

Waste and Resource Recovery Strategy 2023-2030

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Foreword

Waste management is a core service provided by Council, and one of its most significant areas of operation. It is a service that can easily be taken for granted but is one that requires substantial effort and investment.

Council not only runs the collection service for the three kerbside bins – general waste, FOGO (food organics garden organics) and recycling – it also owns and operates Caroline Landfill, the Waste Transfer Station and the ReUse Market.

In 2020 the South Australian Government released the South Australia Waste Strategy 2020-2025. It requires all SA regional local government areas and/or regional city clusters to have waste management plans in place by 2023. The plans are required to set regionally appropriate and progressive waste diversion targets.

The City of Mount Gambier Waste and Resource Strategy 2023-2030 articulates a vision and target for our waste and resource recovery operations. It also outlines objectives and high level priority actions which provide a framework for achievable local solutions to enhance service delivery, manage costs and drive innovation in resource recovery. The implementation will support local jobs and the local circular economy. The intention of this document is to be high level and complementary to the more detailed Waste and Resource Recovery Masterplan.

It is envisaged that this document will assist in establishing the City of Mount Gambier as a leader of regional sustainable waste management, in tandem with the local community. Instead of burying resources in landfill we will make every effort to maximise our capture of the unrecovered resource potential in waste.

In order to implement this strategy, we will develop strong partnerships with industry, government and our local community. I am proud of our community's efforts to reduce waste and maximise the reuse of resources and I am excited to work together to reimagine waste and recover materials that can generate value for the local circular economy.

Lynette Martin OAM Mayor City of Mount Gambier





Mount Gambier is perfectly centred halfway between Adelaide and Melbourne, and less than 30km from the coast. Its location within the Limestone Coast affords great access to natural beauty but can present challenges with regards to waste management with both major centres over 400km away.

Similarly having a population of almost 28,000 and prominence as the largest centre in the region ensures that locals have access to a wide range of services including waste management, but also gives rise to issues.

Council is responsible for delivering services for the management of waste on behalf of the community in the city of Mount Gambier as required by the *Local Government Act 1999*. The services Council provide include:

- Kerbside collection of general waste, food organics and garden organics (FOGO), and recycling,
- Waste Transfer Station,
- ReUse Market, and
- Caroline Landfill.

Delivering these services requires significant financial and human resources. Council recognises the importance of implementing sustainable waste management initiatives aimed at reducing the environmental impacts and increasing resource efficiency for the benefit of the community and the environment.

South Australia's Waste Strategy 2020-2025 has a target for non-metropolitan areas of:

By 2023: Regional Waste Management Plans are in place for all South Australian regional local government areas and/or regional city clusters and set regionally appropriate and progressive waste diversion targets.

This high level strategy outlines Council's vision for waste management and resource recovery, and sets landfill diversion targets for the period of 2023 to 2030. It captures only some of the key opportunities that are available, with more detail contained in the comprehensive Waste & Resource Recovery Masterplan. This Strategy, in conjunction with the Masterplan, will create a waste and resource recovery system with a strong foundation and establish Council's direction, creating the platform for future actions and opportunities, including promoting the local circular economy.

This Strategy is focused on Council's kerbside collection services and high-level actions. The Masterplan considers Council's waste services as a whole – including financial sustainability, the management of Caroline Landfill, Waste Transfer Station and ReUse Market.

Kerbside system and performance

The following table outlines the amount of material collected via Council's kerbside collection service over the past three financial years.

	2020/2021	2021/2022	2022/2023
General waste	6,023 tonnes	6,001 tonnes	5,661 tonnes
	(53% of Total)	(51% of Total)	(45% of Total)
Recycling	2,051 tonnes	2,013 tonnes	2,076 tonnes
	(18% of Total)	(17% of Total)	(17% of Total)
FOGO	3,345 tonnes	3,867 tonnes	4,674 tonnes
	(29% of Total)	(32% of Total)	(38% of Total)
Total	11,419 tonnes	11,881 tonnes	12,410 tonnes
Landfill diversion	47%	49%	55%





The City of Mount Gambier does not conduct its waste management in isolation. It is influenced by a range of factors, from local to global. There have been significant changes in the waste and recycling industry in recent years. These will impact on current practices and will shape our future actions.

The waste hierarchy

When considering its management practices Council endeavours to follow the waste management hierarchy. This highlights the order of preference that should be followed when dealing with waste and related resources.

The circular economy

As the name suggests, the circular economy is an approach where materials are reused back within our economic systems as much as possible – as opposed to a linear approach, where items are created, used, and then buried in landfill.

SA Waste Strategy 2020 – 2025

The strategy has a strong focus on supporting a circular economy approach. It identifies the priorities and pathways for the state to achieve higher resource recovery. One of the most pertinent aspects of the strategy requires regional councils to set progressive landfill diversion targets by the end of 2023.

Circular Economy Opportunities Limestone Coast

In November 2022 Regional Development Australia Limestone Coast and Green Industries SA launched the **Circular Economy Opportunities Limestone Coast** report. This report highlights unique opportunities for improved circularity that exist across agriculture, and food and drink value chains in the Limestone Coast. This report is a blueprint of opportunities for investment and job opportunities in our region and across the country.

SA Food Waste Strategy: Valuing our food waste

This comprehensive state strategy is focused on reducing and preventing food waste being sent to landfill. It proposes actions to support households and businesses to reduce food waste sent to landfill and further opportunities for the organics recovery and processing sectors in South Australia.

SA Solid Waste Levy

The State Government charges a fee is for every tonne of waste sent to landfill in SA. The waste levy aims to incentivise resource recovery by increasing the costs of waste disposal, making resource recovery more financially viable by comparison. Council owns and operates Caroline Landfill, and as such pays the levy for every tonne of material deposited at the facility. Reducing waste to landfill will reduce the cost of the levy for Council.

Limestone Coast Regional Waste Steering Committee

The Committee falls under the Limestone Coast Local Government Association (LCLGA). One of the objectives of the committee is to identify and recommend regional priorities and initiatives for waste management in the Limestone Coast. It oversees both the Limestone Coast Regional Waste Management Strategic Direction 2018-2023 and the Limestone Coast Region Waste and Resource Recovery Infrastructure Plan.



Vision

'Be an innovative leader in regional waste management, supporting the local circular economy through increased resource recovery, and empowering our local community to reduce waste and maximise reuse and recycling.'

Objectives

Objective 1: Increase landfill diversion.

Burying waste in landfill is not a sustainable solution, it does not support the local economy and should be a last resort. Council will endeavour to divert as much material as is practical away from landfill.

Performance indicators:

- Divert 65% of kerbside materials from landfill by 2030.
- Minimum of 60% of residences utilise the FOGO service.
- Sorting of commercial loads prior to arrival at the landfill.





Objective 2: Provide high quality waste and resource recovery services and infrastructure that supports the local economy.

Deliver high quality services and infrastructure that are adaptable to community needs and market changes.

Performance indicators:

- Develop an infrastructure plan that will encourage efficient and effective resource recovery and waste management through its implementation.
- Undertaking educational activities to reduce contamination in all three waste streams.

Objective 3: Financially sustainable waste services

Waste services that are financially self-sufficient, funded through the landfill gate fee and waste service charge. There should be sufficient capacity to not just cover costs, but to reinvest directly back into waste to improve services and infrastructure.

Performance indicators:

• Costs do not exceed revenue from the landfill gate fee and waste service charge.



South Australia's Waste Strategy 2020-2025 contains the target of 70% kerbside diversion by 2025 for metro councils. With regards to non-metro councils it states:

By 2023: Regional Waste Management Plans are in place for all South Australian regional local government areas and/or regional city clusters and set regionally appropriate and progressive waste diversion targets.

The average kerbside landfill diversion rate for regional SA is 40.1%, with the average for metropolitan councils being 50.6% (from SA Kerbside Waste Performance Report 2020-21).

Our 2030 target is to divert 65% of kerbside materials from landfill. This will be achieved through further promotion of Council's FOGO system, and other targeted activities, resulting in increased recovery of organics and recyclables.

	Current	Target				
	2022-2023	2026-2027 2029-2030				
Landfill diversion	55%	60%	65%			



The list of actions below provides high level guidance to achieve Council's objectives and targets. The actions have been allocated numbers for ease of reference. The numbers do not represent an order of priority.

Action 1	Identify infrastructure requirements to ensure best practice waste management and resource recovery.
Action 2	FOGO service - Continue to heavily promote Council's FOGO service, as well as home based options such as composting.
Action 3	Investigate landfill pre-sort options.
Action 4	Explore utilising AI for education and reducing kerbside contamination.
Action 5	Investigate multi-faceted approach to managing landfill leachate.
Action 6	Educate and engage with the community to best manage waste at the source.
Action 7	Procure products and materials containing recycled content.
Action 8	Develop regional partnerships and support community initiatives.
Action 9	Develop financial model to ensure financially sustainable waste services.



Action 1: Identify infrastructure requirements to ensure best practice waste management and resource recovery

Council's vision is to be an innovative leader in regional waste management, supporting the local circular economy. In order to achieve this significant upgrades to existing infrastructure are required.

Upgrades to Council's waste facilities, Waste Transfer Station, ReUse Market and Caroline Landfill, can increase resource recovery, operational efficiency and safety, and provide better services to the community.

These measures, along with working with the LCLGA waste committee on exploring a regional materials recovery facility (MRF), will maximise opportunities to support the local circular economy.

Action 2: FOGO service - continue to heavily promote Council's FOGO service, as well as home based options such as composting

Audits of Mount Gambier's kerbside bins have indicated that the average general waste bin contains 36% food waste and 9% garden waste. This equates to more than 2,000 tonnes of organic material being buried in Caroline Landfill every year. When buried in landfill organics create methane and leachate, which are both problematic, and the material is lost to the circular economy.

The contents of the kerbside FOGO bins go to a local composting facility, then back on to gardens and farms, supporting local jobs and the local circular economy.

Council should also continue to promote home options such as composting and worm farms, particularly through initiatives such as Compost Revolution. Residents can enrich their gardens through managing organics at home, and can create their own circular system through growing their own food.

Action 3: Investigate landfill pre-sort options

Caroline Landfill is the only landfill in the region licenced to accept putrescible waste. The site receives over 30,000 tonnes of waste every year. As stated above, the kerbside system contains significant amounts of material that should not be going to landfill. Similarly, audits of commercial loads have also found that there is a significant proportion of material in this waste stream that should not be deposited in landfill. This is a waste of resources, and leads to landfill cells filling up more quickly than they should.

Pre-sorting commercial loads before they are emptied into landfill will divert materials into the circular economy, and assist with defraying the significant cost to build new cells.

Action 4: Explore utilising AI for education and reducing kerbside contamination

As indicated above, waste audits have demonstrated that the average Mount Gambier general waste bin contains 45% organics, it also comprises 25% recyclables. Thousands of tonnes of materials being buried in landfill each year, rather than being diverted into the circular economy.

Artificial intelligence (AI) could potentially be used to assess the contents of kerbside bins as they are emptied. Feedback could then be given residents regarding how to improve their sorting practices. Sorting at the source is much more effective than large scale sorting at industrial facilities.

Action 5: Investigate multi-faceted approach to managing landfill leachate

Mount Gambier has a relatively wet climate, which makes managing landfill leachate a challenge. The high rainfall received over winter, combined with cooler temperatures, can mean that leachate levels rise considerably over these periods.

Relying on one option to manage leachate carries inherent risks. If that one option is inhibited, then leachate volumes can become a significant risk to the site. In order to manage leachate effectively a multi-faceted approach is required.

Action 6: Educate and engage with the community to best manage waste at the source

Our local community want to manage their waste and resources in an effective manner. To be able to do this they need accurate information, presented in an easily accessible and timely manner. Ongoing education will assist with landfill diversion, cost efficiencies and supporting the local economy.

Council will continue to undertake educational activities, endeavouring to work with other relevant agencies in the delivery. Potential partners include local businesses, other councils and State Government agencies. Council will continue to partner with Green Industries SA to align with the state-wide Which Bin educational campaign.

Action 7: Procure products and materials containing recycled content

The viability of the recycling industry is reliant on having markets for the recycled materials and products. If no-one purchases these items then the system fails. Lack of markets is also an inhibiter to the industry's growth. Council can contribute to developing the local circular economy and remanufacturing, through purchasing products and materials that contain high levels of recycled content in our operations and capital works.

Action 8: Develop regional partnerships and support community initiatives

Building partnerships across the region with industry groups, businesses and communities will help develop a local circular economy and help achieve our goals. Council will consider how we can support new opportunities with these organisations, industry and our community based on their merits, scale, local context and how it aligns with this strategy.

Action 9: Develop financial model to ensure financially sustainable waste services

An informed financial model will enable Council to manage operational inefficiencies, regulatory compliance, and create space to explore opportunities that can provide significant, innovative improvement, which will protect our environment and increase revenue.

Long term financial modelling, whole of life asset management and post closure provisions are key components required to successfully guide implementation of EPA compliant, sustainable best practice in waste service delivery and landfill management. This project is a key integrated component of Council's asset management planning approach.





	2023	2024	2025	2026	2027	2028	2029	2030
1. Identify infrastructure requirements to ensure best practice waste								
management and resource recovery.								
2. FOGO service - Continue to heavily promote Council's FOGO service, as well as home based options such as composting.								
3. Investigate landfill pre-sort options.								
4. Explore utilising AI for education and reducing kerbside contamination.								
5. Investigate multi-faceted approach to managing landfill leachate.								
6. Educate and engage with the community to best manage waste at the source.								
7. Procure products and materials containing recycled content.								
8. Develop regional partnerships and support community initiatives.								
9. Develop financial model to ensure financially sustainable waste services.								