

Regional Circular Economy Plan Gippsland



October 2022



Thank you to all organisations that contributed to the development of the Gippsland Regional Circular Economy Plan.



Advanced Manufacturing Growth Centre; APCO; Australian Biofert; Biomix; Close the loop; Committee for Gippsland; Department of Environment, Land, Water and Planning; GDP Industries; Geelong Chamber of Commerce; MWRRG; National E-Waste Alliance; Opal Australian Paper; Repeat Plastics Australia Pty. Ltd.; Resource Recovery Gippsland; SENVIC - Social Enterprise Network Victoria; Solar Victoria; South Gippsland Shire Council; Tetra Pak; Van Schaik's Bio Gro Pty. Ltd.; Visy

This report's photos were taken on Country of the Gunaikurnai People and Bunurong People.

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



Message from the Minister

From waste to value - A regional approach to growing regional Victoria's circular economies

Victoria is transitioning to a circular economy, with government, business and community looking for new ways to reduce waste, recycle and reuse more.

Regional Victoria is integral to tackling this broad and complex issue - just as it is integral to the state's economic success, its rich social and cultural heritage, and its stunning landscapes and ecosystems.

The Regional Circular Economy Plans (RCEPs) have been developed by regional Victorians, for regional Victorians, with over 125 organisations contributing to their development.

Each region is unique, with its own strengths to build from, and challenges to consider. The plans are statements of intent for where each region would like their circular economy to be by 2030, and the path to achieving this.

Moving to a circular economy opens exciting opportunities for each region to strengthen their local economies, develop new markets, attract investment, and create jobs - supporting their communities and protecting their environments into the future. The plans have been developed as an accessible resource for all to use, to support collaboration, strategic planning, and investment. I look forward to the plans being used to progress circular economy outcomes across regional Victoria.

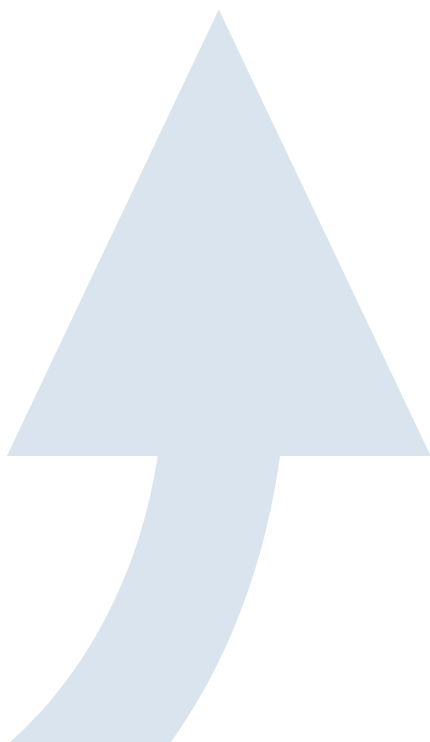
The Victorian Government is investing over \$515 million to transform Victoria's waste and recycling industry. The RCEPs support the delivery of the \$380 million Recycling Victoria: A new economy plan - Victoria's 10-year circular economy plan to reduce waste, increase recycling, and creating more value from our resources. This will help divert 80 per cent of all material away from landfill, create nearly 4,000 new jobs and boost Victoria's economy by up to \$6.7 billion by 2030.

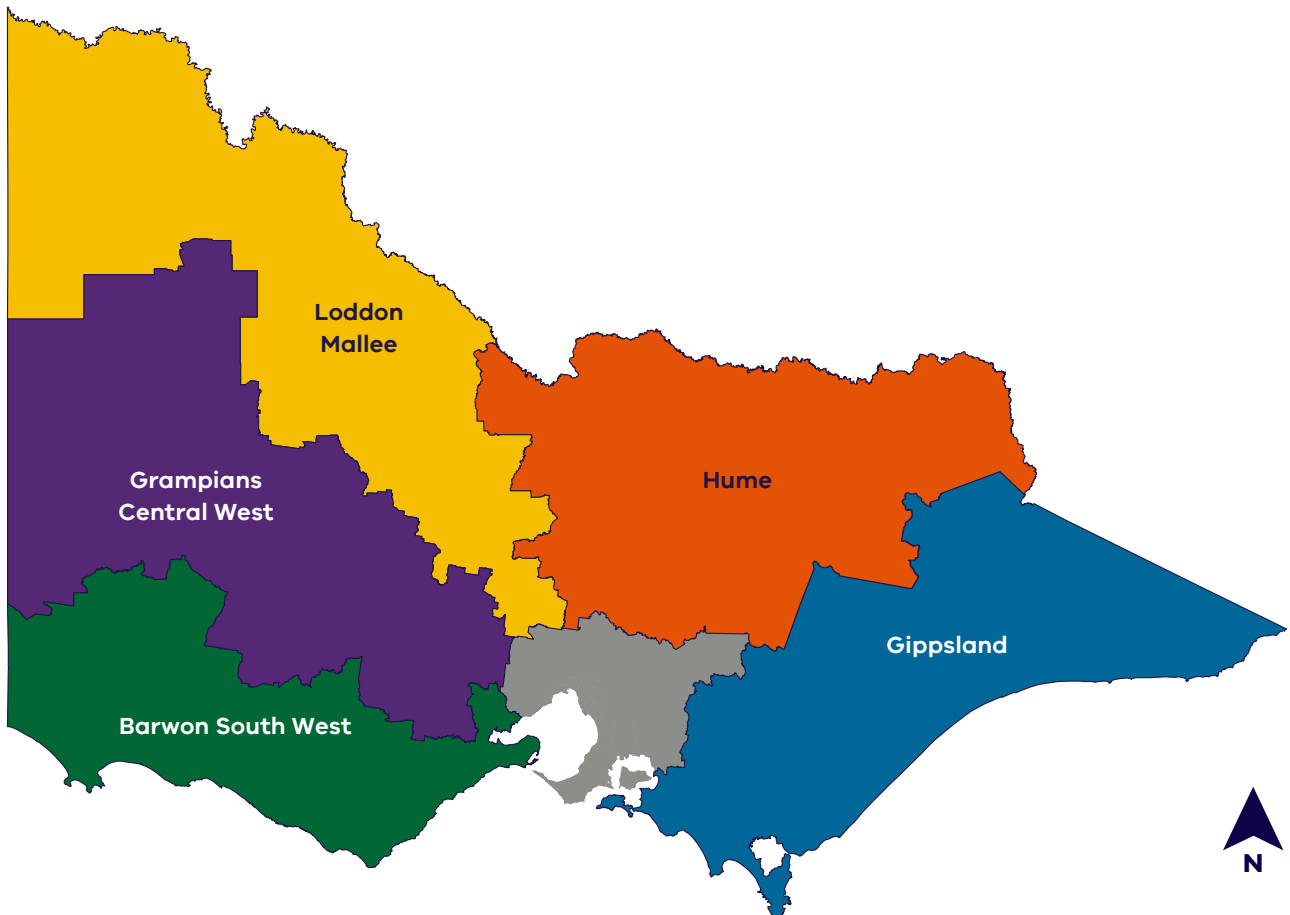


A blue ink handwritten signature of Lily D'Ambrosio.

The Hon. Lily D'Ambrosio MP

Minister for Energy
Minister for Environment and Climate Action
Minister for Solar Homes





The five regions of Victoria that have developed Regional Circular Economy Plans

Circular economy plans for regional Victoria

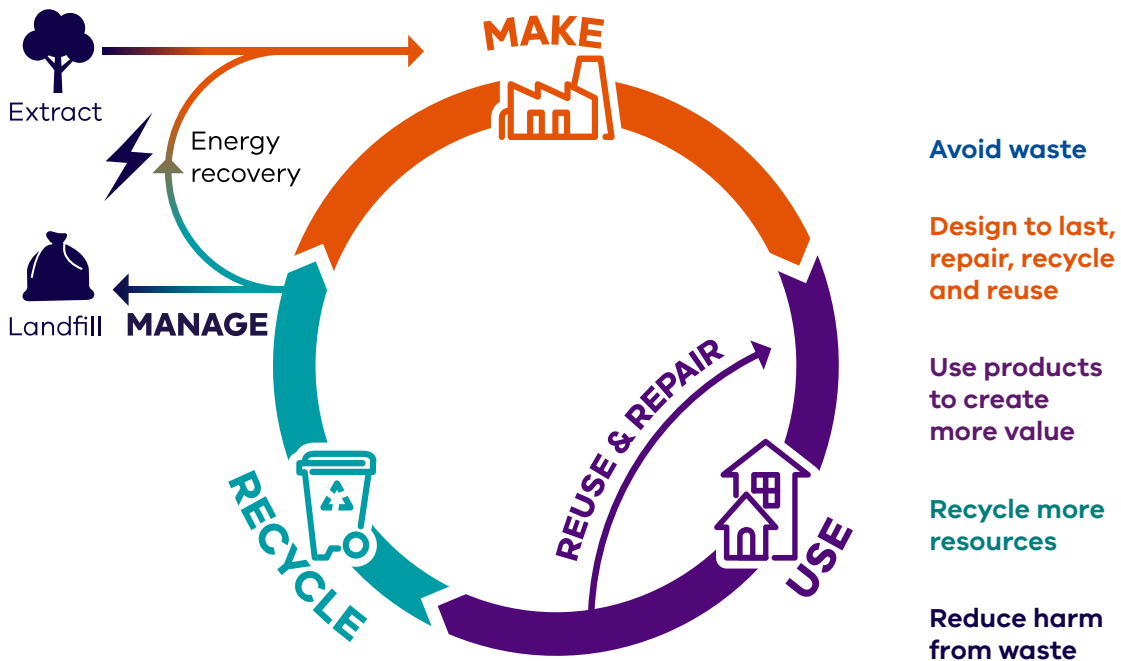
The Gippsland Regional Circular Economy Plan (RCEP) is one of five RCEPs that have been developed for Regional Victoria. RCEPs have also been created for Barwon South West, Hume, Loddon Mallee, and Grampians Central West.

Each RCEP is the result of broad consultation, engagement and collaboration with regional representatives who all have important roles to play in developing the region's circular economy. The plans represent a different approach to planning and are the first of their kind.

For a summary of the engagement program, refer to the [RCEPs Engagement Program Summary Report](#).

The RCEPs support the delivery of Victorian Government's circular economy policy, Recycling Victoria: a new economy, specifically the goals to 'design to last, repair and recycle'; 'use products to create more value'; and 'recycle more resources'.

Resource flows in a circular economy



Gippsland's circular economy plan

This document sets out Gippsland's circular economy aspirations to 2030, and the priorities to help achieve these aspirations. It also provides an insight into the region's strengths and challenges, and how to support the development of a sustainable and thriving circular economy in the Gippsland region.

This is a strategic document, not a plan with set actions for individual participants to report on.

The document identifies the collective aspirations of representatives from across the region. The aspirations and priorities are to be considered by each reader within their own contexts and spheres of influence as they transition to a regional circular economy.

A plan by Gippsland, for Gippsland

Representatives from 51 organisations contributed to the Gippsland RCEP, including local government, the waste and resource recovery industry, businesses and business associations, manufacturers, social enterprise, research and education institutions, and the Victorian Government.

Representatives participated in robust discussions and workshops facilitated by the Victorian Government designed to encourage strategic thinking about their region, where they are now, where they want to be by 2030, and how they can work together to get there.

For further information on the engagement program, refer to the RCEPs Engagement Program Summary Report. The Report has made ten recommendations, which have been incorporated into this plan where possible, or are noted for future consideration.

Gippsland's aspirations for 2030

Together, representatives developed five circular economy aspirations for 2030, to guide the development of the region's circular economy.

Working together to achieve our aspirations

Building from local understanding of the region's strengths and challenges, region specific priorities have been identified to guide the development of Gippsland's circular economy.

The priorities cover a range of key themes including improving infrastructure, developing end use markets, improving collaboration and communication, supporting behaviour change, advocating for legislative reform, undertaking research and development, and providing opportunities for reskilling and job training.

How to use this Plan

This plan is to be used as a resource for the Gippsland region to work together toward creating a sustainable and thriving circular economy.

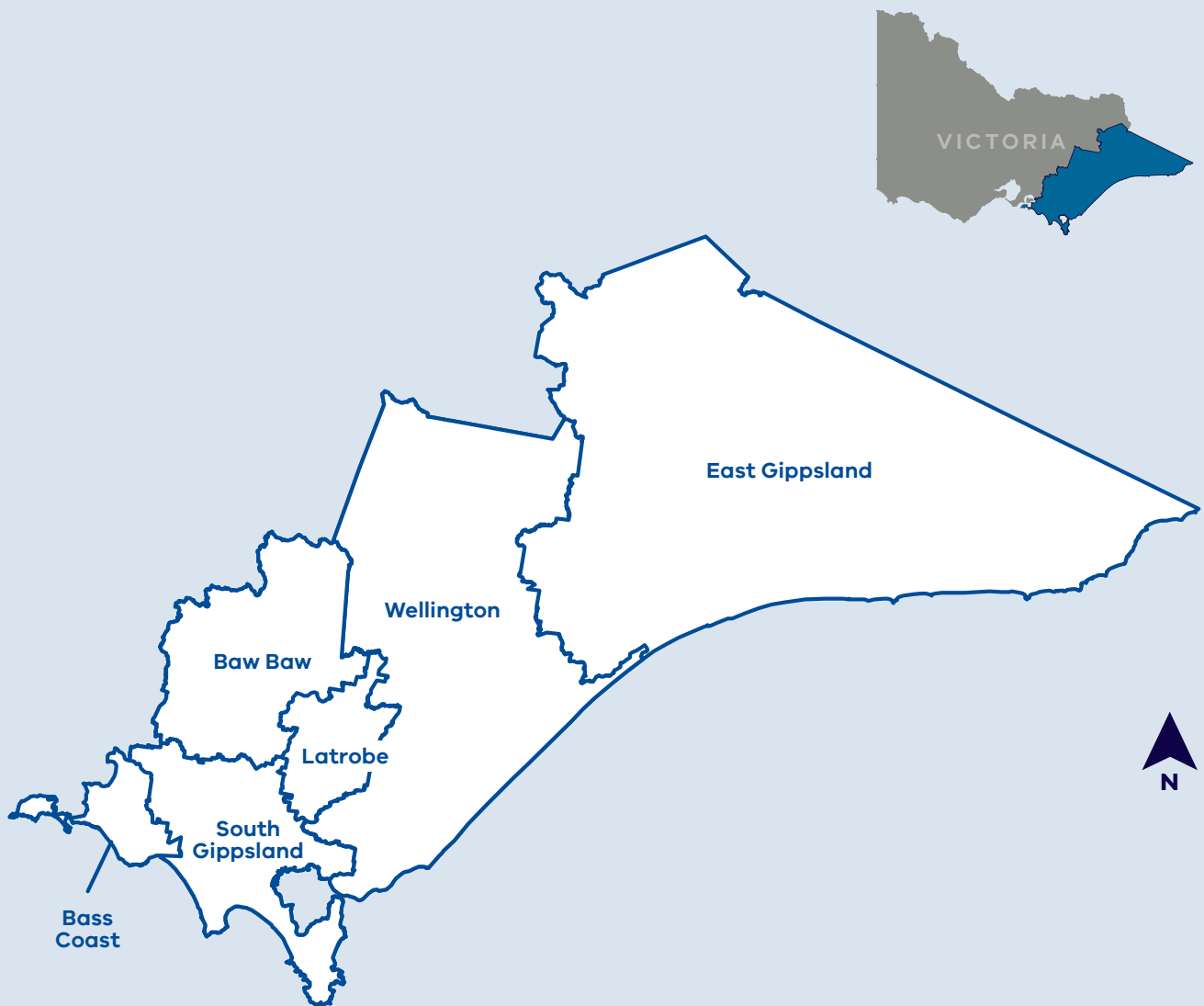
As a resource for all, the Plan has a broad number of potential uses including, but not limited to, regional planning, infrastructure planning, funding program design, business strategy development, community education program design, and product design.





Gippsland region

Map of Local Government Areas (LGAs)
in the Gippsland Central West region



Aspirations and priorities

Gippsland’s five circular economy aspirations to 2030 are detailed below, along with six important changes, or ‘key enablers’, that have been identified to help realise these aspirations.

Aspirations to 2030

1 The circular economy is part of everyday life in Gippsland
 In the Gippsland region all materials are understood to have value, and everyone is engaged in the reuse and stewardship of resources in a circular economy.

2 Collaboration and partnership drive action
 All levels of government, industry, education institutions, researchers and community in the Gippsland region are working collaboratively to deliver shared local circular economy outcomes.

3 End use markets are aligned with resource recovery processing and supply
 The Gippsland region industry sectors and services are integrated with advanced resource recovery infrastructure that produces large volumes of high-quality recycled products and materials that are used to their highest value.

4 An established and maturing circular economy
 In the Gippsland region, there is a clear value chain, return on investment and market opportunities for recovering and recovered materials which is well known, systemised and well utilised.

5 Organics processing capacity and capability is strengthened
 The Gippsland region is Victoria’s leader in extracting maximum value from organics processing.

Key enablers

Important changes to strengthen our circular economy



Improved infrastructure
15%*
 of priorities



Developing end use markets
15%*
 of priorities



Improved collaboration and communication
15%*
 of priorities



Behaviour change (industry and consumers)
23%*
 of priorities



Legislation, regulations, or standards reform
12%*
 of priorities




Other key changes including research and development, reskilling and job training
19%*
 of priorities





* Percentage rounded to nearest whole percentage. The rounded percentages add to 99%.

Priorities to achieve our aspirations



Gippsland has developed 26 priorities to achieve their circular economy aspirations to 2030. Each priority has been identified as contributing to one or more aspiration and has been grouped by Key Enablers. Many of the priorities align with current Victorian Government policy, whilst others will be for future consideration.

| Key | | |
|---|--|--|
| <p>Aspirations</p> <p> 1 The circular economy is part of everyday life in Gippsland 2 Collaboration and partnership drive action 3 End use markets are aligned with resource recovery processing and supply 4 An established and maturing circular economy 5 Organics processing capacity and capability is strengthened </p> | | |
| | | <p>Alignment with Victorian Policy</p> <p>  Aligns  For future consideration </p> |

Improved infrastructure

| | | |
|--|---------|---|
| Invest in resource recovery precincts to increase reprocessing capabilities closer to source and end markets with a focus on whole of region connectivity, planned to precinct strengths (hub and spoke model). | 3 4 5 |  |
| Co-locate a range of facilities in closer proximity to farms/agriculture facilities and hospitality business to minimise feedstock and product transport. | 2 3 4 5 |  |
| Invest in local capacity and technical abilities to accommodate the processing of organic material of varying quality from other regions into high value end products. | 3 4 5 |  |
| Invest in infrastructure and services to strengthen the circular economy ecosystem with consideration to sustainability impacts, community value, industry need, water efficiency, emissions reductions, energy efficiency and land use planning. | 2 3 4 5 |  |

Developing end use markets

| | | |
|---|-------|---|
| Encourage innovation in the way we work and organise ourselves, from our adoption of advanced technologies, creation of product, and process of unused material streams. | 2 3 5 |  |
| Identify new recycling opportunities suited for local processing where large scale, transport and logistics are not cost-effective. | 3 4 5 |  |

Developing end use markets continued

Attract large, recycled material manufacturers to the Gippsland region to create cost effective options within the manufacturing sector.

2 3



Support the production of more pelletised plastic to meet existing demand and education to increase demand.

3 4



Improved collaboration and communication

Coordinate collaboration and sharing of waste and recycling data and insights between government, industry, and community to support better problem solving, decision making, reduce duplication, develop markets and seize circular economy opportunities.

1 2 3 4 5



Foster private sector engagement in the development of circular economy solutions – from redesign of products and business models through to recycling infrastructure.

1 2 3



Attract businesses to the region by promoting collaborative demonstrations/case studies, such as public private partnerships to encourage investment and build confidence in private investment.

2



Support collaboration between councils, industry, research and education institutions to connect a network of local markets for recycled products.

2 3 4 5



Behaviour change (industry and consumers)

Embed consistent practices to support community use of material collection points (research, standardisation) across the region, reduce confusion, contamination and increase collection volumes.

1 3 4 5



Support social innovation activities through implementing share, swap and repair programs and services to assist the community to avoid waste generation and consumption.

1 2



Deliver ongoing education to engage and empower and community to embrace their role in a transition to a circular economy.

1 2 5



Use the national e-waste scheme as a model to improve the recycling rates for other waste streams.

1 3



Design products with a plan for their entire lifecycle, including designing out waste and connecting the product to resource recovery opportunities.

3 4



Encourage, wherever possible, the purchase of locally produced products, made of reused or recycled content to raise community awareness of the broad scope of recycling potential.

1 4 5



Legislation, regulations, or standards reform

Increase risk appetite in funding programs for evolving markets, develop simplified funding criteria to support innovation and investment in the region and increase availability of smaller grants to appeal to local scale businesses and community enterprises.

2 4 5



Incentivise the development of industries with a focus on repurposing and recycling material to a high product quality for end-use and maximise diversion of waste from landfill.

3 4 5



Legislation, regulations, or standards reform continued

Coordinate **government policy and procurement opportunities**, at all levels to maximise circular economy outcomes.

1 2 3 4



Other key changes including research and development, reskilling, and job training

Provide education and re-skilling opportunities to **build capacity and capability** in recycling and manufacturing across the region.

1 3 5



Undertake whole-of-region **research to better understand market opportunities and market demands** (consumer behaviour, investment requirements, feedstock availability and gaps, risks of supply and demand) for each materials stream and pathway.

1 2 3 4 5



Map the plastics production lifecycle including manufacturing, use, and reprocessing to ensure all parts of the cycle are working towards zero waste by employing a **systems thinking approach**.

1 3 4



Standardise and publish waste stream data (type, volume and characteristic) to support market development.

1 3 4 5



Undertake **research into the risks of changing supply and demand for waste streams and manufacturing feedstock** on capital investment into infrastructure and technologies to eliminate redundancy.

3 5





Gippsland today



295,487

Current Population (2020)¹



\$18 billion

Gross Regional Product (2020)²



27,214 tonnes

Kerbside Recycling Collected (2019-20)³



¹ Australian Bureau of Statistics (abs.gov.au)

² Regional Economic Development Strategies (REDS) – Regional Development Victoria (rdv.vic.gov.au)

³ Victorian Local Government Area Survey – Sustainability Victoria (sustainability.vic.gov.au)

Gippsland region

Gippsland's circular economy aspirations and priorities were developed with a local understanding of the region's strengths and challenges. The region's representatives considered 'where we are today' as a region, before projecting forward to 'where we want to be' in 2030 and beyond.

The process identified key strengths within the Gippsland region – unique characteristics that provide the region with a base from which to consider the circular economy priorities and work towards their aspirations for 2030.

The region's skilled technical workforce and strong agricultural sector were highlighted as strengths, along with existing local circular economy project already underway. The region's availability of land for infrastructure was also noted, with the potential to co-locate infrastructure to support and encourage circular economy outcomes, such as locating local manufacturing near material processing infrastructure.

For in-depth economic analysis of the region, refer to Victoria's [Regional Economic Development Strategies \(REDS\)](#).

Strengths:

- **Size of the population and current household mix**, making it suitable for trialling projects due to the volume of waste stream availability.
- **Land availability** for local processing and manufacturing plants or precincts, with the potential to co-locate these with industries.
- **Skilled technical workforce** transitioning from mining.
- **Strong agricultural sector** as both a generator of organic feedstock and an end-user of soil enhancers produced from recycled organic material.
- **Local circular economy** projects to draw upon and promote, such as local biochar production where wood waste is converted for use in agriculture.

Gippsland in 2030



328,861

Projected Population (2031)⁴



18% increase

Projected percentage change (2021 to 2031)



⁴ Victoria in Future (planning.vic.gov.au)

In developing Gippsland's circular economy aspirations for 2030, as well as studying the region's strengths, the region's challenges were also considered. The region's circular economy priorities were developed to mitigate, or in consideration of, these challenges.

The region's large size and distances between recycled and reused material sources and processing facilities are considered key challenges, with the cost of accessing local processing facilities, in some instances, greater than transporting materials to facilities in Melbourne.

The lack of availability of high-quality recycled materials was highlighted as a challenge for existing manufacturers and a barrier for encouraging new entrants into the region.

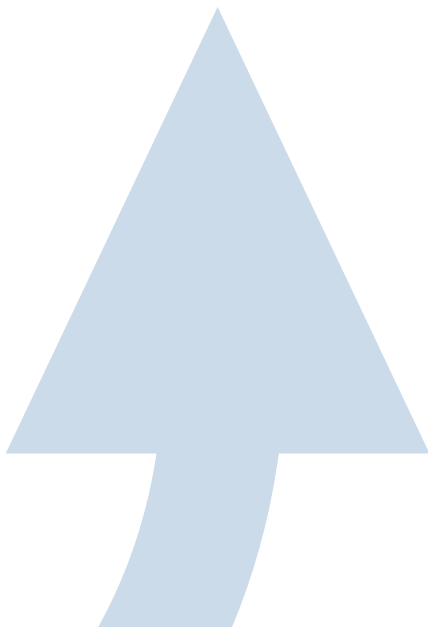
By 2030, the Gippsland region is projected to be home to 328,861 people, increasing by 18 per cent from 2021 to 2031.

Population increase in certain areas, is expected to lead to higher rates of waste and recyclable materials being generated, with increased demand for sorting, processing and storage infrastructure, or pressure on regional roads if this recyclable material is transported outside the region.

For in-depth economic analysis of the region, refer to Victoria's [Regional Economic Development Strategies \(REDS\)](#).

Challenges:

- Large distances between waste sources and processing facilities attribute a high transport cost to recycling.
- Cost of **accessing local processing** facilities is, in some instances, greater than transporting to larger facilities in Melbourne.
- Lack of availability of recycled product is a barrier for manufacturers.
- Variation in quality with recycled products/contamination reduces the attractiveness of it as a commodity.
- Low economies of scale of some waste streams and the high relative costs of small processing facilities reduce the cost effectiveness of recycling.



















































Everyone has a role to play in a circular economy

A circular economy is a collective responsibility requiring shared involvement, commitment, and action.

The table below highlights the various stakeholders involved in Gippsland's circular economy and the important role/s that can be played by each.



| | | | | | | | | | | |
|--|---|---|---|--|---|---|---|---|---|---|
| Introduce legislation, policy, and standards to support the circular economy system | | | | | | | | |  |  |
| Collaborate, design and develop market ready products, packaging, and systems that eliminate waste and pollution and support natural processes | |  |  | |  | | | |  | |
| Undertake research to understand stakeholder needs to support circular economy system | |  |  |  | |  | | | | |
| Plan for circular economy infrastructure |  | |  |  | | | | |  |  |
| Provide funding opportunities to encourage investment in infrastructure, services, and programs |  | | | | | | | |  |  |
| Preference use of reusable or recycled products, products that support natural processes, and recycled materials |  |  |  |  |  |  |  |  |  | |
| Educate households, businesses, and commercial operators |  | |  |  | |  | | |  | |
| Support and participate in share economy and repurposing services |  |  | | | | |  |  | | |
| Collect, sort, and manage recovered material and waste |  | |  | | |  |  |  | | |
| Participate in material recovery process |  | |  |  |  | | | | | |
| Share data and information about collected waste, including material types and volumes |  | |  |  | | | | | | |



How this plan can be used

The RCEP is to be used as a resource for all in the Gippsland region to work together toward creating a sustainable and thriving economy.

Some potential uses could include:

Local Councils in the region

- As an input into strategic waste management planning.
- To guide future procurement and purchasing
- To inform community education programs.
- To promote collaboration across local government areas, particularly in regional and rural areas where lower material volumes and reuse opportunities benefit from a regionally coordinated approach to be viable.
- To enter collaborative projects with other agencies, private businesses and research institutions.
- As a reference for future waste management community consultation programs and education programs
- To consider alongside the Regional Economic Development Strategies (REDS) for economic opportunities for circular economy in the region.
- To support applications for funding.

Researchers and educators (e.g., university sector, private researchers)

- To inform future areas of research.
- To inform education programs.
- To support applications for funding and proposals for the provision of goods and services.

Commercial and industrial operators and industry associations (e.g., designers, product manufacturers)

- To disseminate information and educate industry and consumers.
- To encourage private investment.
- To support the development of feasibility studies for new industry opportunities.
- To inform future plant expansion and re-use opportunities.
- To support applications for funding and proposals for the provision of goods and services.

Water Industry

- To support applications for funding.
- To support advocacy for regulations or legislation.
- To inform future research, such as between water industry, local government, and the university sector.

Businesses and business associations (businesses operating in the region, or their representative bodies)

- To identify potential end use markets.
- To support business case development.
- To support applications for funding and proposals for the provision of goods and services.

Social enterprises and incorporated committees (not-for-profit organisations)

- To understand the role/s that social enterprises could have in the circular economy and inform strategic planning.
- To inform education programs.
- To support applications for funding and proposals for the provision of goods and services.

Residential community/consumer

- To understand Gippsland's circular economy aspirations and priorities.
- To understand the role/s that individuals could have in the circular economy.
- To support applications for funding

The waste and resource recovery industry (e.g., material recovery facility operators)

- To identify potential waste management investment opportunities.
- To measure region specific information and potential levels of service strategies.
- To support applications for funding and proposals for the provision of goods and services.

Victorian Government

- As an input into policy planning, including the 30-year infrastructure program, the Victorian Recycling Infrastructure Plan (VRIP).
- To inform the design and implementation of funding programs, including the Regional Recycling Fund Round 2.
- As an input into Recycling Victoria's work program for circular economy outcomes in regional Victoria.
- As an input into Sustainability Victoria's work program for circular economy outcomes in regional Victoria.
- To inform education programs, such as through Sustainability Victoria.

Federal Government

- To influence product stewardship across Australia.
- To inform design and implementation of national waste and recycling funding programs.
- To harmonise any future national circular economy legislation.

Where to from here?

The Department of Environment, Land, Water and Planning (DELWP) is the custodian of the RCEPs.

The RCEPs will be used as a valuable resource for the Victorian Government's future circular economy planning.

All readers are encouraged to consider the RCEPs within their own contexts and spheres of influence as they transition to a regional circular economy.

For more information about Victoria's circular economy plans and progress, see [vic.gov.au/building-victorias-circular-economy](https://www.vic.gov.au/building-victorias-circular-economy).





© The State of Victoria Department of Environment, Land, Water and Planning 2022.



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning () logo. To view a copy of this licence, visit creativecommons.org/licenses/by/4.0/

ISBN 978-1-76136-147-0 (pdf/online/MS word)

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DELWP Customer Service Centre on 136 186, or email customer.service@delwp.vic.gov.au, or via the National Relay Service on 133 677, www.relay.service.com.au. This document is also available on the internet at www.delwp.vic.gov.au