



Environmental Sustainability Framework

2016–2025





Image: Long Hollow Heathland

CONTENTS

Executive Summary	4
Introduction	6
Environmental Sustainability Framework	8
Council's Vision	8
Council Plan Goals (2013–2017)	9
Bayside Council's Environmental Commitment	10
Guidelines for Planning & Decision-Making	10
Goal 1: Leading the Way	12
Goal 2: Community Partnerships	14
Goal 3: Resilience	16
Goal 4: Sustainable Places	18
Implementation	20
Performance Measurement, Monitoring & Learning	20
Communication and Reporting	21
Background	22
Bayside Community	22
Current State of the Environment	22
Policy Context	30
Key Drivers & Issues	30
How the Framework was developed	32
Acknowledgements	33
Bayside Sustainability Action Plan 2016 – 2019	34
Biodiversity	34
Environmental Citizenship	36
Sustainable Buildings	38
Sustainable Businesses	40
Sustainable Development	42
Sustainable Procurement	44
Sustainable Transport	46
Sustainable Water	48
Waste Management	50
Zero Carbon	52



Executive Summary

Purpose

The *Environmental Sustainability Framework 2016–2025* sets consistent direction and guidance for environmental planning and decision-making within Bayside City Council. It aligns with Council's vision and framework 'Making Bayside a Better Place' and provides clarity, focus and actions for maintaining a high level of liveability and wellbeing for the community – the top priority for Council.

Developing the Framework

The new *Framework* is the result of extensive research and consultation to develop a shared vision to guide Council's work. Research included an examination of our previous efforts and research on the trends and issues influencing Bayside's future. Consultation for the *Framework* included an online survey, community interviews at public places, workshops with a stakeholder leader group, workshops with youth environmental leaders and primary school students, and Bayside City Council staff consultation. Further community input to the *Framework* was provided via community consultation for the new Community Plan. This consultation was conducted concurrently with the *Framework's* development, and identified environmental issues as a high priority for Bayside residents.

Through the consultation process, four goals and ten themes were developed.

Key Drivers

The *Framework* has identified the key drivers of environmental change and threats that Council and the community must plan for and contend with. These are:

- Community infrastructure – maintaining and replacing essential infrastructure in a financially-constrained environment
- Transport – providing mobility in a low-density municipality while avoiding traffic congestion and parking issues
- Population growth – this will drive demand for increased development and the associated pressure on land and services
- A changing climate – the need to act now to reduce the severity of climate change whilst also preparing for its impacts
- Over-consumption – our current way of life is not sustainable and a transformation of our lifestyles and our economy is needed
- Water supply constraints – climate change and successive droughts have resulted in a less consistent supply of water and the cost of water is rising

- Rate capping – Council’s ability to raise revenue for the services it provides is now further limited by the State government policy that will cap the level of rates that Victorian councils are able to charge residents
- Community aspirations – the community has high aspirations for both a high quality of life and a well-protected environment

Intent of the Framework

The *Framework* itself is designed to be visionary, clear and engaging, with actions that are practical, achievable and measurable with clear targets. It needs to factor in Council’s remit and constraints such as rate capping, the limitations of local laws and powers and both the immediate and long-term costs and benefits of each action.

The *Framework* is supported by other Council documents such as the *Climate Change Strategy*, *Waste Management Action Plan (to be developed)*, *Biodiversity Action Plan and Integrated Water Management Plan*.

Our Environmental Commitment

Bayside City Council is going to safeguard the environment for current and future generations. We will do this by making decisions based on the best available evidence and our learning. We will make sustainable decisions that deliver balanced economic, social and environmental benefits.

Bayside City Council's environmental commitment is to:

1. Work in partnership and build strong relationships with our community, government agencies, community organisations and businesses.
2. Minimise Council's own ecological footprint through:
 - Efficient use of Council's energy, water and waste
 - Increasing Council's use of renewable energy and recycled water
 - Purchasing environmentally sustainable products and services
3. Advocate for outcomes that deliver high environmental standards and protection.
4. Engage with and build the capacity of the community to care for the environment and minimise their own ecological footprint

5. Lead by example and demonstrate our commitment to environmental sustainability
6. Use Council's legislated and regulatory authority to deliver required standard of environmental outcomes and protection

We will abide by these commitments through the application of sound planning and decision-making processes and by striving to achieve the goals which arose during the consultations. We have identified ten focus areas or environmental themes to help us prioritise and achieve these goals.

Goal 1: Leading the Way

Bayside City Council operates as a model of environmental sustainability.

Goal 2: Community Partnerships

Supporting an empowered and connected community that acts locally to reduce consumption and live sustainably.

Goal 3: Resilience

Developing community and ecosystem resilience for current and future climate change impacts.

Goal 4: Sustainable Places

Advocating and influencing for healthier ecosystems and more liveable Bayside urban areas and infrastructure.

The ten themes are: biodiversity, environmental citizenship, sustainable buildings, sustainable businesses, sustainable development, sustainable procurement, sustainable transport, sustainable water, waste management, and zero carbon.

Implementation

Within each of these goals a number of Strategic Objectives, Targets and Indicators are identified across the ten themes.

A separate four-year Bayside Environmental Sustainability Action Plan document provides the actions, measures, timeline, budget and monitoring to achieve these objectives.

The ten-year *Framework* will be reviewed annually (informally) to monitor progress with targets and to assist in guiding annual works plans, and biennially (formally) to review issues, risks and determine the overall success of actions.

Council will ensure accountability of delivering the actions in this strategy by embedding it into its planning, monitoring and performance systems.



Introduction

Looking after our local environment is the responsibility of every citizen, and no single organisation can do it alone. We must work together to ensure that all in our community enjoy prosperous, happy and healthy lives within the natural limits of the Earth's resources.

Making Bayside a better place, whilst not undermining the environment on which we are dependent, is a complex task. Our environment includes the local land, the coast, waterways and the air we breathe. It also includes our impacts on environments elsewhere, from the resources we import, use, and turn to waste, to our energy, water supplies and renewable and non-renewable materials that support our standard of living.

We face many challenges in sustaining our environment including the impacts of climate change, water shortages from decreasing rainfall, and increasing costs of waste management, energy and water. The coastline is threatened by erosion from storms and the impacts of future sea-level rise, while the local marine environment continues to be harmed by stormwater pollution.

Our challenges contain multiple simultaneous complexities. People do not always agree on the problem, let alone the solution. There are diverse perspectives and interests and in addition, no single organisation or entity can solve any challenge alone.

Improving our liveability requires engagement and collaboration across the community. Everything in the environment is inter-related, inter-dependent and connected in numerous ways. It is dynamic and changing and we cannot always immediately see the impact of our actions or decisions. Intervening in one area alone will affect other areas. Addressing a challenge piece by piece is not enough – a systemic approach is needed.

Finally, the situation is unpredictable and the future uncertain. There is no precedent to draw from and our past experience alone is not enough – we must create something new. To do this we need to build new capacities, craft new ways of seeing and working together, and innovate in ways that have not previously been possible or understood.

Against this backdrop, maintaining a high level of liveability and wellbeing for the community is the top priority for Council.

The *Environmental Sustainability Framework 2016–2025* provides an overarching document that sets consistent direction and guidance for environmental planning and decision-making within Council. It is an important tool to navigate the complexities of making Bayside a better place.

It aligns with Council's vision and framework, 'Making Bayside a Better Place', and provides clarity,

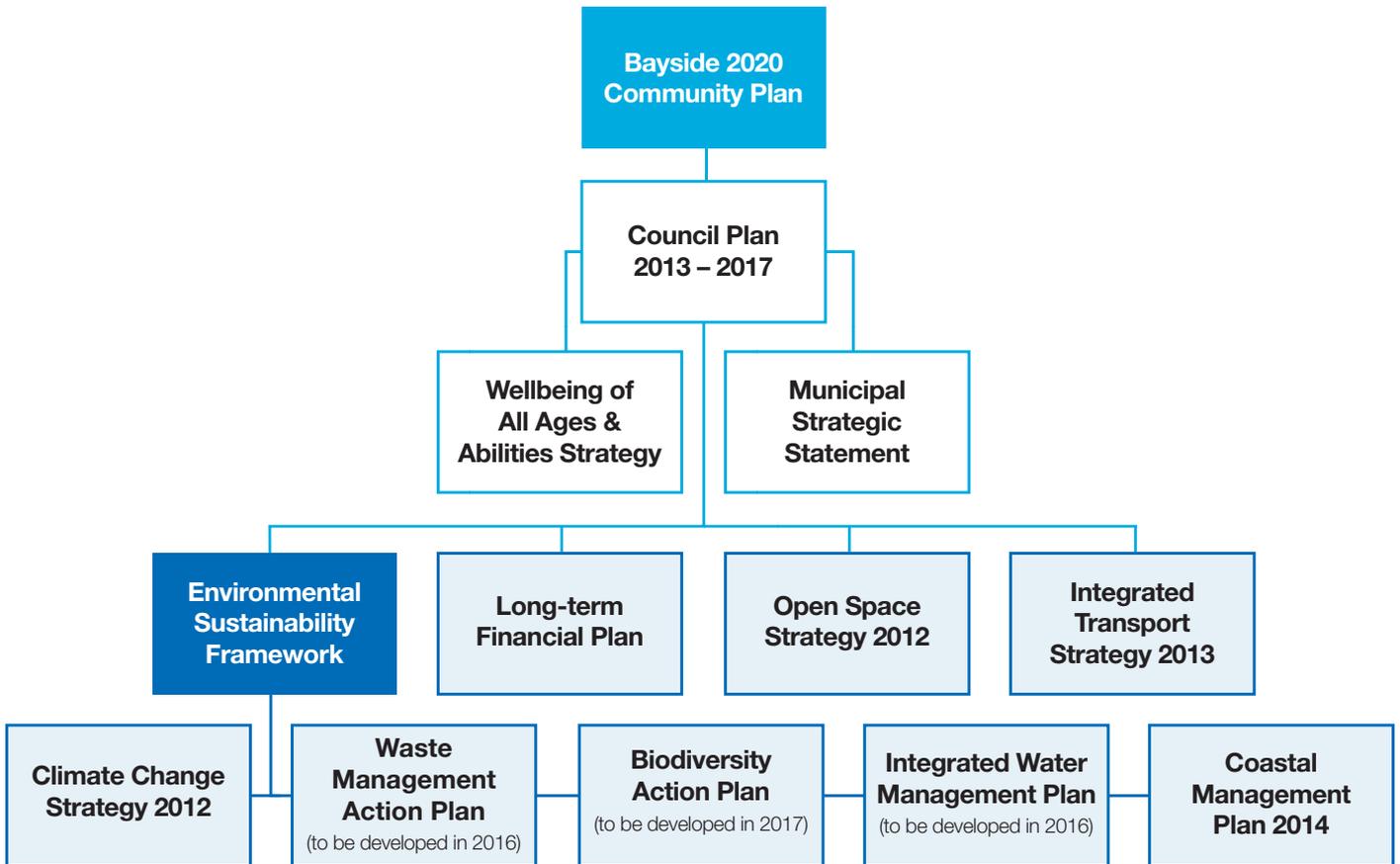


Figure 1: Environmental Sustainability Framework and supporting plans and strategies

focus and actions for achieving Council’s purpose predominantly within the Liveability and Efficiency Key Result Areas of its vision.

The *Environmental Sustainability Framework* (ESF) outlines our challenges in more detail. It describes the strategic context we operate in and identifies broad goals and objectives for environmental sustainability action for the next ten years, and indicators for measuring progress. A four-year Action Plan and subordinate plans and strategies will support the implementation of these goals and objectives. Figure 1 shows where the ESF sits in relation to other Council plans and strategies and its subordinate plans and strategies.

The *Framework* aims to support the community and Council to work together to continue to:

- Identify the key environmental sustainability concerns and develop innovative solutions that assist community action
- Ensure that community environmental sustainability expectations are fulfilled through services delivered by Council
- Ensure that support is provided by Council to enable the community to take up sustainable practices within the community



Environmental Sustainability Framework

Council's Vision

A Vision of a Sustainable Bayside

Transforming Bayside into a better place, one that is sustainable and liveable, is a journey toward a different future. This pathway forward requires a connected community with a shared sense of belonging, ownership and accountability. These elements are imperative if we want to create a resilient community and a thriving, natural environment as we tackle challenges such as resource depletion, species loss, technological change and complex health and economic drivers. Climate change amplifies each of these challenges.

In Bayside's sustainable future, Council understands its role in enabling such change across the community. Council staff and councillors are inclusive of and involve the community in decision-making. Beyond involvement, Council helps to build the capacity of the community to engage in decision-making. Within their own operations Council is leading by example: moving towards carbon neutrality, increasing renewable energy use, maintaining water and energy efficiency, increasing the use of non-potable water and recovering valuable resources.

The Bayside community's vision of a sustainable place is one that supports people to come together

in meeting places such as streets, parks and on the foreshore, and through localised transport options like walking and cycling paths, public transport, car sharing and community transport. People feel a strong sense of community and a strong connection to Bayside.

In this better place the streets, private gardens, parks, foreshore and reserves are havens of flora and fauna indigenous to the Bayside area, have a widespread, shady tree canopy, and include edible landscapes that allow people to produce and harvest fresh food locally. The heritage of buildings and gardens is preserved and Bayside is a beautiful place to be. Residents enjoy a high quality of life in Bayside.

The Bay, foreshore and beaches are cherished. Water pollution to these sensitive environments is minimised by stormwater management practices that remove litter and water pollution. Car usage is reduced through active transport modes and helps improve local water and air quality.

In this better place homes and businesses in Bayside are highly energy and water-efficient and comfortable in all weather conditions. Households and businesses produce less waste with all waste materials being recycled or re-purposed.

Making Bayside a better place

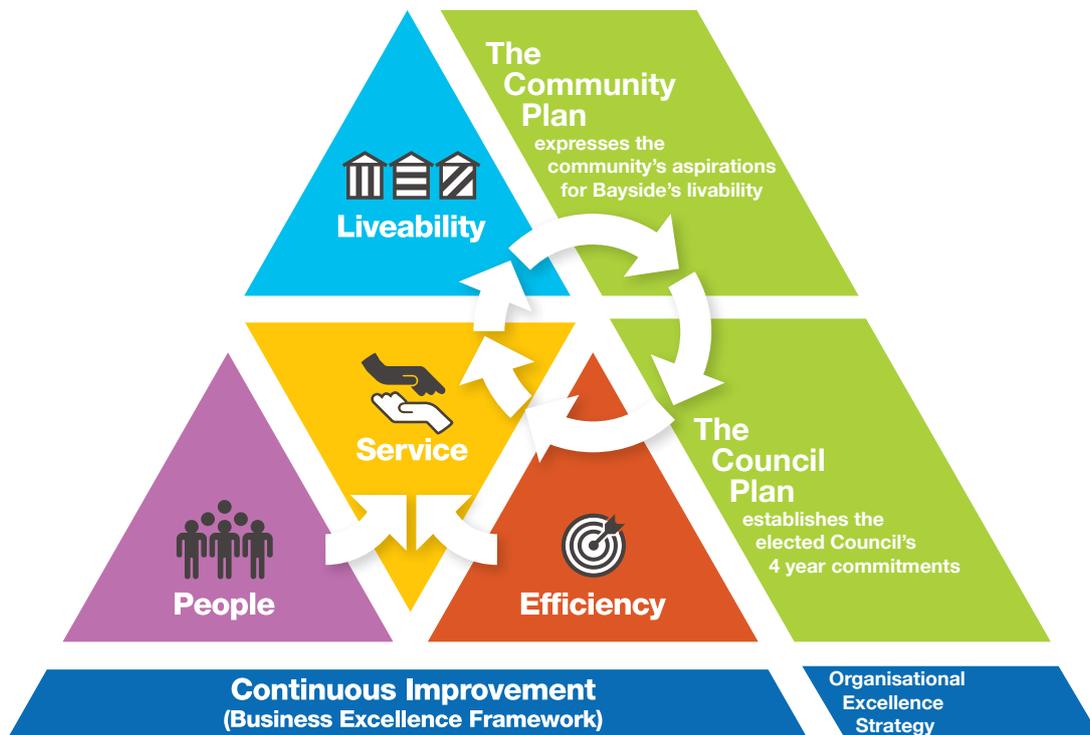


Figure 2: Making Bayside a Better Place

Households buy locally and grow much of their own food.

The social and environmental changes described here support businesses across Bayside to shift their attention from problems to possibilities and derive benefits from the opportunities that a more liveable community brings. More local jobs and growth in key businesses will result from this resilient and sustainable community.

When the impacts of climate change intensify, the Bayside community is prepared with safe and comfortable homes and businesses during heatwaves, storms and floods and infrastructure that can withstand extreme weather. The connected community supports each other through these challenging times as well as Council and community partnerships and networks with those outside the municipality.

The Better Place Approach

Council has developed a performance measurement framework to assist the organisation in managing performance. The Better Place Approach assists the demands for external accountability, establishes clear goals and targets, fosters a strong sense of internal accountability and highlights performance

improvements. The Key Result Areas – Liveability, Services, Efficiency and People – are orientated towards Making Bayside a Better Place.

Council Plan Goals (2013–2017)

1. An engaged community and Council: The Bayside Community will be well informed and will have opportunities to actively participate in Council decision-making.
2. A strong supportive community: Bayside will be a healthy connected community.
3. A liveable city: Bayside will have a well-preserved neighbourhood character and will have accessible transport options.
4. A sustainable natural environment: Bayside will be a leader in environmental management and will be a greener, more sustainable city.
5. A creative and active community: Bayside and its community will have a strong sense of identity, pride and place through its culturally rich arts, recreation and cultural programs.

While the *Framework* aligns broadly with all Council Plan goals, Council Plan Goals 3 and 4 are of particular relevance to the *Environmental Sustainability Framework*.

Bayside City Council's Environmental Commitment

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Bayside City Council's environmental commitment is to:

1. Work in partnership and build strong relationships with our community, government agencies, community organisations and businesses.
2. Minimise Council's own ecological footprint through:
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 - Purchasing environmentally sustainable products and services
3. Advocate for outcomes that deliver high environmental standards and protection.
4. Engage with and build the capacity of the community to care for the environment and minimise their own ecological footprint
5. Lead by example and demonstrate our commitment to environmental sustainability
6. Use Council's legislated and regulatory authority to deliver required standard of environmental outcomes and protection

We will abide by these commitments through the application of sound planning and decision-making processes onto the Action Plan and the actions that develop out of it. This will assist us in achieving the four goals which arose during the consultations.

Goal 1 Leading the way

Bayside City Council operating as a model for environmental sustainability.

Goal 2 Community partnerships

Supporting an empowered and connected community that acts locally to reduce consumption and live sustainably.

Goal 3 Resilience

Developing community and ecosystem resilience for current and future climate change impacts.

Goal 4 Sustainable places

Advocating and influencing for healthier ecosystems and more liveable Bayside urban areas and infrastructure.

We have identified ten focus areas or environmental themes to help us prioritise and achieve these goals.

The ten themes are: biodiversity, environmental citizenship, sustainable buildings, sustainable businesses, sustainable development, sustainable procurement, sustainable transport, sustainable water, waste management, and zero carbon.

Council will measure our progress against clear targets and objectives and improve our practice as we learn, regularly communicating and reporting to the community.

Guidelines for Planning and Decision-Making

The following guidelines will be used to assist Council's planning and decision-making on environmental sustainability. It has been used to develop the 2016–2019 Action Plan and to guide and prioritise implementation of each action.

1. Does Council have a role or responsibility?

1.1 Where Council has no direct responsibility

Where Council has no direct responsibility, Council will consider the importance of the plan or activity and the impact on the Bayside environment to determine if there is a case for advocacy on behalf of the community.

1.2 Where Council has a partial role

Where Council shares responsibility with other agencies, Council will partner, support or seek to influence other agencies to develop an environmental solution consistent with the *Environmental Sustainability Framework*.

1.3 Where Council has a full role

Council's role is either to:

- Provide leadership in its own activities
- Use its powers to determine or regulate the activities of landowners, residents and businesses
- Provide services to support the community and businesses to act sustainably

2. Is the proposal responsive to risk?

Council applies long-term thinking and life-cycle assessment to planning and decision-making and assesses each plan or activity against short, medium and long-term risk and benefit parameters.

3. Is the proposal supported by evidence?

Council actively seeks to build the latest and best thinking, knowledge and practice. All efforts are made to ensure that reliable scientific and technical findings are available to assist planning and decision-making.

Evidence is predominantly based on publications in peer-reviewed journals or reports, or where there is a high degree of support from those with subject matter expertise.

4. Is the proposal viable?

Assessment is made on the capacity and capability of Council and the community to effectively respond to:

- The immediate and ongoing impact on Council resources, systems and liabilities
- The impact on the current and future generations
- Community and stakeholder engagement
- Integration of economic, social and environmental consideration in all we do

5. Does this proposal meet the environmental commitments?

Actions that safeguard the environment for current and future generations are actions that meet one or more of the environmental commitments, and:

- Restore, protect and maintain our natural assets or ecological processes to provide clean air, water, soil and resilient functioning of native plant and animal communities
- Prevent further environmental degradation
- Reduce our resource consumption to within the capacity of natural systems to continually replenish themselves and increase resource recovery for re-use
- Develop a culture of sustainability and strengthen the community's ability to care for the environment

6. Does the proposal provide value for money?

Plans and activities are assessed to determine the environmental, social and financial benefits and impacts.

The Decision-Making Matrix, shown below in Figure 3, will be used to assess proposed actions and should be used when building a business case for projects.

7. Does the plan have additional social and economic benefits?

Plans and activities are assessed to have additional social and economic benefits. An example could be the establishment of a community garden enhancing community partnerships and community bonds (social benefit) and providing cheaper access to fresh fruits and vegetables (economic benefit).

		COST →		
		LOW	MEDIUM	HIGH
↑ SUSTAINABILITY BENEFIT	HIGH	'Quick wins'	Worth considering	Requires strong triple bottom line business case
	MED	Worth considering	Requires strong triple bottom line business case	Not worth considering
	LOW	May be worth considering if easy to implement and has community support	Not worth considering	Not worth considering

Figure 3: Decision-Making Matrix



Goal 1: Leading the Way

Bayside City Council operating as a model of environmental sustainability

Leading behaviour can have a significant effect on the sustainability of our environment. In 2015, the community, as part of the consultations for the Community Plan 2025 and the *Environmental Sustainability Framework*, identified greater leadership on environmental sustainability by all levels of government as an important goal.

Leadership can be shown by us all. It rests not only with government, but with all those in positions of authority and influence, and with each of us as individuals. Environmental sustainability will ultimately be guided by and delivered in partnership with community leadership. The stronger the levels of collaboration the more likely it is that lasting change will occur.

For Council, environmental leadership comes in three forms:

- The extent to which Council as a whole models good practice with its own operations
- The extent to which Council enables, collaborates with and supports community environmental leadership

- The extent to which Council helps the community navigate the opportunities and challenges it confronts now and in the future in ways that enable the community to take action themselves (through advocacy, community education, planning mechanisms, local laws, incentive programs, practical tools, and so on).

Key Delivery Mechanisms

- Climate Change Strategy – A Plan for Council’s Operations – 2012 and Carbon Neutral Review
- Sustainable Building Policy 2010 (to be reviewed)
- Integrated Transport Strategy 2013
- Open Space Strategy 2012
- Open Space Sustainability Water Management Strategy 2011 (OSSWMS)
- Integrated Water Management Plan 2016
- Sustainable Public Street Lighting Plan 2009
- Green Travel Plan 2009

THEME	TARGETS AND OBJECTIVES ¹	INDICATORS
ENVIRONMENTAL CITIZENSHIP	Percentage Increase in staff awareness and engagement in environmental sustainability	Staff satisfaction with Council work on sustainability (Sustainability Culture Indicator annual survey) Number of staff registered in Working Greener Program
SUSTAINABLE BUILDINGS	All of Council buildings developed or upgraded in accordance with the Sustainable Building Policy From 2016/2017 increase square metres (m ²) in Council buildings implementing National Australian Built Environment Rating System (NABERS) requirements into new and retrofit development	Sustainable Building Policy embedded into design and documentation for new and retrofitted Council Buildings to achieve Council Sustainable Building Policy requirements Total m ² of new and retrofit energy, water, waste and indoor air quality meeting NABERS requirements
SUSTAINABLE PROCUREMENT	By 2020 40% of Council procurement to be low greenhouse gas emissions-, water- and materials-intensive and non-toxic products and services By 2025 80% of Council procurement to be low greenhouse gas emissions-, water- and materials-intensive and non-toxic products and services	Sustainability criteria included in Requests For Quotes Percentage of Council purchases that have considered sustainability
SUSTAINABLE TRANSPORT	30% reduction in greenhouse gas emissions intensity of Council's fleet and staff travel to work by 2020	kg CO ₂ e/km
SUSTAINABLE WATER	By 2030 transition from using potable water to using recycled water or stormwater for Council operations and facilities where practical By 2020 source 55% of water supplies from alternative sources; 80% by 2025 By 2020 a 30% increase in water efficiency of Council buildings and operations.; 50% by 2025	Potable water consumption from Council operations. Percentage of Council water use coming from non-potable water sources Consumption of potable water for irrigation within open space
WASTE MANAGEMENT	By 2020 a 60% reduction in Council generated waste to landfill; 90% by 2025. By 2020 a 60% of waste diverted from landfill for reprocessing	Percentage of waste to landfill from Council operations Percentage of recyclables (commingle and green waste) recovered from Council kerbside collection
ZERO CARBON	By 2020 Carbon Neutral Council operations (through energy efficiency and use of renewable energy, with offsets as a last resort) By 2020 a 30% reduction in greenhouse gas emissions in Council buildings By 2020 a 30% increase in the amount of energy sourced from renewable energy for Council's operations. 5% annual reduction of Council total greenhouse gas (GHG) emissions	Council GHG emissions (tonnes of CO ₂ e) Percentage of Council energy produced by renewable energy sources

¹ Baseline for each target are specified within the Action Plan



Goal 2: Community Partnerships

Supporting an empowered and connected community that acts locally to reduce consumption and live sustainably

To understand how each part of the system is interconnected Council and Community must work together to develop new and innovative sustainable solutions.

The challenges of protecting our local environment whilst creating liveable and better spaces are complex. There are diverse perspectives and interests to consider. And each of our challenges has a set of tightly inter-connected social, economic and environmental considerations. Further, the nature of our challenges is not often agreed upon, making it difficult to reach possible solutions.

Council will focus on bringing together the multiple perspectives and interests, and applying systemic approaches to finding these new and innovative solutions. To do this there is a need to build new capacities, craft new ways of seeing and new ways of working together, and innovate in ways that have not previously been possible or understood.

Key Delivery Mechanisms

- Climate Change Strategy – A Plan for Council's Operations – 2012
- Carbon Neutral Review 2016
- Sustainable Schools Strategy (to be developed)

THEME	TARGETS AND OBJECTIVES	INDICATORS
BIODIVERSITY	Increase community participation in biodiversity conservation Increase in plantings of indigenous species.	Number of participants in Friends of Bayside groups' activities Number of indigenous species sold at local nurseries
ENVIRONMENTAL CITIZENSHIP	Increase in community awareness and engagement in environmental sustainability Council to engage with households to: <ul style="list-style-type: none"> • Increase waste diversions • Decrease water consumption • Increase use of renewable energy • Increase energy efficiency 	Biennial environmental citizenship survey covering community attitudes, skills, knowledge, participation and support for environmental sustainability
SUSTAINABLE BUSINESSES	Council to engage with households and small – medium sized businesses to: <ul style="list-style-type: none"> • Increase waste diversions • Decrease water consumption • Increase use of renewable energy • Increase energy efficiency 	Biennial community survey supported by spot sampling, audits and data from other government agencies on: <ul style="list-style-type: none"> Waste types and volumes (tonnes) Water volumes (kL) Installs of renewable energy (kW) Net municipal greenhouse gas emissions (CO₂e)
SUSTAINABLE PROCUREMENT	Increase production and consumption of local food by residents, schools and businesses Increase participation in community food activities including community gardens, food swaps and local farmers' markets.	Biennial community survey on local food production and consumption practices
SUSTAINABLE TRANSPORT	Increase the use of alternative and low carbon modes of transport	Number of staff travelling by car and alternative modes of transport to work Biennial community survey
WASTE MANAGEMENT	Increase diversion of waste from landfill to 60% by 2020, and to 75% by 2025 (from 2014/15 baseline);	Biennial community survey supported by spot sampling, audits and data from other government agencies on waste types and volumes



Goal 3: Resilience

Developing community and ecosystem resilience for current and future climate change impacts

Bayside offers a vibrant and sustainable community surrounded by the natural beauty of coastlines, beaches, sand dunes, marine parks and natural parklands making a coast for all to enjoy and be proud of.

Climate change is with us now and is Bayside's singular most difficult and important social, economic and environmental sustainability challenge. Even with efforts to mitigate climate change, many changes will be irreversible. There is a need to adapt to changes underway and prepare for future change.

It is important that as a community we build the capacity to respond to, and bounce back from the impacts of climate change such as extreme weather events. That is, we need to build our resilience.

Adaptation planning for the impacts of climate change seeks to reduce the likelihood of harmful outcomes to community safety, well-being, infrastructure, service delivery, liveability and the environment, particularly in circumstances where changes could lead to irreversible outcomes.

Council will provide leadership and work with the community to ensure risks are fully understood and help in community preparation, response and recovery from any events.

Key Delivery Mechanisms

- Climate Change Strategy – A Plan for Council's Operations – 2012
- Carbon Neutral Review 2016
- Heatwave Plan 2010 – Sub Plan of the Bayside Municipal Emergency Management Plan
- Flood Management Plan 2011
- Open Space Sustainability Water Management Strategy 2011
- Municipal Emergency Management Plan 2015
- Coastal Management Plan 2014

THEME	TARGETS AND OBJECTIVES	INDICATORS
BIODIVERSITY ENVIRONMENTAL CITIZENSHIP SUSTAINABLE BUILDINGS SUSTAINABLE BUSINESS SUSTAINABLE DEVELOPMENT SUSTAINABLE PROCUREMENT SUSTAINABLE TRANSPORT SUSTAINABLE WATER WASTE MANAGEMENT ZERO CARBON	<p>Council preparedness for, and mitigation of, risks from climate change including:</p> <ul style="list-style-type: none"> • Drought and heat waves • Coastal impacts including storm surges, sea-level rises and coastal erosion • Disruptions to supply of essential services including electricity, fuel, water and food • Heat-related asset failures (for example building cooling systems, surfaces) • Higher peak flows and local flooding • Deterioration of buildings and other built road surfaces • Deterioration of open space, stress on the natural environment and associated costs • Heat-related stress and mortality (particularly among vulnerable populations) • Community impacts – people particularly vulnerable to climate change impacts and less able to respond effectively include the elderly, the very young, people with disabilities or chronic illness, people on low incomes, people with poor quality housing, the homeless, new arrivals and those from diverse cultural backgrounds 	<p>Biennial audit against international standards</p> <p>Number of heatwave deaths, hospitalisations or other heatwave impacts (as compared to other municipalities) (Department of Human Services data)</p> <p>Number of power outages due to extreme weather events</p>
	<p>Community preparedness for, and mitigation of, risks from climate change</p>	<p>Biennial community survey on knowledge and practices</p>



Goal 4: Sustainable Places

Advocating and influencing for healthier ecosystems and more liveable Bayside urban areas and infrastructure

Bayside City Council will strive to ensure the natural environment, distinctive local character and heritage coexist and are highly valued and provide quality leisure experiences. Council will use its regulatory and statutory powers to maximise sustainability in both public and private places. Many of the community's aspirations for a better place and environmental sustainability are beyond the remit of Council. Laws, policies and regulations by State and Federal governments and actions by neighbouring councils and government agencies (such as water authorities) have a large bearing on what is possible.

Council will work with the community to identify priorities for advocacy and work with other agencies and neighbouring Councils to seek to influence the planning and decision-making framework to ensure our infrastructure and urban form is sustainable.

Key Delivery Mechanisms

- Climate Change Strategy – A Plan for Council's Operations – 2012 Plus Carbon Neutral Review
- Integrated Transport Strategy 2013
- Walking Strategy 2015
- Bicycle Strategy 2013
- Open Space Sustainability Water Management Strategy 2011
- Integrated Water Management Plan 2016
- Bayside Tree Strategy 2011
- Municipal Strategic Statement 2000
- Biodiversity Action Plan (proposed)
- Bayside Planning Scheme Coastal Management Plan 2014

THEMES	TARGETS AND OBJECTIVES	INDICATORS
BIODIVERSITY	<p>Maintain natural biodiversity assets and increase conservation effort in areas requiring attention through developing a Bayside Biodiversity Action Plan including but not limited to:</p> <ul style="list-style-type: none"> • Net gain of indigenous flora and fauna species • Increased landscape scale connectivity of indigenous and other vegetation • Increased Council and community knowledge of natural assets including changes in condition on Council managed reserves, foreshore and parks • Reduced negative impacts of pest plants and animals on native flora and fauna • Increased biodiversity and ecosystem health improvements on private land • Increased tree canopy cover • Control of introduced species 	<p>Habitat area, health and biodiversity</p> <p>Tree canopy cover</p> <p>Number of trees planted in streets, parks, foreshore and bushland reserves; target 2000 trees</p> <p>Percentage of new trees planted on nature strips within the Vegetation Protection Overlay Schedule 3 that are indigenous species</p> <p>Number of indigenous plants available for Council use and private sale and sold from the Bayside Community Plant Nursery (100,000 plants available and sold)</p>
SUSTAINABLE DEVELOPMENT	<p>Improved environmental standards for new residential and commercial buildings and renovations in the planning approval process</p> <p>By 2020 90% of Council capital works projects completed consider Environmental Sustainability in planning, design, construction and operation. These will include:</p> <ul style="list-style-type: none"> • Indoor Air Quality • Transport • Energy • Water • Waste • Materials • Biodiversity, land use and ecology • Emissions (GHG) <p>Community Satisfaction rating for appearance of public areas to be no less than 74 Local Government Community Satisfaction Survey index score</p>	<p>Environmental Sustainability requirements incorporated in to planning scheme process, including Built Environment Sustainability Scorecard (BESS) or other superior rating tool</p> <p>Number of capital works projects to include and consider environmental sustainability in design and documentation</p> <p>Number of completed new developments that achieve NABERS as a minimum or other superior rating tool requirements in Bayside</p>
SUSTAINABLE TRANSPORT	<p>Better quality and more integrated transport infrastructure in Bayside to support public transport, cycling and walking to reduce car trips and emissions in Bayside</p> <p>Community and business support for and participation in active, public and low-carbon transport options</p> <p>Community satisfaction rating for local streets and footpaths above 63 Local Government Community Satisfaction Survey index score</p> <p>Community satisfaction rating for traffic management above 58 Local Government Community Satisfaction Survey index score</p>	<p>Use of sustainable transport modes to travel to work by residents (Census data 2016, 2021)</p> <p>Community Satisfaction rating for local streets and footpaths</p> <p>Community Satisfaction rating for traffic management</p>
SUSTAINABLE WATER	<p>Improved (percentage to be determined with relevant water authorities) quality of stormwater entering the Bay</p> <p>Increased retention of stormwater in the landscape</p> <p>Manage storm-water, debris and waste to protect the water quality of the Bay and enhance the environment</p>	<p>Improvements in stormwater quality going into the Bay (EPA Bay water quality data)</p> <p>Total annual number (increased from previous year) of completed actions identified in the Coastal Management Plan 2014 by 2019</p>



Implementation

Performance Measurement, Monitoring and Evaluation

The *Environmental Sustainability Framework* will be implemented from 2016 to 2025. Council's Environmental Sustainability and Open Space Department will monitor and evaluate the implementation of the *Framework*.

The ten year *Framework* will be reviewed:

- Annually (informally) to monitor progress with targets and to assist in guiding annual works plans
- Biennially (formally) to review issues, associated risks and determine the overall success of actions. The action plan will be reviewed and modified where required.

The Indicators will be used to monitor and report on progress towards the targets and objectives identified under each of the Goals. Reporting against the targets and objectives will provide a transparent and comparable method for assessment of progress.

The *Framework* is accompanied by a four-year Bayside Environmental Sustainability Action Plan which details actions, leads, measures, how monitored, timelines and costs, in order to progress the *Framework* targets and indicators.

An annual Environmental Sustainability Framework Implementation Plan will be developed which will link directly to Council's planning system, Interplan.

The Implementation Plan will:

- Detail the priority actions for a given year
- Define annual targets to track percentage progress towards ESF goals and targets
- Detail internal capacity building and organisational development required

Council will ensure accountability of delivering the actions in this strategy through embedding it into Interplan.



Communication and Reporting

An *Environmental Sustainability Framework* Communication Strategy will be developed to guide both internal and external communications.

Regular information about Council and the community's actions towards improving the environment will be provided, including via Council website and community newsletters.

Progress with the annual *Environmental Sustainability Framework* Implementation Plan will be reported quarterly, six monthly and annually, via Council's planning system Interplan. Where progress towards annual targets is not on track, intervention actions will be considered.

An *Environmental Sustainability Framework* annual report to Council will provide progress on actions implemented, and progress towards targets and objectives.

Extracts from the *Environmental Sustainability Framework* annual report will feed directly into Council's Annual Report.



Background

Bayside Community

The Bayside area is characterised by its location fronting onto 17 kilometres of Port Phillip Bay coastline, with many residents highly valuing their easy access to beaches and the open spaces of the foreshore, as well as facilities such as sailing clubs and the Brighton Baths. Residents also enjoy beautiful parks and leafy streets, as well as the golf course precinct in the southern part of the municipality, which provides important natural habitat. Elster Creek is the only significant waterway.

In 2014, Bayside had a population of 99,947 residents living in the suburbs of Beaumaris, Black Rock, Brighton, Brighton East, Cheltenham (part), Hampton, Hampton East, Highett (part), and Sandringham.

The population is growing steadily and is forecast to reach 112,551 residents by 2025 with an average annual increase of 0.85 percent. Building approvals continue to grow with a record 1185 houses, apartments or other buildings approved in the 2014/15 financial year.

Many Bayside households are family households (71 per cent) comprising couples with children, and older couples without children. The largest age groups in the Bayside community are the 40–49-year-olds and the 50–59-year-olds. Bayside is an ‘older’ community compared to metropolitan

Melbourne – the average age of Bayside residents is 42 years whilst the Melbourne average is 36 years. There is a substantially higher percentage of aged persons (85 years and over) than in metropolitan Melbourne.

The 2011 Census showed that 14 percent of Bayside residents took public transport to work – the same as the Greater Melbourne average – while 1.6 percent cycled and 2.2 percent walked to work.

Current State of the Environment

The ten identified focus areas or environmental themes will help us prioritise and achieve the four goals. The current state of these themes is outlined over the following pages.

Biodiversity

The Bayside municipality is located within the Sandbelt region of south-eastern Melbourne, a low-lying region of sandy soil.

Bayside has 77.09 hectares of land specifically managed for conservation. These areas, 56.72 hectares within the foreshore and 20.37 hectares of inland reserves, provide examples of regionally significant flora, much of which is under threat.

These areas are managed in accordance with the Bayside Native Vegetation Works Program (NWP) Stage 1 and Stage 2. As depicted in Figure 5, the Conservation Reserves are:

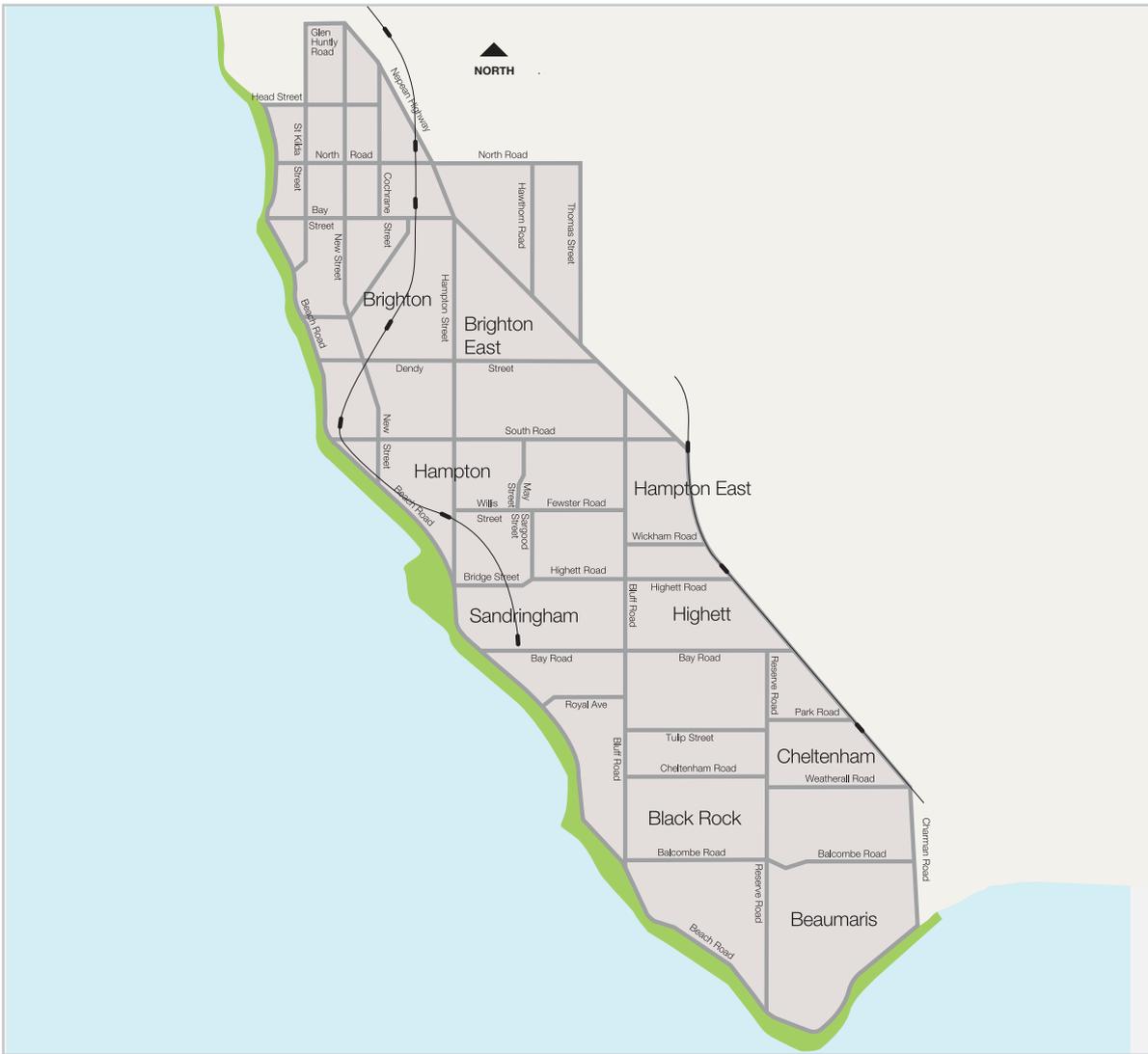


Figure 4: Map of Bayside

Heathland Reserves:

Balcombe Park, Bay Road Heathland Sanctuary, Cheltenham Park Flora and Fauna Reserve, Donald MacDonald Reserve, George Street Reserve, Gramatan Avenue Heathland Sanctuary and Long Hollow Heathland.

Foreshore:

Beaumaris foreshore (north), Black Rock foreshore (south), Brighton Dunes, Picnic Point, Red Bluff, Ricketts Point hinterland and Sandringham foreshore (south).

Some of the heathland reserves are the only surviving remnants of heathland vegetation that was once abundant within the municipality. Golf courses and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) site in Highett also contain remnant vegetation.

Two fauna surveys carried out in Bayside in 1996 and in 2011 included recommendations regarding management of indigenous vegetation, however there has not been an overarching or coordinated approach to manage biodiversity in Bayside on a municipal-wide level.

Bayside has approximately 45,000 native and non-native street trees while the number of trees in parks is estimated at 15,000. Council undertakes biennial tree assessments of tree health and maintains a database about the health of trees.

The defining landscape of Bayside is the foreshore, which covers a total of 99 hectares along the Port Phillip Bay coastline. The Bay is relatively healthy, while the water quality of its beaches varies with rainfall and the impact of waterways or outlets that discharge into the bay.

The 115-hectare Ricketts Point Marine Sanctuary located off Beaumaris is one of the state's marine protected areas and protects a range of marine life.

Bayside also has significant coastal cliffs in the Beaumaris area. Many fossils have been found in this area including various molluscs and the bones of whales, sharks, rays, dolphins, birds and marsupials, indicating the fauna present in this area six million years ago.

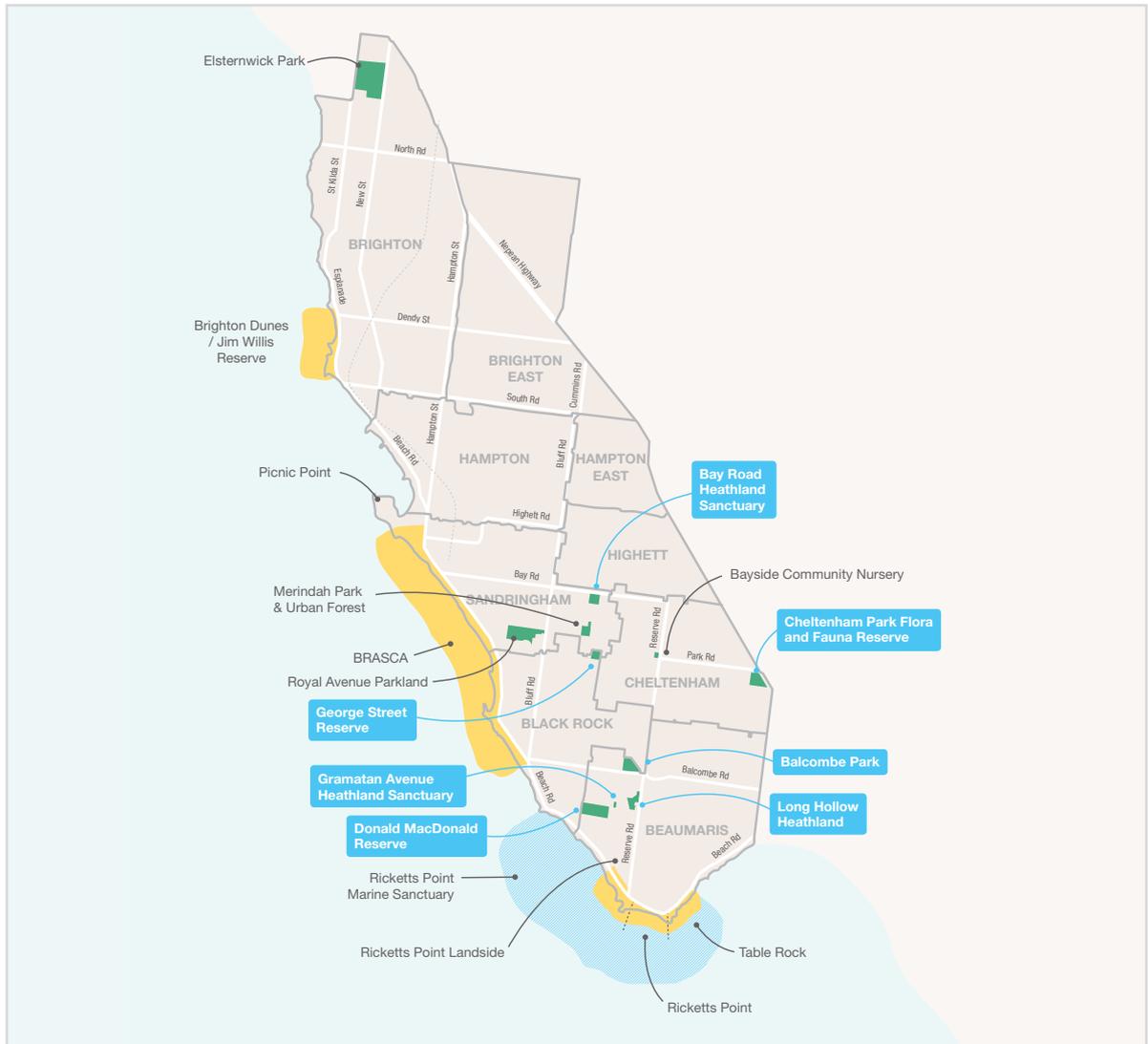


Figure 5: Friends of Bayside work areas in Bayside Reserves

The only waterway within Bayside, Elster Creek, is highly modified from its natural form, containing sections of concrete channel and underground piped drain in parts. Despite this, it is an important habitat for a wide range of flora and fauna.

Sustainable Business

There are 12,554 businesses located in Bayside, the majority being small to medium businesses. To date, Council has run a limited number of sustainability programs with local business, for example supporting local business events to be Waste Wise events.

Council’s Economic Development Plan includes a goal for the Economic Development Unit to develop a program of initiatives in sustainable business practices to support local businesses to operate more sustainably.

Environmental Citizenship

Nature Conservation

There are almost 20 volunteer Friends of Bayside groups within Bayside who work to protect and improve local conservation areas and parks, and educate others about biodiversity through community planting and weeding events, biodiversity monitoring, and social nature events. Council supports these groups’ important work by providing grants and other in-kind assistance.

Eco Footprint and Sustainable Living

In 2004, Council completed an ecological footprint study of Bayside residents. Bayside’s average ecological footprint was calculated at 8.3 hectares per person. This was well above the worldwide average of 2.2 hectares with only 1.9 hectares actually available per person. Bayside’s ecological footprint varied with gender, age, location and wealth, however the study demonstrated that residents consumed a lot of resources to support their lifestyle.

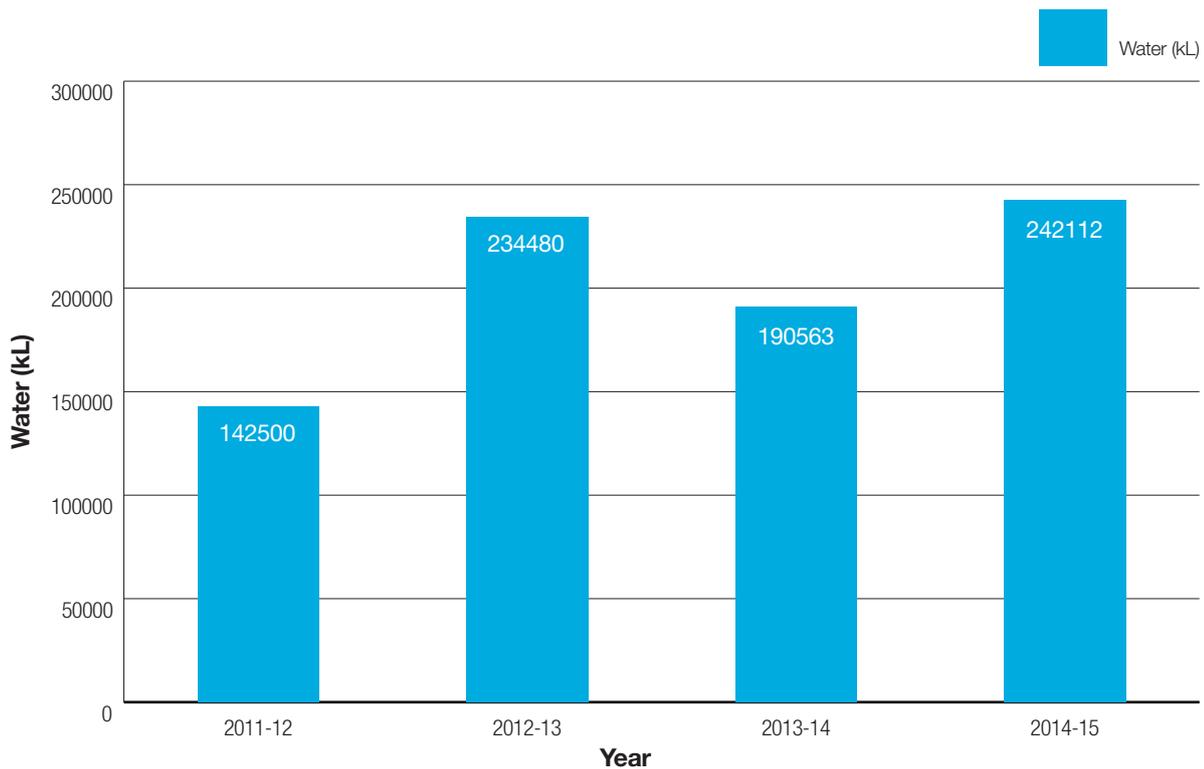


Figure 6: Council's potable water consumption 2011/12 to 2014/15

Council assists residents to reduce their resource consumption and live more sustainably through its sustainability programs, which include workshops, product discounts and giveaways and other assistance to reduce energy, water and waste at home.

Sustainable Schools

Bayside has 30 schools operating from 34 campuses, with an estimated 16,500 students. Sustainability is one of three cross-curriculum priorities in the current Australian National Curriculum Framework for young Australians. There is likely to be demand for support to implement sustainability programs as the new curriculum is implemented, and with increasing recognition of the need to educate youth about environmental concerns.

Council is currently developing a Sustainable Education Strategy and Action Plan focusing on kinder and primary-aged children, with a medium-term goal of including high school students and increasing the high school programs offered.

Currently, support and resources are provided upon request, which does not succeed in creating ongoing and enduring environmental stewardship. Council primarily uses contractors to deliver its schools' sustainability programs.

Sustainable Water

An Integrated Water Management Plan (IWMP) is being developed in 2016 to help Bayside reduce its water consumption, shift to non-potable water sources, and improve water quality and the management of stormwater.

An analysis for the development of the IWMP showed that:

- 6,500 megalitre/year (ML/yr.) of mains water is currently used within Bayside – 350 ML/year is used by Council and the remainder is used by private customers (90 percent residential)
- The total water demand is estimated to increase to 7,800 ML/yr by 2031 with increasing population
- Nitrogen has been found to be the limiting pollutant for the health of Port Phillip Bay. Approximately 22,000 kg/yr of nitrogen is currently discharged from the Bayside municipality via urban stormwater (from roofs, road and other hard surfaces)
- Figure 6 shows Council's potable water consumption from 2011/12 to 2014/15

The analysis for the development of the IWMP identified the potential for harvesting an additional 1,100 ML/yr of stormwater and rainwater within the municipality, which could remove 3,190 kg/yr of nitrogen from entering Port Phillip Bay.

Since the 1995–2009 drought, Council has invested heavily in integrated water management and reducing its operational potable water consumption through:

- Being the first Victorian Council to adopt a Planning Scheme amendment requiring allotment scale stormwater quality management
- Installing large scale stormwater treatment and harvesting systems at Elsternwick Park, Brighton Golf Course and Sandringham Golf Course
- Installing many small-scale stormwater treatment systems in streets and car parks
- Reducing open space water use through upgrading sports grounds with new irrigation systems and changing to low water-use grasses
- Installing rainwater tanks on Council buildings and using water efficiently in order to reduce mains water use

Average water consumption from residential properties across the Bayside City Council area has risen since the break of the drought from 429 litres per household per day in 2012, to 492 litres per household per day in 2013.

Zero Carbon

Climate change is a global, national and local threat to the natural environment and human habitation. The global temperature increase caused by excess carbon pollution in the atmosphere is already resulting in local effects in Bayside, which are projected to intensify, including:

- Decreased average annual rainfall and more frequent droughts
- More intense rainfall events and storms resulting in flooding and coastal storm surge
- More extremely hot days and heatwaves
- Long-term sea-level rise

Bayside's 2012 Climate Change Strategy focuses on responding to the impacts of climate change through initiatives to both reduce greenhouse gas emissions and adapt to the impacts of a changing climate.

In 2008, Council committed to achieving carbon neutrality for its operations by 2020. Its approach to achieving carbon neutrality is based on the adoption of the energy hierarchy of avoidance, energy efficiency, renewable energy and offsetting (such as purchasing approved carbon offsets). Figure 7 shows Council's greenhouse gas emissions profile for 2011–2015.

In 2015 Council conducted a review of progress towards carbon neutrality, which confirmed the following:

- Council's greenhouse gas emissions for 2009/10 baseline year totalled 11,107 tonnes of carbon dioxide (t CO₂e),
- Council's emissions for 2016/17 are expected to reduce by 25 percent compared to 2009/10
- Three additional emission sources (consultant and contractor services, reticulated water supply, and employee commuting) need to be included in Council's emission profile
- Council should continue to follow the energy hierarchy with a focus on minimising emissions first and offsetting as a last resort

Bayside was one of the first councils in Victoria to undertake an energy efficiency retrofit of street lighting. This has led to the most significant reduction in greenhouse gas emissions of all actions taken by Council (27 percent of streetlights emissions or 1,062 MWh per year) and will produce ongoing financial and environmental benefits.

Bayside is working with the Association of Bayside Municipalities to implement a Coastal Adaptation Pathways Project documenting sea-level rises, and identifying sites for hazard assessments; as well as participation in Climate Ready, an interactive adaptation website produced in conjunction with Mornington Peninsula Shire and Kingston City Council, and the Victorian Department of Environment, Land, Water and Planning.

Sustainable Transport

Bayside is a low-density suburban area and not all areas are serviced by public transport. As a result, there is high car dependency. To reduce congestion and local air pollution there is a need to reduce car trips, especially as the population grows.

Bayside is serviced by a number of public transport options including trains along the Sandringham and Frankston lines and public transport buses enabling commuters to travel to the CBD and other areas for work (65 percent of residents travel outside of Bayside for work).

However most short trips are car-based and some of these could be switched to walking or cycling. Council has both a Bicycle Strategy and a Walking Strategy to help support increases in these modes to reduce car trips and to benefit from the health and environmental gains of more active transport.

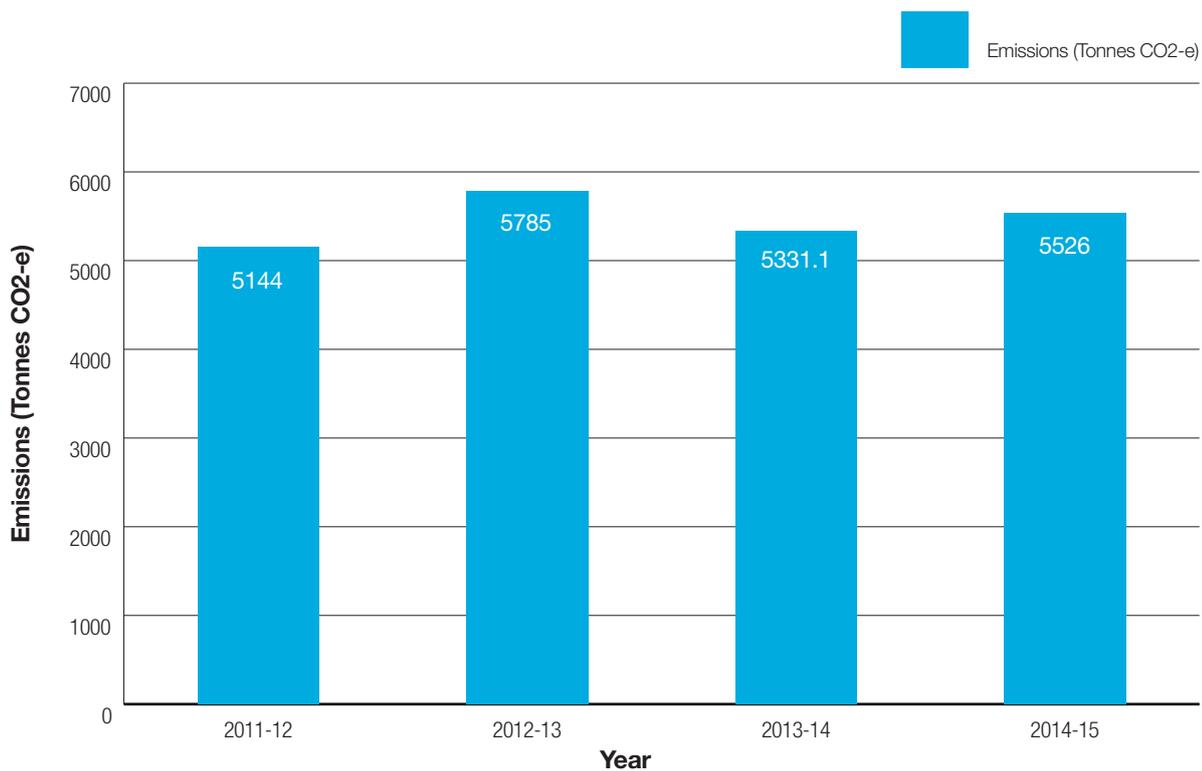


Figure 7: Council's greenhouse gas emissions 2011/12 to 2014/15

Bayside's Integrated Transport Strategy 2013 (ITS) sets the future direction for transport planning and provision in Bayside over the next ten years. The ITS addresses a number of important issues including how to:

- minimise the impact of transport on the environment
- foster a healthy and connected community;
- provide equal access
- improve safety on and off roads
- create a more efficient transport system
- strengthen the economic viability of activity centres and employment nodes
- promote sustainability and active transport modes

Sustainable Development

Incorporating Environmentally Sustainable Design (ESD) elements into all new buildings or renovations in Bayside is a key step in reducing the area's carbon footprint and achieving other positive environmental, economic and social outcomes.

Council currently uses its planning powers to implement Water Sensitive Urban Design (WSUD) principles to reduce stormwater going into the Bay. It also organises the Bayside Built Environment

Awards, which includes a best ecologically sustainable design category as part of an education approach to ESD.

The current 5-star standard for new residential buildings in the Victorian planning scheme is not achieving sufficient sustainability outcomes. As a result, a group of leading Victorian Councils adopted a local planning amendment and created the Built Environment Sustainability Scorecard (BESS) to enable local councils to require higher environmental standards in all new buildings and renovations. The amendment to the Planning Scheme requires all planning applications over a certain size (for example 50m²) to be assessed by the BESS as a way to assist proponents to build more energy and water efficient buildings. This is considered best practice in councils working with their community for sustainable building outcomes. Bayside has not yet adopted this planning amendment.

Sustainable Buildings

Council owns, operates and maintains buildings such as libraries, its Corporate Centre, public toilets and Maternal and Child Health Centres. Buildings such as kindergartens and pavilions are leased to tenants under leases and licensing agreements.

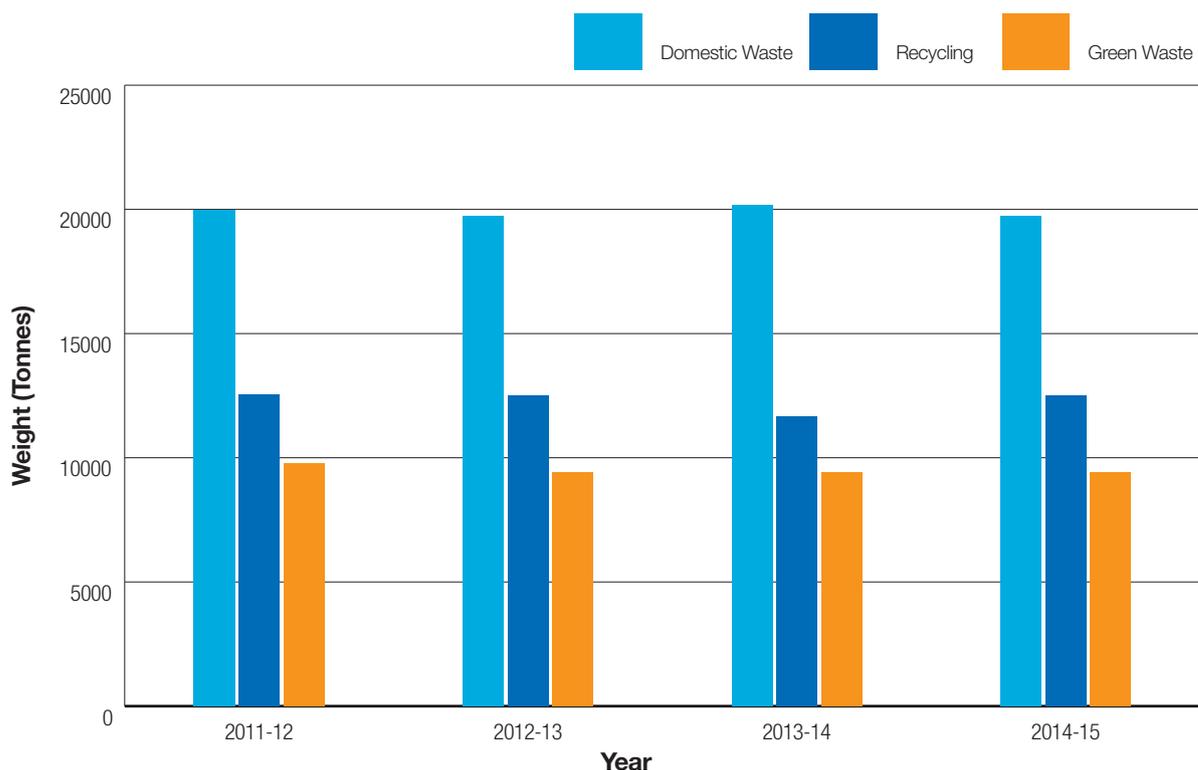


Figure 8: Council's waste to landfill and recycling 2011/12 to 2014/15

The operations of these buildings have an ongoing impact on the environment. Council has a role in minimising the impacts of building use and Council operations and in encouraging sustainable use of buildings by its tenants. It also has a role to ensure that its buildings are designed and built to address the expected impacts of climate change.

Council monitors and reports on energy and water use at Council buildings in order to identify trends and opportunities for improvement. It has conducted energy and water audits of many of its buildings, and continues to implement the audit recommendations to improve resource efficiency. Council has a Sustainable Buildings Policy that describes minimum environmental standards to be achieved in building upgrade, renewal and maintenance programs. This Policy will be reviewed to incorporate the most up to date standards and encompass all stages of building development, including design, demolition, construction and ongoing management and maintenance. It will include a commitment to continue to monitor and report on the environmental performance of its buildings.

Waste Management

Victoria's annual waste generation has increased from roughly eight million tonnes in 2000 to 11.9 million tonnes in 2011 and is projected to continue to rise by about 4 percent annually.

In Bayside waste to landfill has also increased over the same period.

Figure 6 shows Council's waste to landfill and recycling from 2011/12 to 2014/15.

In 2014, 65 percent of the material going to landfill (13,130 tonnes) from waste kerbside bins could have been recycled or composted. Approximately 50 percent of Bayside's landfill waste is food, and 15 percent is recyclable materials. The materials going to landfill from kerbside bins results in significant greenhouse gas emissions and financial cost to Council.

Council provides the following waste services to the community:

- Kerbside waste service, which includes a waste bin, recycling bin and an optional green waste bin
- Hard waste collection service
- Waste transfer and recycling station
- Street and litter bin services
- Home composting products
- Community recycling facilities for batteries, fluorescent tubes and other items
- Waste education services

Council holds an active role, as a member council of the Metropolitan Waste and Resource Recovery Group, in pursuing new and improved waste



management, resource recovery, reduction technologies and practices, and regional partnership projects.

Sustainable Procurement

Sustainable Procurement involves reducing the negative environmental, social and economic impacts of both products and services throughout their entire lifecycles.

Council has a Procurement Policy which is reviewed and adopted annually. The policy is designed to ensure high standards of probity and accountability whilst achieving best value outcomes when purchasing goods, services and works.

The Procurement Policy includes a section on sustainable procurement in which the economic, environmental and social sustainability impacts of procurement decisions are considered. However, this section of the policy requires better integration with other procurement decisions so that it is routinely implemented within Council's procurement, and more support for staff to guide their purchasing decisions.

Bayside is a participant in a Municipal Association of Victoria procurement LEAP program, which will identify improvements in sustainable procurement opportunities.

Sustainable Food

Sustainable food initiatives aim to reduce the greenhouse gas emissions, water and land impacts of food production and consumption by helping consumers choose less impactful products and behaviours. Examples include local food production, food waste composting, and reducing red meat consumption. While there are no 'farms' in Bayside, current sustainable food initiatives include two farmers' markets where farmers and small artisan food businesses sell directly to residents and consumers. This assists in reducing food miles and improving access to seasonally appropriate food.

Community gardens are an opportunity for local residents to grow their own food, as well as enjoy the health and social benefits of gardening. There are different models of community gardens in Bayside including independently operated gardens. Council has a Community Gardens Policy to support the development of more community gardening in Bayside.

Food waste in Bayside contributes to a significant percentage of waste to landfill and avoiding food waste is, and will continue to be, a key component of Council's current waste education program.

Policy Context

Federal and State

Federal and State government legislation, policies and strategies related to the natural environment, agriculture, economy, urban growth, transport and tourism have a significant impact on the future of the Bayside urban and natural environment.

Victoria has more than 25 pieces of legislation and over 30 strategies that relate to environmental management. Table 1 below lists the key Victorian legislation and strategies most relevant to Council

Key Victorian environmental legislative and planning instruments relating to local government:

- *Catchment and Land Protection Act 1994*
- *Climate Change and Environment Protection Amendment Act 2012*
- *Coastal Management Act 1995*
- *Environment Protection Act 1970 and subordinate (State Environment Protection Policies)*
- *Flora and Fauna Guarantee Act 1988;*
- *Marine Act 1988*
- *Planning and Environment Act 1987*
- *Planning and Environment Amendment (General) Act 2013*
- *Pollution of Waters by Oils and Noxious Substances Act 1986*
- Port Phillip and Westernport Regional Catchment Strategy 2013
- Victorian Climate Change Adaptation Plan 2013
- Victorian Waste and Resource Recovery Policy 2014
- Invasive Plants and Animals Policy Framework
- Victorian Waterway Management Strategy 2013
- State Environment Protection Policy (Waters of Victoria)

In addition, relevant Federal legislation includes the *Environment Protection and Biodiversity Conservation Act 1999* as well as international frameworks and conventions to consider.

Regional

Bayside City Council is a member of a number of regional bodies seeking a sustainable future for the region, including:

- The South East Councils Climate Change Alliance (SECCCA), a partnership that brings together interested councils committed to collaboratively

responding to climate change in Melbourne's south east region

- The Port Phillip and Western Port Regional Catchment Management Authority and its Regional Catchment Strategy contains targets and priorities to protect native vegetation, native animals, waterways, water quality and coastlines
- The Metropolitan Waste and Resource Recovery Group (MWRRG) which guides Council waste policy and brings Melbourne's councils together to deliver waste management solutions under the MWRRG Strategic Plan and MWRRG Implementation Plan
- The Association of Bayside Municipalities (ABM) comprised of ten councils that have coastal frontage to Port Phillip Bay seeks to enhance the effectiveness of local government's management of the Bay by improving the overall management of the coastal environment

Local

The *Local Government Act 1989* provides the ability for Bayside City Council to promote the social, economic and environmental viability and sustainability of the municipality.

Council also has significant regulatory roles and responsibilities relating to Federal and State legislation.

Key Drivers and Issues

There are a number of high-level drivers and issues considered as part of the development of the ESF.

Community Infrastructure

Council owns and maintains a significant amount of essential infrastructure that allows the community and businesses to live and function, and supports a high quality of life. Some of the infrastructure in Bayside, such as the stormwater drainage system, is ageing, and will be expensive for Council to replace. The challenge for Council is budgeting to pay for infrastructure in the rate-capping environment. Council's Asset Management Plans provide details on how Council is responding to this.

Transport

Bayside is a low-density urban area, which means servicing a spread out population with public transport and encouraging cycling and walking is more difficult. High levels of car usage in Bayside is leading to congestion and parking issues as well as growing greenhouse gas emissions and air pollution levels.

Public transport is largely a State government responsibility but Council plays a role in supporting public transport use. Cycling and walking paths are largely Council's responsibility but it must partner with other agencies such as VicRoads. Council's Integrated Transport Strategy addresses these matters.

Population Growth

Bayside's population is expected to increase from 99,947 in 2014 to 112,551 by 2025. This will drive demand for new residences and services and is expected to result in increased planning tensions due to infill development, the need for additional open space, pressure on local biodiversity, traffic congestion, parking issues, water and energy consumption and waste generation.

Increased population density can have overall sustainability benefits through more efficient use of existing infrastructure, more people able to access existing services, local recreation and employment opportunities, increased use of sustainable transport, and halting the spread of Melbourne further into farming land. There are competing demands and impacts and they must be monitored and managed effectively.

A Changing Climate

Climate change and its effects are already evident. Bayside is already experiencing and should expect and be prepared for:

- More days over 35°C and higher annual mean temperature
- Fewer but heavier rainfall days
- Reduced average rainfall
- Possible sea-level rise and storm surges on the coast
- Increased frequency and severity of heat waves, floods and drought
- Decreased, uncertain or disrupted supply of electricity, water, food and fuel

There is an urgency to act now to reduce the severity of climate change and prepare for its impacts.

Threats and risks related to climate change within Bayside include:

- Heat-related asset failures (for example building cooling systems, road surfaces)
- Higher peak flows and local flooding through stormwater systems combined with increased rates of blockage and silting

- Faster deterioration of buildings and other built surfaces
- Increased insurance costs
- Deterioration of open space, stress on the natural environment and associated costs
- Higher rates of heat-related stress and mortality (particularly among vulnerable populations)
- Community impacts – people particularly vulnerable to climate change impacts and less able to respond effectively include the elderly, the very young, people with disabilities or chronic illness, people on low incomes, people with poor quality housing, the homeless, new arrivals and those from diverse cultural backgrounds

Council's Climate Change Strategy describes Council's approach to this issue.

Over-consumption

The Bayside community is part of a deeply interconnected global economy that is using natural resources at rates faster than they are being replenished. The lifestyles and economy of affluent nations like Australia are turning natural resources into waste at a rate faster than nature can turn waste back into natural resources. This is not sustainable and a transformation of our lifestyles and our economy is appropriate to allow future generations to enjoy their lives as we do.

The most urgent challenge is to establish a culture in which sustainable living is compatible with a high quality of life; where material consumption is not essential to personal happiness and is decoupled from environmental degradation.

A complex set of social and cultural factors shape our attitudes to the environment, our lifestyles and to our choices on taking subsequent action.

These factors include self-interest, our sense of personal responsibility for and control of environmental impact, our level of environmental knowledge and understanding, and differences in values (for example, how much we value green space).

Water Supply Constraints

The impact of climate change and successive droughts in Victoria has resulted in a less consistent supply of water and the cost of water to rise. For Council, the ability to maintain and preserve community and Council sporting and open space assets has become costlier. The cost of potable water has risen by approximately 150 percent since 2007, to \$3.04 per kilolitre in 2015, driven mainly by the need to pay for large supply augmentations such as the desalination plant and the renewal of ageing infrastructure in Victoria.

Climate change is bringing both a decline in annual rainfall yet more localised flash flooding events which test Bayside's ageing storm-water infrastructure and put pressure on the cost of renewing this infrastructure.

Council's Integrated Water Management Plan will outline Council's response to these issues.

Rate Capping

The State government has introduced policy that will cap the level of rates that Victorian councils are able to charge residents. This will limit Council's ability to raise revenue for the services it provides, despite the growing community expectations for high-quality services. This will require Council to achieve significant efficiencies in order to deliver the services expected by the community but with lower overhead costs. Council's Long Term Financial Plan outlines how Council will respond to this matter.

Community Aspirations

The community has high aspirations for both a high quality of life and a well-protected environment.

A consistent theme that emerged from the consultations in preparing this *Framework* was leadership at all levels of government. This leadership is best demonstrated by Council:

- reducing its own environmental footprint and improving its capacity to lead by example
- engaging and empowering the Bayside community to take action
- encouraging and participating in collective and collaborative action
- advocating beyond its direct responsibility, in particular for development/planning

The *Framework* itself is designed to be visionary, clear and engaging, with actions that are practical, achievable and measurable with clear targets. It needs to factor in Council's remit and constraints such as rate capping, the limitations of local laws and powers and both the immediate and long-term costs and benefits of each action.

How the Framework was developed

A thorough process of community consultation was undertaken in order to develop this *Framework*. The following consultations took place during September to November 2015:

- Online community survey (44 responses)
- Community interviews at public places including Cheltenham, Brighton and Beaumaris (51 responses)
- Youth environmental leaders workshop
- Primary school students workshop (12 year six attendees from two schools)
- A series of three workshops with Stakeholder Leaders comprising representatives of community groups and relevant organisations (22 community attendees). The Stakeholder Leaders Workshops informed the development of the strategy. The workshop process enabled key community leaders to bring ideas and community knowledge to the process, and to provide feedback to drafts of the strategy

Community consultation to develop the new Community Plan was undertaken concurrently with the development of the *Framework* and provided more community input to the *Framework*. In particular, a phone survey of 502 Bayside residents was completed in September 2015 and found environmental issues to be a high priority.

In addition to the findings from the consultation, research was undertaken to provide the background for the *Framework*. Research sources included relevant Council strategies and plans, a discussion paper prepared by Bayside's Environmental Strategy team, a Gap Analysis of Council's environmental work and a recent review of Carbon Neutrality, Food Waste Avoidance and Integrated Water Management approaches.

A report of the background research, community and staff engagement can be found on the Bayside City Council website.



Bayside City Council would like to particularly thank the following for their input into the development of the *Environmental Sustainability Framework*:

Andrea Schujman

Bayside Alliance for Heritage, Environment

Bayside Climate Chance Action Group

Bayside Youth Ambassadors

Beaumaris Conservation Society Inc

Beaumaris Primary School

David Scarr

Friends of Balcombe Park, Beaumaris

George Bennett

Jeremy Newland

John Alkamede

Marine Care Ricketts Point

Michael Norris

Nancy Bulner

Port Phillip Eco Centre

Resilient Aspiring Women

Rosemary Box

Ruth Willis

South East Councils Climate Change Alliance

St Finbar's Primary School

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
BIODIVERSITY			
Increase community participation in biodiversity conservation Increase in plantings of indigenous species	Number of participants in Friends of Bayside groups' activities Number of indigenous species sold at local nurseries	GOAL 2	Environmental Strategy, Open Space
			Environmental Strategy
			Open Space
Maintain natural biodiversity assets and increase conservation effort in areas requiring attention including <ul style="list-style-type: none"> • Net gain of indigenous flora and fauna species • Increased landscape scale connectivity of indigenous and other vegetation • Increased Council and community knowledge of natural assets including changes in condition on Council managed reserves, foreshore and parks • Reduced negative impacts of pest plants and animals on native flora and fauna • Increased biodiversity and ecosystem health improvements on private land • Increased tree canopy cover (to reduce heat island effect, provide shade and improved overall amenity) 	Habitat area, health and biodiversity Tree canopy cover Number of trees planted in streets, parks, foreshore and bushlands; target of 2000 trees Percentage of new trees planted on nature strips within the Vegetation Protection Overlay Schedule 3 that are indigenous species (Target 80%) Number of indigenous plants available for Council use and private sale and sold from the Bayside Community Plant Nursery (Target 125,000 plants available, 125,00 plants sold) Number of plants sold of each species	GOAL 4	Open Space
			Open Space

CW = Capital Works

OB = Operating Budget (current)

F = Future Budget

ER = Existing Resource

G = Grants

ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Develop and deliver Gardens for Wildlife program engaging residents with wildlife gardening improvements	2016/17	Number of participants; Properties involved	ER	OB
Implement Kindergarten Biodiversity program to engage pre-school children with local wildlife	2017/18	Register of number of kindergartens participating	ER	OB
Support local Friends of Bayside groups and natural environment groups to engage more people in their activities such as planting days, etc	2019/20	Friends of Bayside attendance records; Number of residents participating	ER	OB
Develop a Bayside Biodiversity Action Plan including but not limited to: <ul style="list-style-type: none"> • Net gain • Whole of ecosystem approach • Maximise conservation of habitat diversity • Promotion of indigenous flora • Awareness and education • Measure quality and extent of flora and fauna • Weed list and weed actions • Monitoring and data collection system • Control of introduced species 	2016/17 2019/20	Action plan developed; Monitoring data collection system in place	ER	OB
Consistent with Catchment Management Plan 2012 and foreshore precinct master plans seek to increase the area managed under the Native Vegetation Works Plan Stage 2 (Coastal Precinct Specific)	Ongoing	Annual assessment of works program; Total number of indigenous plants used by Council and sold from Nursery	ER	OB
Increase the area managed by the Native Vegetation Works Program as identified in Coastal Management Plan 2014	Ongoing	Annual assessment of works program	G	G
Undertake local indigenous rare plant research, develop management strategies and pilot a reintroduction program	Ongoing	Research completed and management strategies developed; Monitor success of pilot reintroduction program	\$20,000	F; G
Encourage establishment of wildlife corridors and stepping stones to increase connectivity between remnant vegetation	2019/20	Surveys of flora and fauna	ER	OB
Develop Urban Forest Strategy with targets for tree planting to achieve a greater tree canopy cover to reduce heat island effect, provide shade and improve overall amenity	2019/20	Plan developed; Planting implemented; Register of trees	\$50,000	F; G

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
ENVIRONMENTAL CITIZENSHIP			
Percentage Increase in staff awareness and engagement in environmental sustainability	Staff satisfaction with Council work on sustainability (Sustainability Culture Indicator annual survey) Number of staff in Working Greener	GOAL 1	Environmental Strategy, All staff
Increase in community awareness and engagement in environmental sustainability Council to engage with households to: <ul style="list-style-type: none"> • Increase in waste diversions • Decrease in water consumption • Increase use of renewable energy • Increase in energy efficiency Targets to be determined after first survey	Biennial environmental citizenship survey covering community attitudes, skills, knowledge, participation and support for environmental sustainability	GOAL 2	Environmental Strategy, Port Phillip EcoCentre
	Biennial community survey supported by spot sampling, audits and data from other agencies on: <ul style="list-style-type: none"> • Waste types and volumes • Water volumes • Take-up rates of renewable energy and energy efficiency activities • Net municipal greenhouse gas emissions 		Environmental Strategy
			Environmental Strategy
			Environmental Strategy

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Implement the Working Greener staff education program across all business units by 2020	2020	Annual review program Number staff registrations	ER	OB
Develop an Environmental Citizenship Program including a Schools Strategy and Action Plan in partnership with a diverse group of community stakeholders and based on collective impact principles and practices	2016/17	Partnership established; Community participant feedback	ER	OB
Promote and facilitate Teacher Environment Network (TEN) meetings (so that all primary school teachers attend)	Ongoing	Education database; Number of attendees; Schools represented	ER	OB
Primary and secondary schools and early years centres assisted to develop sustainability plans	2016/17	Education Database; Sustainability Plans endorsed by schools	ER	OB
Develop an understanding of the school sector and the barriers and drivers to improving sustainability outcomes and develop Council programs	2016/18	Education Database; Survey responses; Meetings held	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
SUSTAINABLE BUILDINGS			
<p>All Council buildings to be developed and delivered in accordance with the reviewed Sustainable Building Policy in 2016/17</p> <p>From 2016/2017 increase square metres (m2) in Council buildings implementing National Australian Built Environment Rating System (NABERS) requirements or superior system into new and retrofit development</p> <p>Increase utilisation of existing Council owned buildings</p>	<p>Sustainable Building Policy embedded into design and documentation for new and retrofitted Council Buildings to achieve Council Sustainable Building Policy requirements</p> <p>Total m² of new and retrofit energy, water, waste and indoor air quality meeting NABERS requirements</p> <p>Occupancy and use of Council owned buildings</p>	GOAL 1	City Works, Environmental Strategy, Building
			City Works, Environmental Strategy
			Environmental Strategy, City Works, Procurement
			Infrastructure Assets, Environmental Sustainability

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Review the Sustainable Buildings Policy to ensure resource-efficient use of buildings. Incorporate specifications on minimum performance standards for products, technologies and services to help meet Sustainable Building Policy objectives	2016/17	Revised policy	ER	OB
Implement building resource efficiency upgrades as recommended by audits and/or feasibility studies	2017/18	Retrofit actions delivered; Annual assessment of financial costs; Waste, Water, Energy databases	Annual Allocation	CW
Review and amend procurement policy so that all new contracts reflect the revised Sustainable Buildings Policy	2016/17	Revised policy reflected in new contracts; Waste, Water, Energy databases	ER	OB
Review existing occupancy of Council buildings Complete items from Building Asset Management Plan 2016	Ongoing	Occupancy rate; Actions completed	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
SUSTAINABLE BUSINESSES			
Council to engage with households and small – medium sized businesses to: <ul style="list-style-type: none"> • Increase waste diversions • Decrease water consumption • Increase use of renewable energy • Increase energy efficiency Targets to be determined after first survey	Biennial community survey supported by spot sampling, audits and data from other government agencies on: <ul style="list-style-type: none"> • Waste types and volumes • Water volumes • Take-up rates of renewable energy • Net municipal greenhouse gas emissions 	GOAL 2	Economic Development, Environmental Strategy, Environmental Health
			Economic Development, Environmental Strategy
			Economic Development, Environmental Strategy
			Environmental Strategy, Economic Development, Environmental Health

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Develop a program of initiatives in sustainable business practices that will assist local businesses to adopt new environmental and resource usage practices, including facilitating Bayside businesses to access Local, State and Commonwealth sustainability programs	2018/19	Program developed; Attendance or enrolment in program by businesses	ER	OB
Develop a sustainability sub-program of the Bayside Business Network (BBN), with relevant events and support services	2018/19	Attendance of business representatives	ER	OB
Identify and support Bayside businesses that have a “sustainable” product or service portfolio and assist in building local supply chains in this sector Consider establishing a cluster hub of green or sustainable businesses	2019/20	Local supply chains exist	ER	OB
Adopt a methodology for sustainable business certification, such as GreenBiz (*Greenbizcheck is a simple, online assessment covering energy, water, waste, recycling, transportation, procurement, supply chain and optional GHG calculator) and support businesses to use this and adopt a resulting sustainability action plan	2017/19	Number of local businesses using the certification and having an action plan; Survey businesses for participation	ER	OB

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
<p>Use the Planning scheme to incorporate sustainable design and assessment in the Planning Process (SDAPP)</p> <p>Incorporate Environmental Sustainability requirements into planning scheme conditions and process</p> <p>Include the Built Environment Sustainability Scorecard (BESS) to guide staff and developers</p> <p>Develop internal design standards for capital works projects in design, construction, operation, fit out and in consideration of the community to include:</p> <ul style="list-style-type: none"> • Indoor Air Quality • Transport • Energy • Water • Waste • Materials • Biodiversity, land use and ecology • Emissions (GHG) <p>Train planning assessment staff to use the BESS tool to increase knowledge in sustainable design</p> <p>Develop (voluntary) guidelines for design and material selection for development in coastal areas reduce climate change vulnerability</p>	2017/18	<p>Planning amendment passed;</p> <p>Number of approved planning permits with NABERS, BESS and superior rating tools implemented</p>	ER	OB
<p>Join the Council Alliance for Sustainable Built Environment (CASBE) as a member council</p>	2016/17	Participation in CASBE	\$10,000	F

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
SUSTAINABLE PROCUREMENT			
<p>By 2020 40 percent of Council procurement below greenhouse gas emissions-, water- and materials-intensive and non-toxic products and services</p> <p>By 2025 80 percent of Council procurement to be low greenhouse gas emissions-, water- and materials-intensive and non-toxic products and services</p>	<p>Sustainability criteria included in Requests For Quotes</p> <p>Percentage of Council purchases that have considered sustainability</p>	GOAL 1	Procurement, Environmental Strategy
			Procurement, Environmental Strategy, Organisational Development
			Procurement, Environmental Strategy
			Events, Environmental Strategy
<p>Increase production and consumption of local food by residents, schools and businesses</p> <p>Increase participation in community food activities including community gardens, food swaps and local farmers' markets</p>	<p>Biennial community survey on local food production and consumption practices</p>	GOAL 2	Environmental Strategy
			Environmental Strategy

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Review procurement policy with the aim to integrate sustainable procurement into Council's business as usual practice	End 2016	Council endorsed policy Purchases	ER	OB
Develop and deliver sustainable procurement training for key Council staff and ensure training is included in the training calendar	2017	Staff training records	ER	OB
Investigate sustainable purchasing of all goods and ascertain baseline of sustainable purchasing in order to establish a minimum percentage of sustainable purchasing across the organisation	2017/18	Supplier and contractor data	ER	OB
Review Council's Event Management plans and policy to include sustainability principles	2017/18	Annual review of Event Plans	ER	OB
Provide food growing workshops and education program	2017/18	Number of workshops and attendees	ER	OB
Work with the community to assist in them establishing community gardens and other sustainability food activities	Ongoing	Trial and feasibility study completed; Number of community gardens established; other sustainability food activities established	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
SUSTAINABLE TRANSPORT			
30% reduction in greenhouse emissions intensity of Council's fleet and staff travel to work by 2020	kgCO ² -e/km	GOAL 1	Environmental Strategy, Fleet
			Environmental Strategy
			Environmental Strategy, Fleet
			Environmental Strategy, Fleet
Increase the use of active transport and low carbon modes of transport Targets to be determined after first survey	Number of staff travelling by car and active transport to work Biennial community survey	GOAL 2	Open Space, Transport Planner
			Environmental Strategy, Transport Planner
			Events, Environmental Strategy
			Transport Planner, Fleet, Environmental Strategy

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Review the Green Travel Plan 2013–15 and deliver actions with the aim of reducing fleet emissions in particular reducing fuel intensity of Council fleet	2016/18	Review completed Energy database Staff travel survey	ER	OB
Prepare a new Green Travel Plan and deliver the actions achieve a 30% reduction from 2014/15	2018/19	Revised plan delivered Energy database	ER	OB
Investigate the feasibility, suitability and benefits of implementing a car sharing program for Council staff travel	2017/18	Feasibility completed	ER	OB
Investigate the potential expansion of the number of electric vehicles in Council fleet	2017/18	Investigation completed	ER	OB
Continue to promote Bayside's network of shared paths	2016/17	ABS Census Data Victorian Integrated Survey of Travel and Activity	ER	OB
Develop and implement a program of campaigns and events that promote sustainable transport options including: <ul style="list-style-type: none"> information on the Council website social media including mobile phone applications regular articles in Council newsletters prepare an annual report on progress achieved information and orientation kits for new residents event based behaviour change initiatives, such as Ride to Work Day, Global Corporate Challenge and Walk and Ride to School days 	2016/17	ABS Census Data	ER	OB
Provide temporary secure bike parking at Council-run community events to encourage the community to ride rather than drive to these events.	2016/17	Review of event usage	ER	OB
Investigate the potential of broadening access to a car share program for existing residents and business in Bayside	2017/18	Review of existing programs, fleet and infrastructure and investigation	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/PARTNERS
<p>Better quality and more integrated transport infrastructure in Bayside to support public transport, cycling and walking to reduce car trips and emissions in Bayside</p> <p>Community and business support for and participation in active, public and low-carbon transport options</p> <p>Community satisfaction rating for local streets and footpaths above 63 Local Government Community Satisfaction Survey index score</p> <p>Community satisfaction rating for traffic management above 58 Local Government Community Satisfaction Survey index score</p>	Use of sustainable transport modes to work by residents	GOAL 4	Transport Planner
	Community Satisfaction rating for local streets and footpaths		Transport Planner
	Community Satisfaction rating for traffic management		

SUSTAINABLE WATER			
<p>By 2030 transition from using potable water to using recycled water or stormwater for Council operations and facilities where practical</p> <p>By 2020 source 55% of water supplies from alternative sources; 80% by 2025 (from 2014/15 baseline)</p> <p>By 2020 a 30% increase in water efficiency of Council buildings and operations; 50% by 2025 (from 2014/15 baseline)</p>	Percentage of potable water consumption from Council operations.	GOAL 1	City Works
	Percentage of Council water use coming from non-potable water sources		City Works
	Consumption of potable water for irrigation within open space		City Works, Open Space, Melbourne Water
			Open Space, City Works
			Open Space, City Works
A decrease in potable water consumption per household	Biennial community survey supported by spot sampling, audits and data from government agencies to decrease potable water consumption	GOAL 2	Environmental Strategy, South East Water
			Environmental Strategy, Environment Protection Authority
<p>Improved quality of stormwater entering the Bay</p> <p>Increased retention of stormwater in the landscape</p> <p>Manage storm water, debris and waste to protect the water quality of the bay and enhance the environment</p>	Improvements in stormwater quality going into the bay	GOAL 4	Asset Management
	Total annual number (increased from previous year) of completed actions identified in the Coastal Management Plan 2014 by 2019		Strategic Planning

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	ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
	Deliver the Integrated Transport Strategy 2013	2016/20	Census data	ER	OB
	Advocate for greater investment in trains and bus services in Bayside	2016/20	Census data	ER	OB

	Implement corporate centre audit water recommendations	2016/17	Retrofits completed with water metering; Water databases	Annual Allocation	CW
	Monitor water consumption and retrofit buildings (other than corporate centre) for water efficiency and undertake regular maintenance	2018/19	Scheduled maintenance checks; Retrofits completed with water metering; Water databases	ER	OB
	Review Integrated Water Management Plan 2016, Sustainable Water Management Strategy 2010 and 2011 to develop a Water Management Plan for Council by 30 June 2017	2016/17	Water Management Plan in place; Water databases	ER	OB
	Deliver Dendy Park Water Harvesting Project	2016/18	Water databases	\$2.9M	CW; G
	Deliver Dendy Street Beach Rain Garden	2016/18	Project complete	\$1.0M	CW; G
	Work with South East Water to deliver a range of education programs and activities to achieve greater involvement and understanding	Ongoing	South East Water databases	ER	OB
	Advocate to water authorities to do more to encourage water efficiency in households and businesses in Bayside	Ongoing	EPA water quality reports	ER	OB
	Deliver recommendations in the Integrated Water Management Plan 2016 – including improving outfalls to the Bay, increasing stormwater recycling and providing infiltration opportunities	Ongoing	Annual reporting of volumes diverted	ER	OB
	Implement clause 22.10 of the planning scheme: that is Water Sensitive Urban Design	Ongoing	Number of planning approvals with clause 22.10'	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/ PARTNERS
WASTE MANAGEMENT			
By 2020 a 60% reduction in Council generated waste to landfill and 90% by 2025 (from 2014/15 baseline)	Percentage of Waste to landfill from Council operations	GOAL 1	Environmental Strategy, Waste Management
	Percentage of recyclables (commingle and green waste) recovered from Council kerbside collection		Environmental Strategy
	Percentage reduction of paper compared to baseline data		Environmental Strategy
Increase diversion of waste from landfill to 60% by 2020, and to 75% by 2025 (from 2014/15 baseline)	Biennial community survey supported by spot sampling, audits and data from other government agencies on waste types and volumes	GOAL 2	Waste Management
			Environmental Strategy, Waste Management
			Waste Management
			Environmental Strategy, Waste Management
		GOAL 4	Urban Places, Environmental Strategy
	Environmental Strategy		

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Deliver staff education and behaviour change to reduce resource loss (contamination) of recyclable and compostable materials in the waste bins to below 20% by 2020, at the corporate centre	2020	Biennial kerbside waste audits Waste KPI database	ER	OB
Investigate and deliver strategies to decrease paper use across the organisation	2016/17	Reams of paper /per annum; Monitoring software	ER	OB
Introduce composting (or other food waste minimisation) at all Council facilities	2020	Annual bin audits	\$2000	F
Develop a Waste Management Action Plan to inform how the framework outcomes and targets are achieved.	2016/17	Council endorsed Plan	ER	OB
Deliver a range of education programs and activities to achieve greater involvement and understanding of resource recovery within schools, local businesses, sporting clubs and the general community through education programs and activities	2020	Biennial kerbside waste audits Waste KPI database	ER	OB
Investigate and implement potential efficiencies in the hard waste collection service to maximise resource recovery by 2025	Ongoing	Waste databases Customer Service System	ER	OB
Facilitate opportunities, develop programs and provide infrastructure to keep food organics out of landfill by 2018	2016/ 2018	New kerbside organics contracts; Infrastructure	ER	OB
Review, upgrade and promote Bayside's public place bins, in line with best practice along the foreshore, parks and other open spaces	Review 2017 Upgrade 2020	Biennial Audits	\$80,000	F
Facilitate and implement education programs to reduce the amount of litter, particularly at litter hotspots, in public places and open spaces (increasing access to public place recycling)	Ongoing	Annual review of education program including attendance	ER	OB

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/PARTNERS
ZERO CARBON			
<p>By 2020 Carbon Neutral Council operations (through energy efficiency and use of renewable energy, with offsets as a last resort)</p> <p>From 2012/13 baseline:</p> <ul style="list-style-type: none"> • By 2020 a 30% reduction in greenhouse gas emissions in Council buildings • By 2020 a 30% increase in the amount of energy sourced from renewable energy for Council's operations • 5% annual reduction of Council's total GHG emissions 	<p>Percentage of Council energy produced by renewable energy sources</p> <p>Council GHG emissions (tonnes of CO₂)</p>	GOAL 1	Environmental Strategy, Infrastructure Assets, City Works, South East Councils Climate Change Alliance
			City Works, Environmental Strategy, South East Councils Climate Change Alliance
			City Works, Environmental Strategy, South East Councils Climate Change Alliance
			City Works, Environmental Strategy, Finance
			Infrastructure Assets
<p>Increase use of renewable energy</p> <p>Increase in energy efficiency</p> <p>Targets to be determined after first survey (refer to indicators)</p>	<p>Biennial community survey supported by spot sampling, audits and data from other government agencies on:</p> <ul style="list-style-type: none"> • Take-up rates of renewable energy • Net municipal greenhouse gas emissions 	GOAL 2	<p>Environmental Strategy, South East Councils Climate Change Alliance</p> <p>Infrastructure Assets, Environmental Strategy</p> <p>Environmental Strategy, South East Councils Climate Change Alliance</p>

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
<p>Develop and implement a carbon neutral action plan with the following focus areas:</p> <p>Firstly avoid emissions</p> <p>Then reduce energy and resource consumption</p> <p>Then switch energy sources from non-renewable to renewable</p> <p>Lastly, offset residual</p>	2016/17	Carbon Neutral Action Plan complete; Actions verified by annual audit; Energy databases	ER	OB
<p>Investigate feasibility of solar and install based on recommendations of feasibility study</p>	2016/17	Comparison against completed feasibility study; Energy Databases	ER Initial	OB
<p>Investigate feasibility of new renewable energy technologies and battery storage for Council and implement where considered feasible</p>	2017–19	Comparison against completed Feasibility study; Energy Databases	To be determined by feasibility study.	F
<p>Investigate potential to source alternative funding sources such as investment from Clean Energy Finance Corporation (CEFC) Local Government to fund renewable energy installation</p>	2017/18	Report completed	ER	OB
<p>Increase annual overall percentage of low emission asphalt, recycled asphalt, and recycled aggregate in road and footpath construction</p>	2017/18	Amount in tonnes per annum	ER	CW
<p>Develop and facilitate implementation of a community engagement plan for energy efficiency and renewable energy including investigate the feasibility of using Council's rating powers to assist uptake of renewable energy by the community (including solar bulk buy program)</p>	2017/18	Development of plan and progress with plan implementation	\$20,000	F; G
<p>Work with community groups or businesses who lease buildings from Council to reduce greenhouse gas emissions. As the largest lessee emitter, prioritise the Sandringham Family Leisure Centre</p>	2019/20	Number of leased buildings occupants engaged; Energy utility suppliers data	\$20,000	F; G
<p>Develop and offer a solar bulk-buy program to residents and SMEs</p>	2017/18	Energy utility suppliers data	\$20,000	F; G

Bayside Sustainability Action Plan 2016 – 2019

TARGETS/OBJECTIVES	INDICATORS	GOAL	LEAD/PARTNERS
<p>Council preparedness for and mitigation of risks from climate change including:</p> <ul style="list-style-type: none"> • Drought and heat waves • Coastal impacts including storm surges, sea-level rises and coastal erosion • Disruptions to supply of essential services including electricity, fuel, water and food • Heat related asset failures (e.g. building cooling systems, road surfaces, etc.) • Higher peak flows and local flooding • Deterioration of buildings and other built surfaces • Deterioration of open space, stress on the natural environment and associated costs • Heat-related stress and mortality (particularly among vulnerable populations) • Community impacts: people particularly vulnerable to climate change impacts and less able to respond effectively include the elderly, the very young, people with disabilities or chronic illness, people on low incomes, people with poor quality housing, the homeless, new arrivals and those from diverse cultural backgrounds. • Community preparedness for and mitigation of risks from climate change 	<p>Biennial audit against international standards</p> <p>Number of heatwave deaths, hospitalisations or other heatwave impacts (as compared to other municipalities) (Department of Human Services data)</p> <p>Biennial community survey on knowledge and practices</p> <p>Number of power outages due to extreme weather events</p>	GOAL 3	Community Services, Environmental Health
			Environmental Strategy, South East Councils Climate Change Alliance
			Open Space, Environmental Strategy, Infrastructure Assets, Port Phillip and Westernport Catchment Management Authority
			Infrastructure Assets
			Infrastructure Assets, Melbourne Water
			Strategic Planning, Melbourne Water, Victoria State Planning
			Strategic Planning, Victoria State Planning, Association of Bayside Municipalities

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ACTION	TIMING	HOW MONITORED	COST	FUNDING SOURCE
Deliver Heatwave Plan	Ongoing	Annual review of progress with actions	ER	OB
Work with State Government Climate Adaptation programs and SECCCA to maintain up to date knowledge on impacts and adaptation and to develop programs to minimise impacts and help the community prepare for the impacts	Ongoing	SECCCA and other relevant memberships renewed and active participation; Community surveys	ER	OB
Continue to implement actions in the climate change strategy to better understand local impacts	2016 Climate Ready	Number of hits on Climate Ready website	ER	OB
Ensure new community recreational facilities and upgrades along the coast are designed to be easily protected, raised or relocated, or have a shorter design life	2017/18	Review of facilities, both new and upgrades	ER	CW
Work with Melbourne Water to investigate areas of greatest risk from flooding due to extreme events and drainage failure, and investigate site specific solutions	2014/18	Review Flood Management Plan	ER	OB; G
Review and update existing planning overlays including Land Subject to Inundation Overlay (LSIO), Special Building Overlays (SBO) and Flood Overlays (FO)	Ongoing	Planning overlay amendments passed	ER	OB
Continued involvement in the 'Choosing a Preferred Pathway for Port Phillip Bay' project, and liaise with the State government regarding future coastal projects to provide guidance on the development of coastal vulnerability assessments and guidelines	Ongoing	Project includes contribution from Bayside	ER	OB



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