



AGENDA APPENDIX
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**AGENDA ITEM FOR SEPARATE DISTRIBUTION TO COUNCILLORS AND
EXECUTIVE LEADERSHIP TEAM DUE TO DOCUMENT SIZE.**

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E.3 SUSTAINABILITY STRATEGY 2016-2020 – FINAL FOR ADOPTION
SUSTAINABILITY STRATEGY 2016-2020

SOUTH GIPPSLAND SHIRE COUNCIL

Sustainability Strategy 2016 - 2020



South Gippsland
Shire Council



Executive Summary

This document presents the South Gippsland Shire Council's long term sustainability strategy to be implemented by the Sustainability Team. The plan contains a vision for sustainability and a set of actions to be undertaken over the next 4 years to work to achieve our vision. It is a fluid document, structured so that it can change and adapt as Council or government policy and direction changes as well as improvements in understanding and technology.

The plan has been divided up into five broad areas of activity:

1. Community
2. Energy and Water
3. Climate Change
4. Biodiversity
5. Waste Management

The structure of the Strategy has transitioned from the original strategy that was adopted by Council in May 2011 - reflecting the maturing of the organisation. Whilst the original strategy separately defined actions to be completed by other departments of Council and external groups this latest strategy is solely focused on the Sustainability Team and their actions towards the future. In most cases, actions that were previously designated to specific departments for implementation have been incorporated into business as usual activities for those areas.

Our Sustainability Vision

To be a municipality that values its local people, flora and fauna and is committed to actively and collaboratively engaging with its community and other partners in protecting the environment and benefiting from sustainable opportunities.

Key actions identified in the Sustainability Strategy are:

No.	Actions	Timeframe
2.4	Implement the Victorian Adaptation and Sustainability Partnerships grant funded project – Enabling Gippsland Councils to integrate climatic risk and adaptation into local and regional strategies	December 2016
2.5	Implement the Victorian Adaptation and Sustainability Partnerships grant funded project “Agricultural Resilience and Shared Climate Change Opportunities in Southern Gippsland (ACAP)” to support the adaptation to climate changes by local food producers, in partnership with Bass Coast Shire Council.	November 2016
3.5	Continue to implement Council's Greenhouse Gas Reduction Plan with a target of reducing Council's emissions by 20% on 2009/10 levels by 2020.	Annual monitoring 2020

Further actions can be found in the action tables under each key area.



Foreword

So what is Sustainability?

Sustainability has become a wide-ranging term that can be applied to almost every facet of life. Sustainability is one of the most diversely applied concepts amongst academics and professionals discussing the future. It has cut across all disciplines and professions and has developed many complexities. It can have a different meaning for everyone so it can never be assumed that all people mean the same thing when they use it.

For South Gippsland “sustainability” is ensuring that our children and grandchildren inherit a tomorrow that is at least as good as today, but hopefully better! We want to make sure that the way we live our lives is sustainable - that it can continue and keep improving now and into the future.

Sustainability is

- Ensuring that the things we do today do not compromise the ability of future generations to meet their own needs considering the economy, environment or community;
- A form of progress that meets the needs of the present without compromising the ability of future generations to meet their needs;
- The ability to live and work in South Gippsland while protecting our natural assets and providing a high quality of life for residents.

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Introduction

Background

The inaugural South Gippsland Sustainability Strategy was formally adopted by Council in May 2011. Containing more than 100 actions/strategies to be implemented across a broad range of areas relating to sustainability, the document was both very comprehensive and detailed. Development of the Strategy was supported by funding from what at that time was known as the Sustainability Accord. The Accord has since evolved into the Victorian Adaptation and Sustainability Partnership (VASP).

The implementation of the initial Sustainability Strategy was very successful, with almost all actions detailed in the Strategy being completed or substantially advanced. The implementation of significant projects supported by the Strategy has included the Green Street Lighting Project and the development of web based directories, Sustainability Gippsland and the Southern Gippsland Foodmap.

The Green Street Lighting Project involved the replacement of 1,300 80W mercury vapor street lights to the more efficient T5 fluorescent bulbs and has achieved ongoing annual cost savings for Council of more than \$70,000.

In addition to the direct cost savings, the project has reduced Council's annual greenhouse emissions by more than 400 tonnes.

Sustainability Gippsland is a website developed by Council in partnership with the State Government, the Gippsland Climate Change Network (GCCN), and the other Gippsland councils, Sustainability Gippsland is the go-to place for Gippslanders involved in sustainability.

It is a web-based tool designed to engage and support individuals, community groups, local government, organisations and business in Gippsland to coordinate, enhance, and promote activity underway in the sustainability sector. A key driver of the project is to develop stronger networks that can overcome the region's geographical isolation and build capacity through the free exchange of information and the sharing of best practice in developing sustainable and resilient communities in the face of numerous social and environmental challenges.

The Southern Gippsland Foodmap is another successful project, jointly funded by Council and the State Government. It involved the creation of a website that can be used by visitors to the site to source local produce and by business to promote their produce and link with retailers. Launched in 2014 the site has been an enormous success, with other councils from outside of the region now looking to develop their own content to link with the site.

The revised South Gippsland Sustainability Strategy builds on the work already achieved through the implementation of the original Strategy but focuses more on objectives and actions that are able to be implemented with consideration of Council's approved budgets, long term financial plans and existing staff resources.





Why do we need a strategy?

As an organisation that services its community, South Gippsland Shire Council must be part of the change to a more sustainable future. In its operational decisions, it must strive to find a balance between its use of environmental resources, its growth as an organisation and its position as a service provider within the community.

South Gippsland's community is growing and it will continue to grow into the future. This growth will require an increase in building and infrastructure development and an increasing population and visitation to the area. We need to ensure that there are no potential negative effects from this growth and that our community is resilient enough to deal with these changes.

Having a strategic document such as this Strategy helps steer our direction to ensure this is achieved. The benefits of having a Sustainability Strategy is that Council can show that we are leading by example, by sustainably managing our own operations and by providing relevant services and information to the whole community, visitors and businesses.

Benefits

- Promotion of Council's local leadership role
- Direction and vision
- Ability to allocate Council funds towards programs and projects that offer maximum benefit to Council and community
- Cost savings through reduced energy consumption and use of resources
- Opportunities for project and funding partnerships with residents, businesses, farmers, other councils and government agencies at a regional, State and national level

Sustainability Principals

To ensure the Strategy's principles are adopted, South Gippsland Shire Council will:

- Ensure the conservation and enhancement of the diversity of South Gippsland's indigenous flora and fauna
- Manage South Gippsland's coastal and bushland reserves to protect and enhance their natural and recreational values
- Identify risks associated with climate change. Manage these risks by implementing adaptation measures
- Ensure efficient and minimal energy and resources used in all South Gippsland Shire Council operations and within the broader community.
- Encourage development within South Gippsland that is sustainable, minimises impacts on the natural systems and is consistent with the needs of the community
- Improve local knowledge of sustainability principles and practices through active engagement and education of community

Council Policy Framework

Council's key strategic document is the Council Plan 2013 – 2017 which sets out Council's corporate objectives for the future. The Plan is set out in cascading order that links each Outcome to the Objectives and to the action/measures & targets to reach the desired result.

Outcome 1: A prosperous shire

Objective 1.3: Improve the sustainability of the local and regional environment

1.3.1: We will actively engage businesses, farmers, industries and individuals in creating a clean, green Shire, where environmental sustainability is embraced and practiced.

1.3.2: We will promote sustainable waste management practices, energy efficiency and management of our natural resources.



Key Actions & Strategies

Climate Change

In its latest initiatives, the State Government has shifted its direction from encouraging councils to work to mitigate the effects of climate change to now look at adaptation.

There are two main policy responses to climate change: **mitigation** and **adaptation**. Mitigation addresses the root causes, by reducing greenhouse gas emissions, while adaptation seeks to lower the risks posed by the consequences of climate change. Both approaches are necessary, because even if emissions are dramatically decreased in the next decade, adaptation will still be necessary to deal with the global changes that have already been set in motion.

As part of the VASP program South Gippsland Shire Council has been lucky enough to secure funding for two projects. One in which we received \$40,000 is being led by East Gippsland Shire Council and involves all six of the Gippsland councils, looks at integrating climatic impacts into Local Government Process across Gippsland.

We found that despite council plans across Gippsland identifying the need for integrating climate risk and adaptation across organisations very few councils have actually started to embed adaptation into their strategies and plans.

This project will address this gap and aims to provide processes and decision pathways to embed adaptation to climate risk in all local government activities as part of daily business to manage short and long term risks to public assets and services.

The other project – ‘Agricultural resilience and shared climate change opportunities in Southern Gippsland’ – aims to facilitate climate change adaptive strategies for food producers in the area. It will provide opportunities for partnerships between a range of organisations in the Bass Coast and South Gippsland municipalities to further support the sustainability of local food production in a meaningful and practical way.

Being part of the VASP projects strengthens Council's position and acknowledgement that climate change is real and it is/will impact our community and organisation. Council accepts the international scientific consensus that climate change is the result of an increase of anthropogenic greenhouse gases in the atmosphere and that it is influenced primarily by human activities.

South Gippsland Shire sources its scientific data from the Commonwealth Science Industry Research Organisation (CSIRO), the Intergovernmental Panel on Climate Change (IPCC) and Australia's Climate Council. Key actions in addressing climate change are to manage and reduce greenhouse gas emissions, adapt existing activities to reduce impacts on the environment and educate the community on how best to adjust and plan for climate change.

Climate change is the preeminent environmental issue of our time. It is an international concern that will be experienced locally. Increasing concentrations of greenhouse gases (GHGs) in the atmosphere are changing the climate in ways detrimental to social and economic well-being.

Current research suggests climate change impacts in South Gippsland will likely result in:

- More days over 35 degrees.
- Less annual rainfall, but more intense rainfall events.
- More days with high and extreme fire danger.
- More extreme weather events (floods and droughts).
- Decreased water flows in rivers and wetlands.
- Increased weed and pest distribution.
- Increasing sea temperatures and sea levels.

With the economy of South Gippsland so heavily reliant on its natural resources (agriculture and tourism) the South Gippsland Shire is vulnerable to the impacts of climate change.



Climate Change

No.	Actions	Timeframe
2.1	Actively work to embed sustainability principles into Council policies and processes.	Ongoing
2.2	Work towards incorporating sustainable design principles and requirements into Council's planning scheme.	Ongoing
2.3	Encourage the use of sustainability principles in the development and refurbishment of Council buildings.	Ongoing
2.4	Implement Victorian Adaptation and Sustainability Partnership grant funded project – Enabling Gippsland Councils to integrate climatic risk and adaption into local and regional strategies.	30 December 2016
2.5	Implement Victorian Adaptation and Sustainability Partnership grant funded project 'Agricultural resilience and shared climate change opportunities in Southern Gippsland (ACAP)' to support the adaptation to climate changes by local food producers, in partnership with Bass Coast Shire Council.	November 2016
2.6	Develop a sustainability policy for Council	June 2017
2.7	Advocate and apply for grant funding to complete initiatives identified in Sustainability Strategy	Ongoing
2.8	Investigate possibility of grant funding towards undertaking an assessment of the condition and effectiveness of the seawalls within the municipality and the governance around there ongoing maintenance.	June 2017

Community

Sustainability is a challenge for everyone. To achieve effective sustainable outcomes, we need to encourage resilient and vibrant communities. Increasingly Council is being seen by many residents as having a role in facilitating the sustainable development of their communities and whilst we need to get our own house in order first, Council still has an important contribution to the community in being a leader, partner, advocate, and facilitator and in some cases, by taking direct action.

No.	Actions	Timeframe
1.1	In conjunction with Bass Coast Shire Council, coordinate the running of the annual South Gippsland Sustainability Festival. The festival will now be run alternately in each municipality.	Annual
1.2	Actively encourage carpooling and other active transport alternatives for Council staff, Councilors and community members	Ongoing
1.3	Encourage and support community gardens (vegetables and fruit) and kitchens to promote home vegetable gardening, local produce and composting education	Ongoing
1.4	Promote local food producers and retailers and sustainability practices within the local agricultural industry in partnership with local industry bodies and community groups.	Ongoing
1.5	Continue to advocate for appropriate state and national policies and programs to support the transition to sustainable societies.	Ongoing
1.7	Support and promote the continuing development and implementation of the Sustainability Gippsland website.	Ongoing
1.8	Maintain interactive sustainability education materials and sustainability resource library to encourage education about sustainability issues.	Ongoing
1.9	Deliver sustainability education through public media outlets including social media and community radio.	Ongoing
1.10	Work with the community to explore and implement a community energy project within the municipality.	Ongoing



Energy & Water

Reducing energy consumption has become one of our biggest sustainability challenges, because of our dependence on it and the environmental consequences of its use. Our use of fossil fuels as our main source of energy is causing the planet to warm rapidly and these climatic changes are resulting in a reduction of rain, thus reducing water resources also. Water quality and quantity is important to maintain local agriculture, tourism and townships. Drought prevalence and severity is expected to rise and we are in a position to support the preparation of the community to manage these risks and maintain healthy prosperity levels.

Now more than ever it is crucial for Council to continue to work with our community and other levels of government to reduce greenhouse gas emissions and water consumption, and to change the way we work to integrate environmental sustainability into everything we do. We must all work together to reduce our ecological footprint and indeed seize the opportunities that are opened up by the rapidly emerging green economy. South Gippsland Shire Council continues to take responsibility for our emissions and supporting a sustainable quality of life for current and future generations.

No.	Actions	Timeframe
3.1	Work in partnership with other Natural Resource Management agencies to reduce water consumption across the municipality.	Ongoing
3.2	Support audits for households, businesses and community groups to identify opportunities to improve energy and water efficiency.	Ongoing
3.3	Support the diversification of energy systems to include more sustainable sources, such as solar and wind.	Ongoing
3.4	Where opportunity and funding exists, replace public lights with more sustainable alternatives.	Ongoing
3.5	Continue to implement Council's Greenhouse Gas Reduction Plan with a target of reducing Council's emissions by 20% on 2009/10 levels by 2020.	Annual monitoring 2020
3.6	Monitor organisational greenhouse emissions by source, reporting annually on emissions levels and providing the ability to identify further efficiency improvements.	Ongoing
3.7	Promote the introduction of renewable energy and resource efficiency initiatives in public and community buildings.	Ongoing
3.8	Continue to implement energy efficiency and renewable energy initiatives across Council facilities via Council's Revolving Sustainability Fund.	Ongoing
3.9	Support the implementation of community-owned renewable energy projects within the municipality.	Ongoing
3.10	Evaluate the water usage data for Council's highest water usage sites with a view to identifying opportunities to reduce water consumption	Ongoing



Biodiversity

South Gippsland contains a diverse natural environment. Stretching from the Strzelecki Ranges containing tall forest including patches of endangered Cool and Warm Temperate Rainforest, to the coast where wetlands of national and international significance such as Corner Inlet can be found. These diverse vegetation communities also contain a wide range of native plants and animals. Some plant and animal species are unique to the region including the Giant Gippsland Earthworm, the Eucalyptus Strzelecki and the Strzelecki Koala.

The protection of South Gippsland's biodiversity (the plants, animals and microorganisms, as well as the variety of genetic material they contain and of the ecological systems in which they occur) is critical for our survival.

Biodiversity provides food for people and animals, materials such as timber and natural fibers, medicines, chemicals and genetic material.

Biodiversity ensures the maintenance of ecological process including the maintenance of water quality within catchments, protecting soil fertility, the cycling of nutrients, weather moderation, pollination of crops, pest control and storing carbon emissions.

Biodiversity provides aesthetic and recreational values for us to explore and enjoy i.e. Wilson Promontory National Park, which contains a diverse range of vegetation communities and native plants and animals

The study of biodiversity (e.g. biology, biochemistry, ecology, genetics and agronomy) also leads to a greater understanding of the natural environment and potential breakthroughs in the management of biological systems with the associated benefits to agriculture and industry.

Key issues facing biodiversity include the ongoing destruction of habitat (removal of native vegetation), species loss/extinction, invasion by pest plants and animals and pathogens e.g. *Phytophthora cinnamomi*, climate change, absence or use of inappropriate fire regimes, decline in genetic diversity due to species fragmentation and isolation and the protection and restoration of waterways.

Strategies aimed at supporting the protection of biodiversity include forming and maintaining strong partnerships to promote and implement protection and enhancement activities, promote the importance of biodiversity values to landowners and the community and ensure that new developments maintain or enhance biodiversity values.

Biodiversity is the variety of all life forms. The different plants, animals, fungi and micro-organisms, the genes they contain and the ecosystems of which they form a part. Australia is one of only 35 countries recognised as 'mega-diverse', meaning that a significant proportion of the world's biodiversity is located here. It is estimated that Australia is home to about one million species of plants, animals and micro-organisms, many of which are endemic and cannot be found elsewhere in the world.

Biodiversity is essential to sustaining the living networks and systems that provide us all with health, food, wealth, fuel and the vital services our lives depend on. These organisms, ecosystems and ecological processes supply us with oxygen and clean water.

They help keep our lives in balance and regulate the climate. Yet this rich diversity is being lost at a greatly accelerated rate because of human activities. CSIRO research shows that by 2070, the impacts of climate change on Australia's biodiversity will be widespread and extreme. We need to take action now to preserve this irreplaceable natural wealth and reduce biodiversity loss.

No.	Actions	Timeframe
4.1	Work in partnership with internal departments, state government, WGCMA, Landcare, VFF, SGW, GW and SRW to promote and implement protection and enhancement initiatives for water quality and biodiversity (where appropriate and funding provided).	Ongoing
4.2	Investigate the potential and the feasibility of purchasing and using cameras to capture animal activity throughout the municipality and use this for the promotion of establishing native gardens and increasing biodiversity.	Ongoing
4.4	Complete a cost analysis of the in-house roadside weed control program to assess the extent of additional works possible and undertake works accordingly.	Ongoing
4.5	Seek funding to increase biodiversity education within the bush reserves and the local community.	Ongoing
4.6	Conduct an annual survey on staff knowledge and behavior toward the environment. Sustainability and climate change awareness to be included in survey.	Annually



Waste Management

Most people don't think about the waste they produce, how much of it they produce or where it ends up. Waste has become a by-product of modern living. Almost everything we do creates waste and as a society we are currently producing more waste than ever before.

So what do we do with all this waste? Council provide services to recycle or reuse materials where possible before the residual waste is sent to landfill for disposal. Once waste is landfilled the potential resources within it are lost. In South Gippsland approximately 17,000 tonnes of waste is disposed of to the Koonwarra Landfill annually. This equates to 600kgs per person per year of waste disposed of to landfill. This not only represents a huge amount of lost resources but also a substantial cost to Council to manage the waste.

How we manage this waste sustainably is an ongoing issue. It is predicted that our current landfill site at Koonwarra (Stage 1) has enough approved airspace to provide for waste disposal until 2031. Stage 2 of the site, which requires EPA approval to proceed, could provide landfill airspace to last until 2060. If EPA do not approve Stage 2 of the Koonwarra Landfill Council will have to either source an alternative landfill site or an alternative to landfill. In the scheme of things that's

not that far away. EPA approvals for Stage 2 are due to be sought during the 2016/17 year to secure ongoing landfill airspace for South Gippsland.

To minimize the amount of waste going to landfill and to prolong the life of the Koonwarra Landfill, Council has and is continuing to implement waste services that maximize resource recovery and meet the needs of the local community. In July 2015 Council introduced a kerbside green waste collection service. Removing green waste from our kerbside garbage service will divert approximately 1,000 tonnes of green waste from our landfill to be turned into a usable compost product. In the future this service will hopefully include food waste once a suitable composting facility is available. Removing organic waste from the landfill not only frees up space in the landfill, but organic waste when disposed of under wet, anaerobic conditions such as those in landfill produce methane containing biogas. The methane in biogas is 20 times more potent than carbon dioxide. Therefore, uncontained landfill gas, which escapes into the atmosphere, may significantly contribute to the effects of global warming.

Composting and reusing the green waste is a far more environmentally sustainable way to dispose of green waste, Council also rehabilitates the Koonwarra Landfill progressively as it fills up with waste. Capping and rehabilitating the landfill progressively reduces the amount of damaging landfill gas from escaping to the atmosphere. The introduction of a Reuse Shop at the Koonwarra Transfer Station site is also aiding in the reduction of waste to the landfill.

Another Council initiative to increase the sustainability of our landfill and reduce the amount of space taken up is the installation of a tarp cover system for the landfill. Before its implementation in July 2015, a 300mm deep layer of soil had to be placed over the top of the waste in the landfill. This stops litter and odour escaping from the site and also prevents pest vectors from accessing the waste. The problem with adding a layer of soil each day is that this soil then takes up a significant amount of space in the landfill. The roll out tarp system now being used at the Koonwarra Landfill achieves the environmental requirements of soil cover while not wasting valuable landfill airspace.

Sustainable waste management is a core service of South Gippsland Shire Council. Waste management is a fundamental element in caring for our natural environment and as such a separate Waste Management Strategy has been developed and adopted by Council to provide sustainable solutions to the collection, disposal and resource recovery of waste.

The development and implementation of Council's Waste Management Strategy has guided current service delivery and assist's in the future planning of services. It was developed as part of the commitment Council has made to provide sustainable solutions for the management of waste generated within our community. Sustainable approaches to waste management need to be integrated into future policies, strategies and planning decisions made by Council.

No.	Actions	Timeframe
5.1	Implement actions contained in Council's Waste Management Strategy	Annual
5.2	Investigate and implement a full organics (food & green waste) collection if viable	2019/2020
5.3	Implement public place recycling in townships areas and high visitation areas	Ongoing
5.4	Seek and obtain EPA works approval for Stage 2 of the Koonwarra Landfill	2016/2017
5.5	Implement a WAIV leachate management system at the Koonwarra Landfill	2016/2017



Monitoring & Review

The success of this plan will be evaluated against the actions identified in the action tables such as:

- Demonstrating a reduction in corporate greenhouse gas emissions by 20% on 2009/10 levels by 2020
- Action taken towards the embedding of adaptation into Council processes and procedures.
- Demonstrate action that builds resilience to climate change impacts in Council's operations, services and infrastructure

Council's Sustainability Team is responsible for ensuring these actions are realised. Where applicable the actions will be incorporated into department business plans and work plans.

This is a fluid document, structured so that it can change and adapt as Council or government policy and direction changes as well as improvements in understanding and technology.

Please note: While many of the actions in the strategy are operational with no direct additional financial cost, some of these actions will require Council providing appropriate allocations in budgets. This will need to be taken into consideration during monitoring and evaluation.