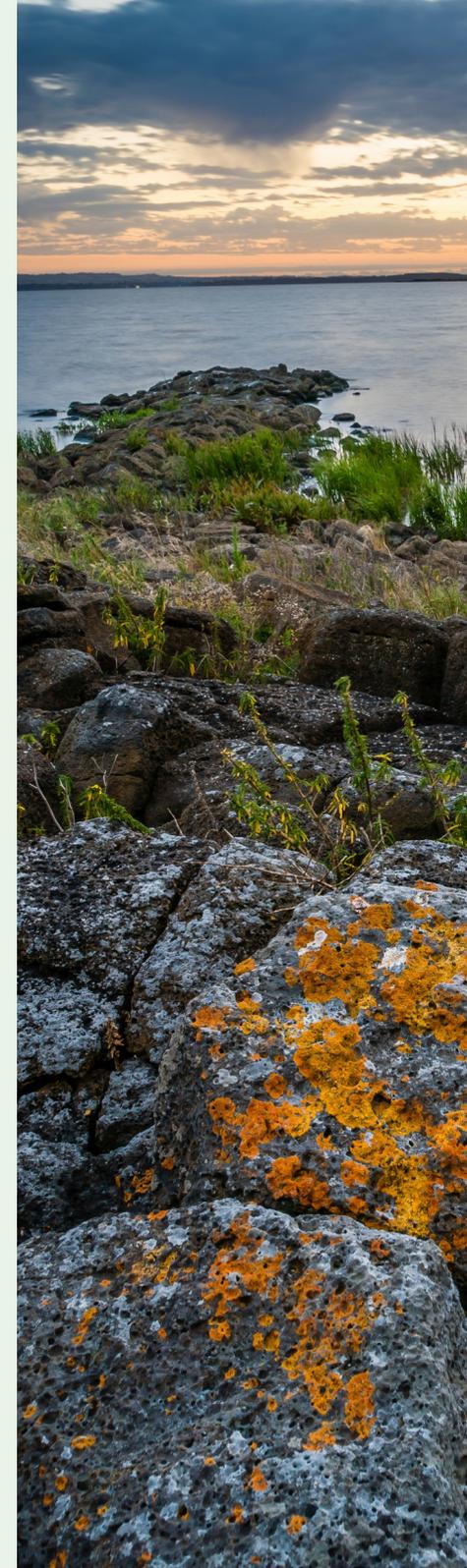
The strategy also sets key environmental sustainability targets that Council aims to achieve and maintain during the course of this strategy. These are: the use of 100 per cent renewable electricity; reduction in consumption and minimisation of waste sent to landfill; decreased reliance on potable water; increased uptake of sustainable technologies; and continuous improvement as responsible and adaptive land managers.

We hope that through the ten year implementation timeframe we will be able to raise greater awareness of, and concern about, the environment and its associated threats and challenges, as well as the sustainability opportunities we can all benefit from. We also aim to foster knowledge, skills, commitment and empowerment to work individually and collectively towards environmental and sustainability solutions to achieve a healthier and climate-safe future.



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1. Vision



Colac Otway
SHIRE

Colac Otway Shire is a place of thriving, resilient, diverse and connected natural landscapes and ecosystems, where the environment and green spaces are intrinsically valued.

Our community has a deep connection to nature and places and is inspired to actively care for, protect and enhance both the natural and the built environments.

As an active, environmentally aware and inclusive community, we live and work sustainably and consider climate change in our daily activities and decisions to create a climate-safe Shire now and for future generations.

2. Introduction

Council acknowledges its communities are facing a global climate change and biodiversity crisis, one that requires urgent action by all levels of government, including local councils.

Colac Otway Shire (the Shire) is regarded as one of the most environmentally diverse municipalities in Victoria. It comprises spectacular coastal areas, lush rain forested hinterlands and vast open plains with rare native grasslands.

The Shire is fortunate to have a very unique and precious natural environment that provides the basis for a healthy and thriving community.

The climatic conditions, the soils, the vegetation, the internationally recognised waterways and Great Ocean Road coastline all make our Shire a place where people want to live, work and visit.

Our environment is not only the physical and biological surroundings in which plants, animals and people live and interact, it also encompasses the conditions in which people live and work and the way those conditions influence people's health and wellbeing. It includes the natural environment, the built environment we create, and how we live and work in such environments.

Environmental sustainability describes the process where our patterns of living meet the needs of the present generations

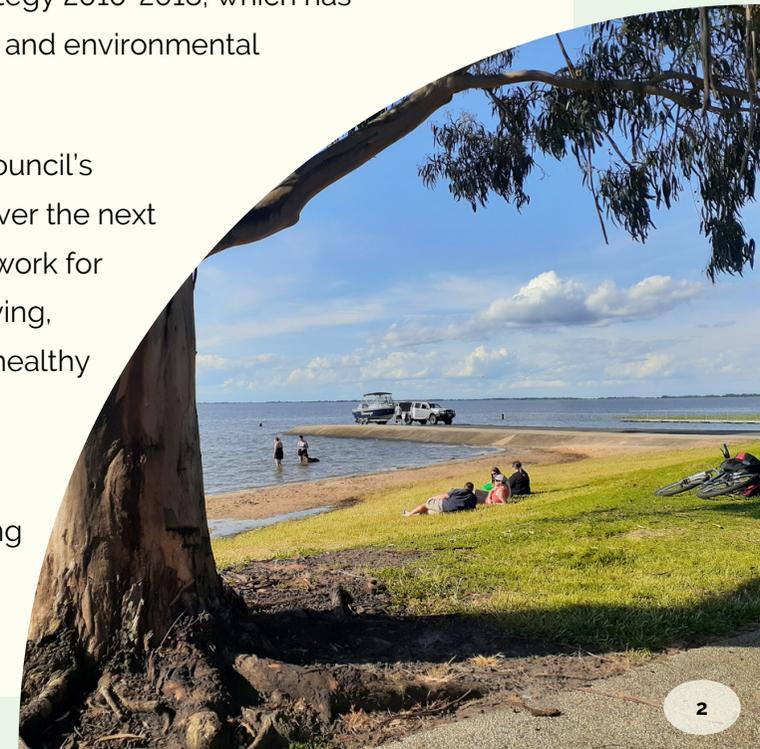
without compromising the ability to meet the needs of future generations.

Environmental sustainability needs to be highly proactive to minimise the negative impacts of how we live, work, play and travel, as well as to maintain a balance between environmental protection, economic prosperity, social justice and cultural inclusion.

Colac Otway Shire's Environmental Sustainability Strategy 2023-2033 replaces the Environment Strategy 2010-2018, which has shaped Council's conservation and environmental activities up to this time.

This new strategy will guide Council's environmental management over the next 10 years and provides a framework for Council to work towards a thriving, sustainable municipality, with healthy natural environments and communities.

Council is committed to working with the community to create a vibrant, sustainable future.



Achieving this vision relies heavily on protecting, enhancing and where possible restoring environmental values.

All areas of Council have responsibility for environmental management and sustainability.

Environmental considerations need to be embedded in all aspects of Council governance.

The Colac Otway Shire Environmental Sustainability Strategy 2023-2033 provides long-term strategic direction to shape the municipality and broader region by connecting the community to our environment, supporting environmentally sustainable development and economies, protecting and enhancing thriving ecosystems and providing well-designed built environments that support health and wellbeing of people as well as the environment that surrounds them.

The Strategy also identifies that through good leadership, governance, and strong partnerships Council can provide and support the transformational change required to maintain a healthy environment and liveable region.

Council hopes to take great strides towards achieving both the vision of this strategy and the Colac Otway 2050 Community Vision through direct action, advocacy and working in partnerships with our community, industry and other agencies.



3. Our Shire

3.1 Who we are

Located in Victoria's south west, the Shire is diverse, with volcanic lakes, craters and plains in the north; the hinterland forests of the Otway Ranges; and the spectacular Great Ocean Road coastline in the south. The Shire encompasses a total land area of 3,400 square kilometres of which a large proportion is National Park. The Shire has two main townships, with many small villages and localities.

Colac is the main residential, industrial and commercial service centre for the Shire and surrounding region with a population of 12,800 people. Colac is situated on the southern shoreline of Lake Colac, on the Princes Highway, 138 kilometres south west of Melbourne. Lake Colac is a significant natural feature in Colac, and is an important environmental, cultural heritage, aesthetic and recreational feature for the community and city.

Apollo Bay is our major tourism centre, along with the neighbouring hamlets of Marengo and Skenes Creek, with a permanent population of 2,400 that swells to over 20,000 people during the summer season. It is an iconic part of the heritage listed Great Ocean Road and a gateway to the spectacular natural attractions of the coastline and Otways hinterland. The current Shire population is approximately 22,400 people.

Much of the Shire's rural area is used for agriculture, with farming, cropping and dairying being the main agricultural pursuits. Agricultural activity is concentrated in the northern part of the Shire, although

timber and fishing are prevalent in the south. The Shire has a diverse range of other employment industries including: health care, social services, manufacturing, public administration, retail and tourism.

3.2 Environmental characteristics and values

Colac Otway Shire contains some of the most significant environmental assets in Australia, including 54 different native vegetation types and an extensive network of water bodies, some of which are Ramsar listed (i.e. of international significance), such as Lake Corangamite.

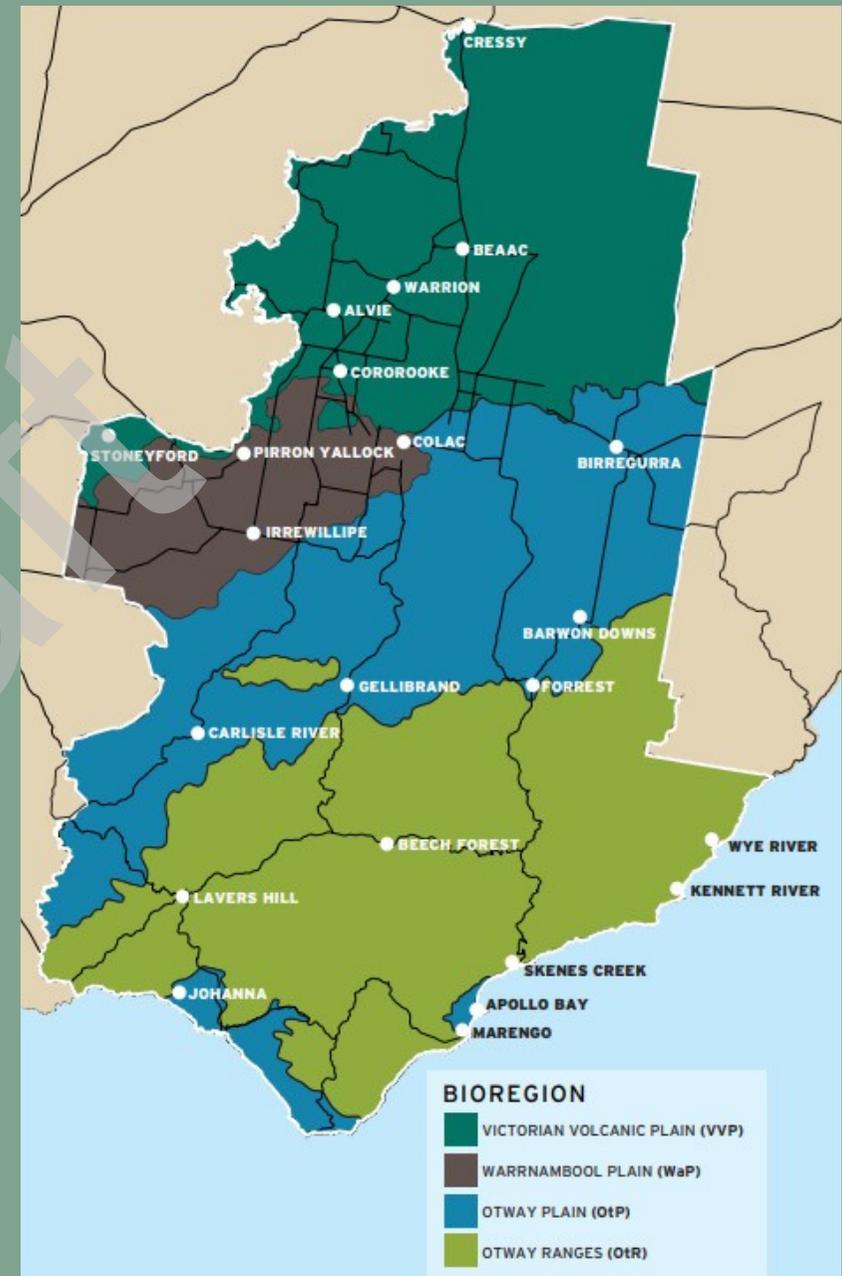
Bioregions reflect natural boundaries and relationships between biodiversity assets and natural resources. Four Bioregions are found in the Shire; Victorian Volcanic Plain (VVP), Warrnambool Plain, Otway Plain and the Otway Ranges (Figure 1):

- **Victorian Volcanic Plain Bioregion:** Colac Otway Shire covers in excess of 900 square kilometres of the VVP that once supported large tracts of the Ecological Vegetation Community (EVC) Plains Native Grassland and Plains Grassy Woodland vegetation. These are now only found in limited areas along roadsides and saline lakes, with some small remnant patches on private land. The VVP also hosts internationally protected Ramsar Lakes supporting several rare and threatened waterbirds.



Figure 1: Colac Otway Bioregions

- **Warrnambool Plain Bioregion:** The Warrnambool Plain extends into a relatively small area of the Shire from the west and is often referred to as the Coastal Plain. The identifying features of the Warrnambool Plain are nutrient deficient soils over low calcareous dune formations. Much of the limestone has been overlain by more recent sediments, and between the limestone dunes, areas of swamplands are characterised by highly fertile peats and seasonal inundation.
- **Otway Plain Bioregion:** Similar to the VVP, the Otway Plain covers over 900 square kilometres of the Shire. This bioregion includes coastal plains and dunes, foothills with river valleys and swamps in the lowlands. The upper terrain supports Lowland Forest and Heathy Woodland ecosystems, whereas the floodplains and swamps predominantly contain Grassy Woodland and Floodplain Riparian Woodland. Much of this vegetation remains intact on private land and protected in Crown land.
- **Otway Ranges Bioregion:** The largest, and most protected, bioregion within the Shire is the Otway Ranges. Consisting of moderately steep slopes and moist gullies, this bioregion supports Shrubby Wet Forest and Cool Temperate Rainforest ecosystems on the higher slopes; and Shrubby Foothill Forest on the lower slopes.



3.3 Environmental challenges and opportunities

Climate change

Climate change is a disruption of natural climate systems and weather patterns attributed directly or indirectly to human activity, predominantly caused by the burning of fossil fuels producing heat-trapping greenhouse gases. As a result, increased global temperatures, sea level rise and unprecedented extreme weather events and trends are already being experienced around the globe. Australia is especially vulnerable to these climate change impacts, demonstrated by drought, fire and flooding that are increasing in frequency and intensity.

These events emphasise the need for both mitigation and adaptation to respond to the threat of climate change. Impacts are already evident in both the natural and human environment, demonstrated through accelerated species extinction, and increased heat stress posing a challenge for human health.

Australia's weather has already become more variable. More frequent extreme and cascading weather events are impacting communities and the economy, and threatening the environment. At the same time, summers are becoming steadily hotter and drier, leading to adverse health impacts; increased bushfire risks and ecological damage; and threatening agricultural production.

Victoria's climate has also changed in recent decades, becoming warmer and drier. These changes are expected to continue. Understanding the drivers and impacts of these changes, as well as what we can expect in the future, will help us to plan and adapt.

Projections for Victoria indicate the state is likely to become hotter and drier in the future, but the timing and extent of changes will vary across regions. Comparison of observations and projections in Victoria suggest that temperature has been tracking towards the upper limit of projections, while winter rainfall has been tracking towards the drier end of projections. By the 2050s, if the current global warming rate continues, regional Victoria could experience around double the number of very hot days each year compared to the 1986–2005 average.

Barwon South West has been getting warmer and drier. In the future the region can expect...



Temperatures to increase all year around



More hot days and warm spells, and fewer frosts



Less rainfall in Winter and Spring



More frequent and more intense downpours



Harsher fire weather and longer fire seasons



Rising sea level



Increased frequency and height of extreme sea level events

Source: www.climatechange.vic.gov.au/?a=392919

Population growth

The Shire's attractive landscape, featuring both coastal and hinterland environments, has also led to permanent resident population growth, which is slated to continue to increase into the future. Managing development to cater for both permanent population growth and visitation whilst protecting natural assets is therefore a key ongoing challenge.

There is an increasingly pressing need for Council to plan for land, services and infrastructure for a larger population, and to use that investment to make sure that the Shire is an even better place to live.

It is important that we make sure growth happens in a positive way that fits with the community's vision and aspirations by ensuring that developments, new and old, are low-emissions, sustainable, waste wise, and energy and water efficient.

Working with Traditional Owners

The Colac Otway Shire proudly acknowledges the Gulidjan and Gadubanud peoples as the traditional custodians of the Colac Otway Region. Colac Otway Shire is located and conducts business upon the traditional lands of the Gadubanud and Gulidjan people. Aboriginal culture is the oldest living culture in the world. Reconciliation with First Nations peoples is a fundamental and pressing need if we are to become a truly thriving, inclusive, fair society.

The Native Title Act 1993 and Aboriginal Heritage Act 2006, which recognise the rights and interests of Traditional Owners in land and water management, are evidence of progress, but the long history of injustice continues to impact on Aboriginal and Torres Strait Islander people.

Colac Otway Shire Council is seeking to build strong, ongoing relationships with Traditional Owners. Environmental management is a key avenue through which Council can enhance relationships with Traditional Owners, learn about traditional land practices, and support collective interests and goals for the future.

Council resources

In order to be able to provide services and facilities to the community, Council generates income through rates and government grants.

Given the limited potential to increase rate revenue, Council will continue to be constrained in its capacity to fund changes to services and programs. A large proportion of the Shire's land is National Park, meaning despite the large geographical size of the municipality, rateable land and therefore income to Council is low. Council is also entering a period where a significant proportion of its public facilities and assets are becoming due for renewal or costly upgrades.

Seasonal tourism

Our Shire experiences a dramatic increase in demand during the peak holiday periods throughout the year, and particularly in summer. For example, Apollo Bay has a permanent population of 2400 that swells to approximately 22,000 during the busy tourist season.

The seasonal nature of the Shire's



population poses a significant challenge for Council. Pressures on reserves, local roads, parking and other Council facilities significantly increase during the warmer months, and allocating sufficient resources to fairly spread the cost of infrastructure to support non-rate paying visitors is a key challenge.

Tourism sometimes poses a burden on the Shire's natural assets if high visitation rates are not carefully managed, particularly in terms of sustainable use of resources, threats to native flora and fauna, and waste management. A key challenge is therefore balancing visitation to ensure both environmental and economic sustainability.

Waste management

Waste generation is growing in line with increasing consumption and population growth. The composition of waste is also changing, with more organic matter being sent to landfill in Victoria, leading to increased methane gas emissions.

Council's responsibilities include waste management through kerbside collection, and therefore these issues pose a significant challenge. Reducing the burden of waste and reducing its environmental impacts will require effective management of waste streams, as well as a broader cultural change through education that guides the community towards a circular economy.

Council adopted a Waste Management Strategy in 2021 to set strategic direction in this area and to guide Council's operations

over the next decade. In order not to duplicate this strategy, the Environmental Sustainability Strategy will encompass waste matters without making this a primary focus.



4. State of the Environment

Victoria naturally has a diverse climate and ecosystem due to its varied geography. However, the state's climate and biodiversity are threatened by human activities and climate change.

Victoria's climate is generally classified as temperate, with mild to cool temperatures in winter and warm temperatures in summer. However, the climate varies across the region, with some areas experiencing hot and dry conditions, while others - such as most of Colac Otway Shire - receive high rainfall. Climate change is expected to exacerbate these variations and increase the frequency and severity of extreme weather events, such as heatwaves, droughts, and bushfires.

Victoria has a rich biodiversity, with over 3,000 plant species and many unique fauna species. However, this biodiversity is threatened by habitat loss, fragmentation, and degradation due to human activities such as land clearing, urbanisation, and agriculture. Invasive species also pose a significant threat to Colac Otway's biodiversity, with many introduced species preying on and outcompeting native species for resources. Climate change is also affecting our region's biodiversity, with some species unable to adapt to changing conditions and becoming increasingly vulnerable to extinction.

The Australian government published its latest State of the Environment Report in 2021 to assess the country's environmental condition and provide recommendations for environmental management. The latest report found that the country's environment is facing significant

challenges, including climate change, land-use change, invasive species, and pollution.

The report notes that the impacts of climate change are already being felt across Australia. Land-use change, including deforestation and urbanisation, is also having a significant impact on the country's environment, as is the introduction of invasive species.

The report highlights the importance of protecting and restoring biodiversity, noting that many species are under threat of extinction, and the loss of biodiversity can have significant, often unrecognised, economic and social impacts. It also emphasises the need to improve the management of natural resources, including water and land, to ensure their sustainability for future generations.

To respond to this, we need to: strengthen policy and governance frameworks, invest in action, research and monitoring, and engage with communities and stakeholders to promote sustainable practices.

5. Background

5.1 Previous strategy and review

Council's previous Environment Strategy 2010-2018 has shaped Council's conservation and environmental activities for the past twelve years. A review of that strategy was released in January 2022, providing a summary of the highlights and challenges associated with previous goals and objectives. This review also informed the initial process of identifying ongoing challenges and opportunities that could be addressed in the new strategy.

5.2 Community and stakeholder consultation and strategy development

Community and stakeholder consultation was at the centre of developing the new Strategy. Council has liaised with local residents and visitors via an online survey and drop-in sessions held in locations across the Shire.

Council also held workshops with environmental related government agencies, environmental community groups, business groups, Council staff and Councillors to allow for more in-depth discussion and enhance consultation findings. Incorporating community and stakeholder views was a strong priority in the development of the strategy.

The engagement activities were guided by the themes and strategic directions based on Council's Environmental Sustainability Policy and Framework 2021. These themes are detailed in Figure 2.

5.3 What we heard

An analysis of the engagement – including the survey, drop-in sessions and workshops – revealed the key areas of concern to be:

- Habitat protection and enhancement (revegetation, weed & pest control)
- Climate change adaptation & mitigation
- Energy and water conservation, clean and green supply and security
- Land use planning reform and innovation for a safe climate and sustainable, low emissions communities and places
- Integrated water management, waterway health & water conservation
- More collaboration with other levels of government, business, community groups and Traditional Owners
- Risks, opportunities and benefits associated with fire in our landscape
- Strong support and advocacy for improved coastal management
- Impacts and opportunities associated with farming & agriculture
- Urban greening and cooling
- Electrification of transport
- Council has a key role in advocacy, facilitation and leadership
- Environmental information, education and capacity building
- Waste reduction, reuse and recycling



Figure 2: Environmental Sustainability Strategy 2023-2033 Engagement Themes



STRATEGIC THEMES		STRATEGIC DIRECTION
	Climate Change	Council and the Shire focus on energy efficiency, emissions reduction and moving towards a zero-carbon future whilst improving resilience to changes in short and long-term climatic conditions.
	Natural Environment	A healthy and connected natural environment that protects indigenous landscapes and enhances natural ecosystems, public health and livability.
	Built Environment	Built Environment - Sustainable, resilient and inclusive infrastructure and places.
	Water	A water sensitive shire with a focus on integrated water management, water sensitive urban design, healthy waterways and reduced reliance on potable water.
	Waste & Pollution	A clean and safe Council and shire that minimises waste generation and maximises reuse and recycling, working towards a sustainable circular economy.
	Partnership, Leadership & Advocacy	Council provides leadership, advocacy, brokering, communication and conduit roles to help achieve environmental outcomes. Leadership will also be shown through the development, strengthening and nurturing of partnerships.

6. Our Strategy

Colac Otway Shire's Environmental Sustainability Strategy 2023-2033 will guide Council's environmental management over the next 10 years and provides a framework for Council to work towards a thriving, sustainable municipality, with healthy natural environments and communities.

6.1 Scope

Local government is responsible for a vast range of infrastructure and land management, including parks, reserves, leisure centres, libraries, roads and bridges. Council also provides a multitude of services, such as emergency management, support services for vulnerable people and the elderly, youth engagement, waste collection and pet registration, and is responsible for development and enforcement of local laws.

Issues of major concern to the community over which Council has limited influence will continue to be acknowledged and addressed through targeted advocacy.

Council is required to work within legislation that guides a broad range of matters, from weed and native vegetation management through to energy and resource use. Council has a key role in implementing certain legislation, such as the Victorian Local Government Act 2020 and the Victorian Planning and Environment Act 1987.

Other acts listed below have significant implications for environmental management, and therefore are important for guiding objectives of the strategy:

- Australian Environmental Protection and Biodiversity Conservation Act 1999

- Australian Climate Change Act 2022
- Victorian Flora and Fauna Guarantee Act 1988
- Victorian Catchment and Land Protection Act 1994
- Victorian Environment Protection Act 2017
- Victorian Water Act 1989
- Victorian Climate Change Act 2017
- Victorian Aboriginal Heritage Act 2006

Victorian legislation has also made action on climate change a key responsibility of local government. For example, the Climate Change Act 2017 sets a target of net zero carbon emissions by 2050 for Victoria. Under this Act state and local governments must have regard to climate change in public health and wellbeing planning. The Local Government Act 2020 now also requires Councils to address climate change in their Council Plans. Every council must promote the economic, social and environmental sustainability of the area, including mitigation and planning for climate change risks.

The Victorian Public Health and Wellbeing Plan 2019–2023 for the first time also prioritises action to tackle climate change and its impact on our health and wellbeing. Councils are required to formally respond to this priority; this is reflected in the 2021-25 Council Plan.

Council has endeavoured to establish a progressive new strategy, within the restraints of resourcing and its sphere of control and influence. To maximise efficacy of the strategy, Council has focused on areas directly within the control of the organisation, and matters it can effectively influence.

6.2 Development of goals and objectives

The Strategy builds on the achievements of the Colac Otway Shire Environment Strategy 2010-2018, and is strongly aligned to the Colac Otway 2050 Community Vision, the Council Plan 2021-25, and Council's [Environmental Sustainability Policy and Framework](#). It also reflects extensive feedback from our community and stakeholders received throughout the strategy development engagement activities.

The Strategy has a clear vision, underpinned by the six themes of Council's Environmental Sustainability Framework 2021 and forms the long-term strategic policy position on environmental management and sustainability for Council.

Utilising the findings of the community and stakeholder engagement that preceded the drafting of this strategy, and the overarching themes and strategic directions guiding the Strategy development, six key goals were formulated to capture the breadth of environmental sustainability responsibilities and aspirations of Council.

These goals are high-level, forward thinking and provide a flexible and adaptive framework for onground delivery and implementation. They are supported by objectives that have been developed to further detail how Council intends to achieve those goals during the next decade.

The links between the themes and strategic directions and the Strategy's goals and objectives are shown by the use of symbols in the following pages.

6.3 Implementation

The Strategy is a broad framework of values and priorities to inform development of action plan. This action plan will detail how Council will achieve its goals and objectives, as defined by the strategy, and will be formed in accordance with current knowledge and the social, economic and environmental context.

The specific actions to achieve these goals and implement the objectives will be captured and detailed in the accompanying action plan, providing the opportunity to review and realign implementation actions to maintain their relevance.

The action plan will identify:

- Actions that align to the goals and objectives outlined in this Strategy;
- Timeframes for implementation of each action;
- Resource requirements and availability;
- Council's business units responsible for delivery of these actions; and
- Council's progress against any actions identified in the action plan when it is reviewed in 2028.

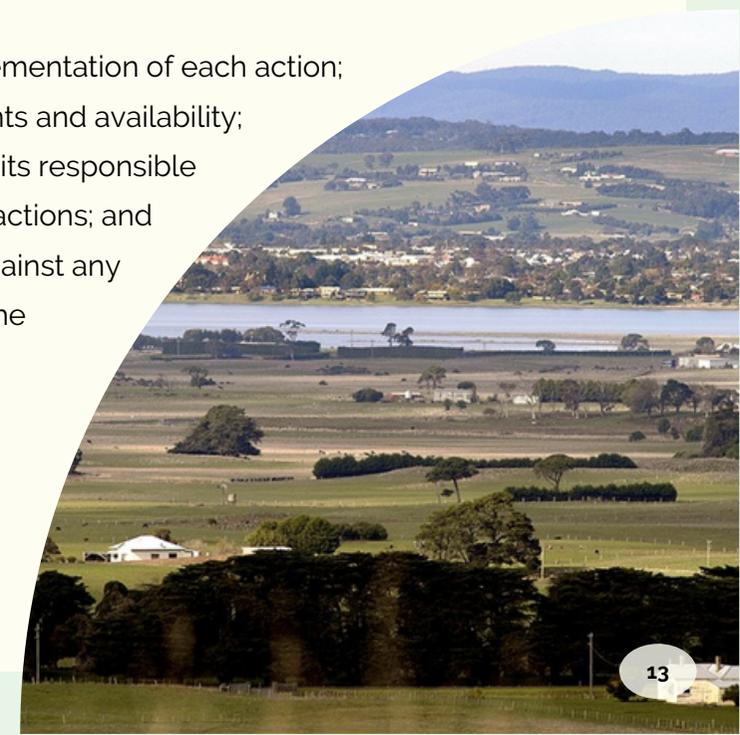
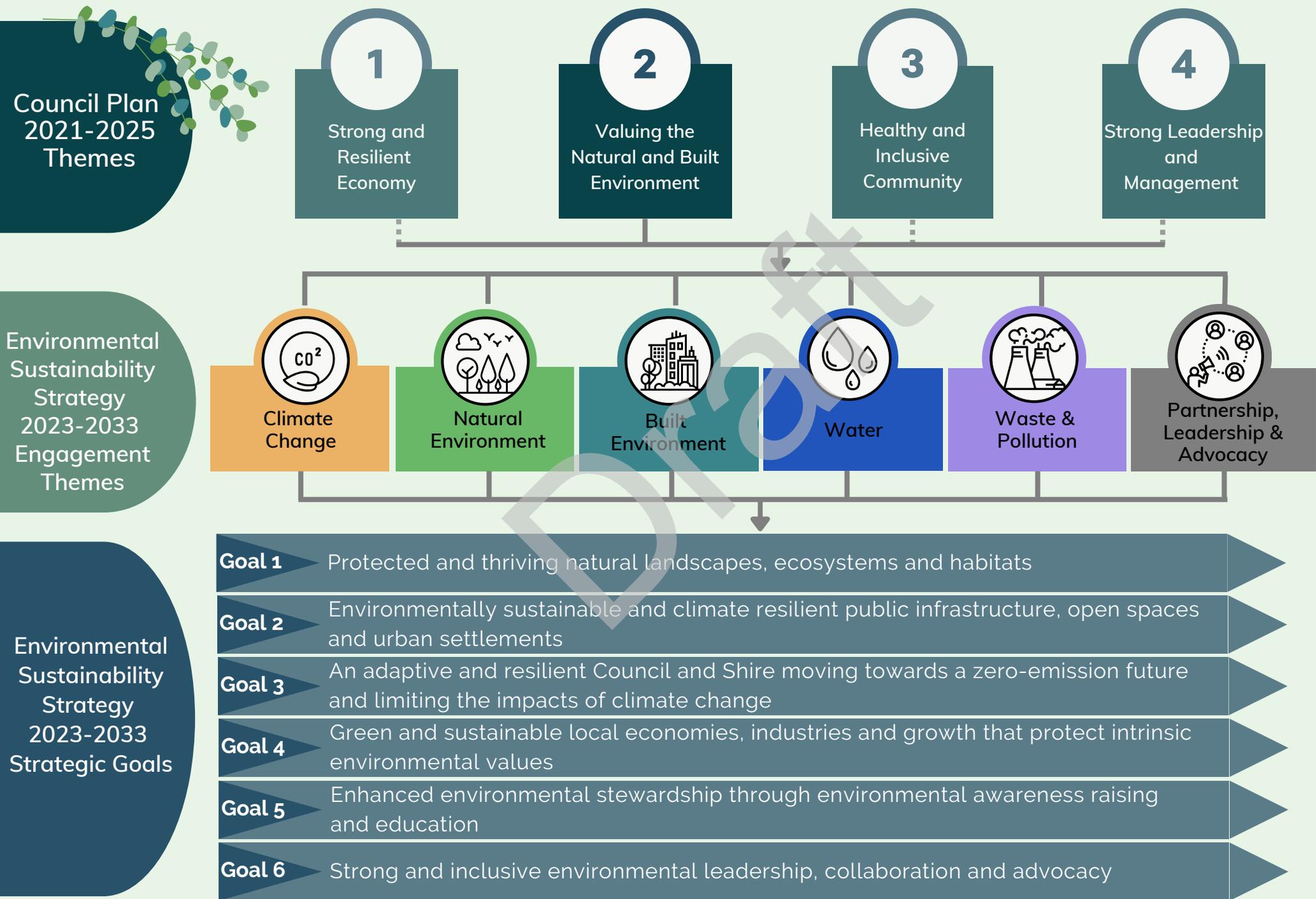


Figure 3: Relationships between the Council Plan, Engagement Themes and Strategy Goals



7. Our Targets

TARGET AREA	KEY TARGET	SPECIFIC TARGETS	SUPPORTING STATEMENT
 <p>Greenhouse Gas Emissions</p>	Net zero greenhouse gas emissions	<ul style="list-style-type: none"> Maintain Carbon Neutral Council Operations (Scope 1 & 2). Net Zero Corporate Emissions (Scope 1, 2 & 3) by 2035. Our community will have transitioned to a Zero Carbon Community by 2040. Reduce Council's corporate emissions by 75% by 2030 and 85% by 2040 (Baseline year 2010-11). Council's Light Fleet will comprise zero emissions vehicles by 2030 and its heavy plant and equipment by 2040. 	Council commits to reporting on corporate greenhouse gas emissions and implementing actions and delivering projects and programs to reach net zero emissions for Council operations.
 <p>Renewable Energy</p>	100% renewable electricity	<ul style="list-style-type: none"> Council will obtain 100% of its electricity from emissions free renewable energy sources. 	Council commits to obtain 100% of its electricity from emissions free renewable energy sources and increase its renewable energy generation capacity.
 <p>Waste</p>	Zero recoverable waste to landfill	<ul style="list-style-type: none"> Divert 80 per cent of waste from landfill by 2030.* Cut total waste generation by 15 per cent per capita by 2030.* 	Council commits to report on and reduce waste sent to landfill.
 <p>Water</p>	Reduce potable water use	<ul style="list-style-type: none"> Reduce Council's operational potable water consumption by 10% by 2030 and 20% by 2040. 	Council commits to reducing the overall volume of potable water through its operations used for non-potable purposes.
 <p>Biodiversity</p>	Responsible and adaptive land management	<ul style="list-style-type: none"> Increase tree canopy cover in urban settlements by 5% by 2030 and 10% by 2040. 	Council commits to protecting and enhancing biodiversity on Council owned and managed land and increasing urban canopy cover.

*Resource Recovery and Waste Management Strategy 2021-2030

8. Our Goals

Goal 1: Protected and thriving natural landscapes, ecosystems and habitats

The protection of healthy natural landscapes and ecosystems, and the minimisation of negative impacts on native flora and fauna was identified as the highest environmental priority for our communities, as expressed through the engagement processes for the Council Plan and this Strategy. Victoria is experiencing significant degradation of native species due to various human activities, such as land clearing, introduction of non-native species, hunting, and changes in fire regimes.

After colonisation, land clearing for agriculture, timber harvesting, and urbanisation resulted in the loss of habitat for many native species. This was particularly devastating for forest-dependent species. Hunting for fur, food, and sport also had a significant impact on many native species, many of which are now extinct or critically endangered.

The introduction of non-native species, such as rabbits, foxes, pigs, deer and cats has had a devastating impact on native species throughout the Otways due to competition for food, predation, and extreme alteration to the natural balance of ecosystems. This has had a particularly significant impact on small marsupials and ground-dwelling birds, many of which are now endangered or extinct. Also many native plant species require fire to regenerate, and the alteration of fire regimes has resulted in the loss of habitat and changes to the composition of plant communities.

Revegetation is essential to preserving and restoring biodiversity and ecological resilience. Returning plants into the landscape also fosters environmental and social wellbeing, captures carbon and preserves healthy waterways and water quality. Council will continue to undertake significant revegetation projects and encourage natural regeneration in its environmental reserves, parklands and along Council managed habitat corridors, such as linear reserves. Council's natural resource protection initiatives will also focus on weed and pest control, and collaboration with agencies and stakeholders to ensure impactful cross-tenure projects are achieved.

Council's environmental management decisions will respect and integrate Traditional Owners' perspectives, culture and knowledge through meaningful engagement and collaboration. Council will proactively collaborate to integrate Traditional Owners' ecological knowledge and stewardship and other scientific knowledgebases to heal Country and restore environmental values, through meaningful recognition for Indigenous custodianship.

Underpinning Council's efforts to protect environmental values, restore ecosystems and enhance biodiversity is an appreciation that a healthy environment is a central element of a healthy and liveable community.

Goal 1: Protected and thriving natural landscapes, ecosystems and habitats

Supporting Policies, Strategies and Plans

Council Plan 2021-2025
Environmental Sustainability Policy 2021
Colac 2050 Growth Plan

Lake Colac Foreshore Masterplan 2016
Draft Urban Forest Strategy 2015
Weed Management Policy 2020

Objective 1.1 Enhance biodiversity values and habitat connectivity across the municipality



- 
- 1.1.1 Increase biodiversity of remnant ecosystems through natural regeneration and revegetation programs to reduce habitat fragmentation and increase connectivity.
 - 1.1.2 Protect indigenous biodiversity, habitat and natural landscapes in all council planning, decision making and operations.
 - 1.1.3 Manage and control invasive species to reduce pest plant and animal impacts on indigenous biodiversity.
 - 1.1.4 Collaborate with Traditional Owners and incorporate traditional knowledge of country to improve biodiversity planning and management practices and protect cultural heritage.

Objective 1.2 Build a strong knowledge base that improves understanding of local biodiversity to inform decision making and natural resource management programs



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- 1.2.1 Continuously improve decision making tools (e.g. mapping, up-to-date scientific data), technologies and methods.
 - 1.2.2 Embed and grow ecological and sustainability knowledge and understanding among Council staff for better design and delivery of Council services and operations.

Objective 1.3 Improve waterway health and water quality



1.3.1 Protect, restore and increase indigenous biodiversity and habitat that support healthy waterways, estuaries and wetlands.

1.3.2 Raise local awareness, knowledge and appreciation of water quality protection and healthy waterways.

1.3.3 Reduce pollution and litter entering waterways, wetlands, estuaries and the marine environment via Council's drainage and stormwater systems.

Goal 2: Environmentally sustainable and climate resilient public infrastructure, open spaces and urban settlements

Throughout recent community consultations for the Colac 2050 Growth Plan, Council Plan and this Strategy our community has voiced the urgent need to plan and respond to the challenges and impacts of a changing climate. Council also needs to manage the competing priorities of a growing population with maintaining the Shire's highly valued rural character and unique natural environment. This requires careful balancing of priorities and resources to meet community service and infrastructure needs now and as our community grows.

Collective investment by all levels of government and our community to facilitate this growth will provide opportunities to make the Shire an even better place to live and to create the sustainable future and communities we all aspire to by creating low carbon urban developments. Principles that must underpin successful new developments, public open space design and infrastructure renewal include universal design, functionality, resilience and low energy.

To achieve these things Council will improve land use planning instruments and controls to minimise the impacts of climate change on the environment, people and places, and to improve the efficiency, sustainability and resilience of housing, development and infrastructure. Council will also advocate and work with state government to ensure that our land use planning system and building regulations are contemporary, flexible and adaptive to deal with new challenges posed by climate change and the emerging low carbon and circular economies.

Council will also protect and continue to increase green public open spaces and tree canopy cover to create cooler urban settlements, protect biodiversity, reduce flood risks, and improve air quality and community health and wellbeing.



Goal 2: Environmentally sustainable and climate resilient public infrastructure, open spaces and urban settlements

Supporting Policies, Strategies and Plans
Colac 2050 Growth Plan
Health & Wellbeing Plan 2021-2025
Colac Otway 2050 Community Vision

Council Plan 2021-2025
Environmental Sustainability Policy 2021
Active Transport Strategy 2013-2023
COS Climate Change Adaptation Plan 2017-2027

Colac Integrated Water Management Plan 2014
Draft Urban Forest Strategy 2015
Colac Stormwater Development Strategy 2020
Waste Management Strategy 2021-2030

Objective 2.1 Land use planning innovation and reform to protect the Shire's environment and improve the livability of its human settlements



2.1.1 Ensure that land use planning policies and processes consider and implement best practice environmental protection and sustainability principles.

2.1.2 Protect and restore biodiversity in our parks, roadsides, reserves, waterways, streetscapes, coastal and rural landscapes through planning and design processes that prioritise regeneration and indigenous plants.

2.1.3 Establish a strategic approach to open space and landscape planning which promotes biodiversity, habitat connectivity and builds ecosystem resilience.

Objective 2.2 Urban greening and cooling for biodiversity, climate change resilience and community health



2.2.1 Design and deliver urban cooling programs using canopy trees and other greening options to increase community resilience to the impacts of climate change and improve the livability and sustainability of our urban settlements.

2.2.2 Protect and increase canopy cover and shade in public open spaces, around community facilities and along urban commuting routes to improve amenity and enable active and public transport options.

Objective 2.3 Waste Reduction, Recycling and Circular Economy



2.3.1 Support community and business efforts to avoid and reduce waste through education, behaviour change, capacity-building and the provision of innovative services, such as public glass recycling collection.

2.3.2 Build Council's capacity to understand and implement the waste hierarchy, litter management, life cycle analysis and sustainable procurement principles to better support the acceleration of a circular economy.



Objective 2.4 Foster and promote better integrated water management through decision making, planning and design



2.4.1 Plan, design and implement best practice stormwater management, treatment and harvesting systems and infrastructure.

2.4.2 Develop partnerships with governments, water corporations, key agencies, organisations and our community to plan and achieve sustainable water management outcomes.

2.4.3 Reduce reliance and demand on potable water supplies by prioritising the use of alternative water supplies.



Welcome to the Colac rain gardens

There are two rain gardens on the edge of Memorial Square, Colac. One is at the corner of Memorial Square and another at the corner of Hesse and Dennis streets.

What are rain gardens?

Rain gardens are small landscaped areas, except they are designed to capture rainwater. They are supported by natural soil, covering a beautiful garden bed which provides a natural filter for rainwater, without needing to use precious drinking water for watering.

What do they do?

By capturing stormwater which runs off hard surfaces after it rains, rain gardens are designed to filter and clean the water which protects and maintains the health of local creeks and Lake Colac.

Lake Colac



These rain gardens have been filtering our stormwater since March 2016. The rain gardens were constructed with funding provided by the Victorian State Government.



Photo: Rainwater Garden, Memorial Square, Colac

Goal 3: An adaptive and resilient Council and Shire moving towards a zero-emission future and limiting the impacts of climate change

Australia's emissions have been steadily increasing for decades. The latest report from the United Nation's Intergovernmental Panel on Climate Change (IPCC Report No. 6 <https://www.ipcc.ch/assessment-report/ar6/>) states that industrialised nations must halve their greenhouse gas emissions by 2030 and be carbon neutral by 2050 if they wish to prevent the most catastrophic harms of global warming. The report reveals that failure to slash emissions will mean average global temperatures will rise more than 1.5°C above pre-industrial levels. Past this threshold, the impacts will be severe, including species extinctions, irreversible melting of ice sheets and extreme sea level rise.

Accelerated climate action is needed to make the best possible transition to a zero-emissions future and to restore a safe climate pathway for future generations. This requires substantial commitment to both climate change mitigation and adaptation actions now and into the future by all levels of government and our communities.

Colac Otway Shire has demonstrated its commitment and leadership in energy conservation and greenhouse gas reduction by significantly reducing energy use and greenhouse gas emissions in all Council operations over the last decade, and leading and participating in many regional collaborative



Goal 3: An adaptive and resilient Council and Shire moving towards a zero-emission future and limiting the impacts of climate change

projects to mitigate and adapt to the impacts of climate change. In 2022 Council also joined the Victorian Energy Collaboration (VECO), the largest emissions reduction project ever undertaken by the local government sector in Australia. Fifty one Victorian Councils have pooled their electricity needs into one long-term contract which provides the VECO councils with clean renewable energy generated from wind farms in south-west Victoria to power Council-owned infrastructure, such as offices, sports grounds, community venues, leisure centres and streetlights.

A Net Zero Emissions Target for Council was advocated for by our community, and after resolution by Council in the 2020-21 financial year was achieved and delivered. This was a significant milestone for Council, as part of its ongoing demonstration of meaningful environmental action, and provides an imperative for Council to strongly focus on opportunities to reduce its residual emissions further so that the offsetting required will continue to be minimised going forward.

To achieve this, Council will work to ensure its services and operations become increasingly efficient. Council will also support households and businesses to take their own steps to be more sustainable. This will involve our organisation leading by example to support efforts to reduce energy consumption, improve energy efficiency, and promote renewable energy production and storage solutions.



Goal 3: An adaptive and resilient Council and Shire moving towards a zero-emissions future and limiting the impacts of climate change

Supporting Policies, Strategies and Plans
Colac Integrated Water Management Plan 2014
Council Plan 2021-2025

Draft Urban Forest Strategy 2015
Environmental Sustainability Policy 2021
Health & Wellbeing Plan 2021-2025
Waste Management Strategy 2021-2030

Colac Stormwater Strategy 2020
Colac 2050 Growth Plan
COS Climate Change Adaptation Plan 2017-2027

Objective 3.1 Promote and increase clean energy production, energy efficiency and low-emission transport for Council and the community



3.1.1 Continue implementing energy efficiency and emissions reduction programs in Council-owned and operated facilities, services and operations and maintain Council's Carbon Neutral status.

3.1.2 Encourage community efforts to transition to a zero-carbon environment, including the electrification of transport and enhanced public transport services across the region.

Objective 3.2 Embed climate change adaptation into decision making, planning and design



3.2.1 Design and build climate resilient community infrastructure and services.

3.2.2 Increase awareness and understanding of climate change impacts and mitigation and adaptation responses across Council and the community.

3.2.3 Plan for climate change and related emergency management at the municipal level, provide relief and recovery services, and support emergency response operations.

Objective 3.3 Adaptive management and renewal of Council assets and infrastructure to build resilience to climate change



3.3.1 Prioritise innovative adaptation programs to reduce climate change induced extreme weather events impacts on people, infrastructure, places and the environment.

3.3.2 Promote and facilitate best practice integration of blue and green infrastructure within developments and urban settlements to improve climate resilience and health and wellbeing.



Goal 4: Green and sustainable local economies, industries and growth that protect intrinsic environmental values

Australia's population is expected to exceed 28 million by 2030. Population drivers lead to a range of pressures that directly affect the environment because of the spaces we take up and urbanise, the resources we use, our modes of travel, and the waste we produce. The production of goods and services to maintain our current and growing population also requires a large amount of energy and materials, all of which are sourced from the environment.

Ecosystem modification, resource extraction, production and consumption, and waste disposal all affect the health and resilience of natural capital, and the ecosystem services it provides. In order to create a global sustainable future, it is critical to recognise the relationships between economic activity, environmental degradation and social wellbeing.

Our region also has great opportunities to expand and grow, both for permanent populations and as a destination for domestic and international visitors. The growth seen in Colac and Apollo Bay and surrounds is a great example of the rapid expansion in our local communities. The Colac Otway region also supports a network of over 1,500 businesses and well over 800 farms and the Shire has a diverse range of industries including health care, social services, manufacturing, public administration, agriculture, forestry, fisheries, retail and tourism.

Given 48% of Colac Otway's 2020-21 community emissions were attributed to agriculture, Council will also need to explore opportunities to support the agricultural and farming sector to improve land management practices, better integrate environmental and biodiversity protection, and enhance resilience of these sectors to a changing climate.

Therefore, it is important to foster an environmentally sustainable economy by attracting new environmentally sustainable industries and encouraging existing businesses to reduce the environmental impact of their operations. Council is committed to developing green and circular economies within our region.



Goal 4: Green and sustainable local economies, industries and growth that protect intrinsic environmental values

Supporting Policies, Strategies and Plans

Council Plan 2021-2025
Environmental Sustainability Policy 2021
Health & Wellbeing Plan 2021-2025

COS Destination Action Plans
Colac 2050 Growth Plan
Waste Management Strategy 2021-2030

Objective 4.1 Explore opportunities to work with the agricultural and farming sector to enhance land management practices, operate sustainably and adapt to a changing climate



4.1.1 Promote and support integrated environmental and biodiversity protection within the commercial, industrial and agricultural sectors.

4.1.2 Assist local commercial, industrial and agricultural sectors to combat the impacts and explore the opportunities of climate change both environmentally and economically through adaptation and mitigation.

Objective 4.2 Green economy, tourism and growth



4.2.1 Protect and enhance environmental values, biodiversity and natural landscapes that draw visitors to and underpin the unique character, economy and prosperity of our Shire.

4.2.2 Advocate to state and federal governments for waste-minimising design, manufacturing and packaging policy and legislation toward a circular regional economy.

4.2.3 Foster and promote infrastructure that prioritises environmentally sustainable development and design principles that integrate and encourage amenity, accessibility, active and public transport and longer visitor stays.

4.2.4 Attract and support environmentally sound industry, such as recycling plants, commercial solar arrays and waste to energy, including all forms of associated manufacturing.

4.2.5 Foster and promote infrastructure that prioritises environmentally sustainable development and design principles that integrate and encourage amenity, accessibility, active and public transport and longer visitor stays.

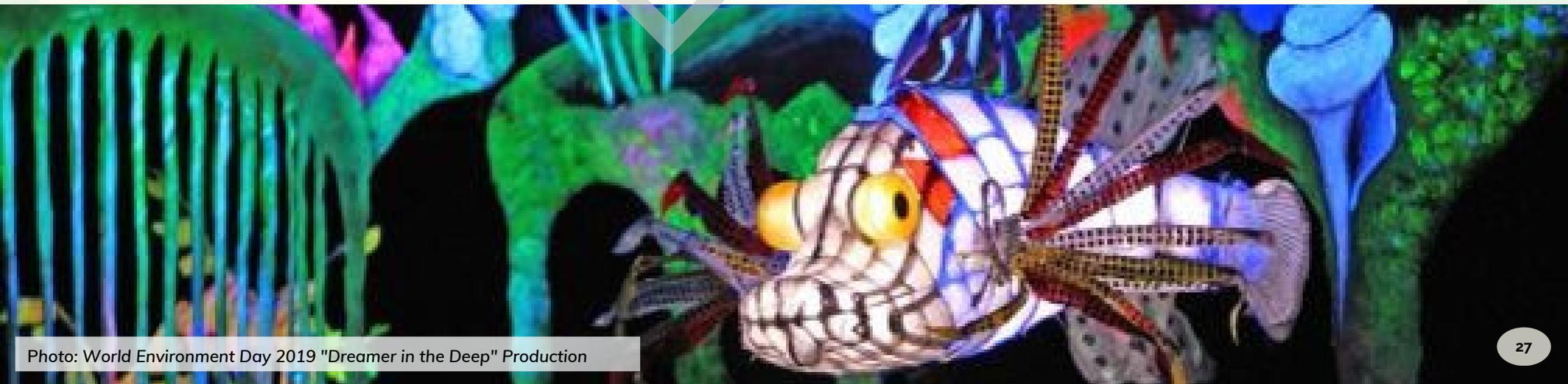
Goal 5: Enhanced environmental stewardship through environmental awareness raising and education

Colac Otway Shire has an important role to play as a level of government closely connected to local communities in which we live, work and conduct business. This creates powerful opportunities for Council to conduct meaningful and uniquely tailored education and stewardship initiatives in response to our community's expectations and requirements.

Council will provide opportunities for the community and Council staff to engage with nature, learn about the environment and its related challenges. These education and engagement initiatives and programs will enable residents and staff to be engaged and educated about environmental sustainability, build knowledge and capacity to use resources wisely, take positive steps and actions to reduce carbon emissions and adapt to a changing climate.

Council will also provide broad and regular communication about the importance of caring for the environment and living sustainably, both in rural and urban settings across all media and local publications.

The Shire has a thriving community of people keenly interested in participating in sustainability action and wide-ranging areas of environmental awareness raising. Under this strategy, Council will take up these opportunities for enhanced engagement and collaboration with groups and individuals with skills and interest in this space to help foster and support the local environmental groups' aspirations, goals and actions.



Goal 5: Enhanced environmental stewardship through environmental awareness raising and education

Supporting Policies, Strategies and Plans

Council Plan 2021-2025
Environmental Sustainability Policy 2021
Health & Wellbeing Plan 2021-2025

COS Destination Action Plans
Colac 2050 Growth Plan
Waste Management Strategy 2021-2030

Objective 5.1 Council will help build the community's environmental literacy and knowledge to increase community understanding and involvement in biodiversity conservation activities and foster sustainable behaviour, including wise resource use.



5.1.1 Council will provide broad and regular communication about the importance of caring for the environment and living sustainably both in rural and urban settings across multiple platforms.

5.1.2 Improved communication, engagement with local environmental groups to support their aspirations, goals and activities.

5.1.3 Support, develop and deliver education and engagement opportunities and resources for our community to engage with nature and live more sustainably.

5.1.4 Council will build internal capacity to understand and implement the carbon emissions hierarchy (i.e. reduction of emissions prioritised over offsetting), increased corporate knowledge and data capture of emissions.



Goal 6: Strong and inclusive environmental leadership, collaboration and advocacy

Council has a strong history of effective collaboration with community groups, stakeholders and other levels of government. To achieve Council's environmental sustainability objectives, strong leadership will also be shown through the strengthening and nurturing of these partnerships and relationships that will provide and deliver improved environmental sustainability outcomes for our community. Council aims to foster strong partnerships to achieve successful landscape and ecosystem scale protection and improvements that often require action and cooperation across land management boundaries with other government agencies and authorities; businesses and industry; community groups and landowners.

Integrating environmental sustainability across the organisation is also key to strong and consistent commitment from all staff. Leadership, cross-department collaboration and ongoing support is required to ensure staff have the awareness, information, capacity and confidence to deliver appropriate environmental outcomes through their daily work functions.

Under this strategy, Council will strive to be a leader, conduit and facilitator of collaboration, innovation and capacity building to increase and build environmental stewardship. In 2022 Council formally joined the Barwon South West Climate Change Alliance to collaborate with other Councils, water authorities and research institutions and to amplify advocacy and adaptive outcomes for the region. Council will also work to assist the community and private sector to better understand and appreciate the impacts and opportunities that climate change adaptation and mitigation will have both environmentally and economically.

Council will continue to advocate for new projects and initiatives, as well as in relation to environmental issues that are important to our communities.



Photo: Climate Resilient Communities BSW - Climate Change Conference, Geelong

Goal 6: Strong and inclusive environmental leadership, collaboration and advocacy

Supporting Policies, Strategies and Plans

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 Environmental Sustainability Policy 2021
 Health & Wellbeing Plan 2021-2025

Colac 2050 Growth Plan
 Colac Otway 2050 Community Vision
 Waste Management Strategy 2021-2030

Objective 6.1 Lead and facilitate collaboration, innovation and advocacy to increase and build environmental stewardship of individuals, community and businesses.



6.1.1 Establish stronger relationships and partner with key stakeholders to achieve regional biodiversity protection and improvements.

6.1.2 Establish stronger relationships and partner with key stakeholders to improve knowledge of, plan and implement responses to limit regional climate change impacts.

6.1.3 Participate in and support collaborative community led advocacy, projects and programs relating to biodiversity protection and environmental sustainability.

6.1.4 Strongly advocate for robust evidence-based climate action, policies and legislation at all levels of government to accelerate transition of our communities and economy to a clean, climate-safe future.



9. What Success Looks Like

The Outcomes we seek by 2033:

Goal 1 Protected and thriving natural landscapes, ecosystems and habitats

Biodiversity and connectivity of remnant ecosystems is increased through natural regeneration and revegetation programs.

Reduction in the coverage of invasive species across the Shire.

Increased number of water quality treatment systems installed to manage stormwater to support healthy and diverse aquatic ecosystems.

Goal 2 Environmentally sustainable and climate resilient public infrastructure, open spaces and urban settlements

Improved land use planning instruments and controls to minimise the impacts of climate change on the environment, people and places and improve the efficiency and sustainability of housing, development and infrastructure.

Green open space and tree canopy cover is increased across the Shire.

Increased diversion of household and commercial waste from landfill.

Goal 3 An adaptive and resilient Council and Shire moving towards a zero-emission future and limiting the impacts of climate change

Council's corporate greenhouse gas emissions are reduced or offset to achieve net zero emissions.

New developments in the Shire incorporate best practice water conservation and stormwater management measures through integrated water management and water sensitive urban design.



Goal 4 Green and sustainable local economies, industries and growth that protect intrinsic environmental values

There is an increase of green businesses and industries in the Shire.

Increased adoption of more environmentally sustainable practices and active protection of biodiversity and landscapes by businesses in the agriculture sector.

Goal 5 Enhanced environmental stewardship through environmental awareness raising and education

Increased community participation in environmental events and activities.

Goal 6 Strong and inclusive environmental leadership, collaboration and advocacy

Traditional Owner perspectives, culture and knowledge and their land management and environmental stewardship goals being reflected in Council's environmental management decisions.

Increased community satisfaction rating for overall performance in environmental sustainability (Annual Local Government Community Satisfaction Survey) and exceed the Victorian Council average.

Leadership will be shown by measuring and reporting progress in implementing the Environmental Sustainability Strategy and Climate Change Action Plan.





Draft



Colac Otway
SHIRE