

WASTE & RESOURCE RECOVERY STRATEGY

2021-2026

Legatus Group

Foreword

The Local Government Sector has a major interest in waste and recycling and works cooperatively with the SA Government including both Green Industries SA and the EPA in making a significant contribution to positive reforms currently taking place in South Australia.

The South Australian Government released the South Australia's Waste Strategy 2020-25, showing that Regional Waste Management Plans are to be in place for all SA regional local government areas and/or regional city clusters by 2023. The Plans are required to set regionally appropriate and progressive waste diversion targets. The 20-Year State Infrastructure Strategy identifies opportunities for development in regional areas, including in investment in:

- equipment and facilities for waste compaction and bulk hauling to reduce costs of transporting waste to end markets;
- expanding or developing commercial composting organics from MSW and industries such as vineyards, orchards and other agriculture; and
- developing high-value organics products.

In March 2021, the South Australian Regional Organisation of Councils through the Legatus Group released a Report on Waste Management Infrastructure for South Australian Regional Councils to assist with future actions regarding Waste Management for Regional Local Governments in SA. Through our partnerships with the University sector, we have also released in 2021 reports on:

- Making and Using Organic Compost
- Implementing the Circular Economy in SA
- A supply chain analysis of the circular economy in regional South Australia

The Legatus Group has identified a series of targeted projects that leverage advocacy and collaboration activities to deliver targeted outcomes for the region and as such commissioned the Legatus Group Waste and Resource Recovery Strategy 2021-2026 and its Action Plan.

Mayor Phillip Heaslip

District Council of Mount Remarkable & Chair of Legatus Group

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Background

The Legatus Group¹ is a regional subsidiary established under the Local Government Act 1999. It represents 15 member councils and helps to facilitate and coordinate activities that contribute to economic and community development within the region. These councils include:

- Adelaide Plains
- Barossa
- Barunga West
- Clare & Gilbert Valleys
- Copper Coast
- Flinders Ranges
- Goyder
- Light
- Mount Remarkable
- Northern Areas
- Orroroo Carrieton
- Peterborough
- Port Pirie
- Wakefield
- Yorke Peninsula

Waste and resource recovery strategy

Councils provide the essential waste and recycling services to the community. This includes the collection of kerbside bins and managing transfer stations/resource recovery centres for residents to drop-off materials.

This strategy outlines the goals and actions to assist councils improve how they manage waste and recycling materials and create a consistent approach across the region. The Legatus region is large and diverse. It makes sense for sub-regional groups to partner together to overcome the challenges associated with travel distance and low populations and provide service improvements and cost efficiencies for the community.

This strategy only captures some of the key opportunities that are available. We will continue to work with councils and the community to explore other options that target our communities and align with the strategy.

Development of the strategy

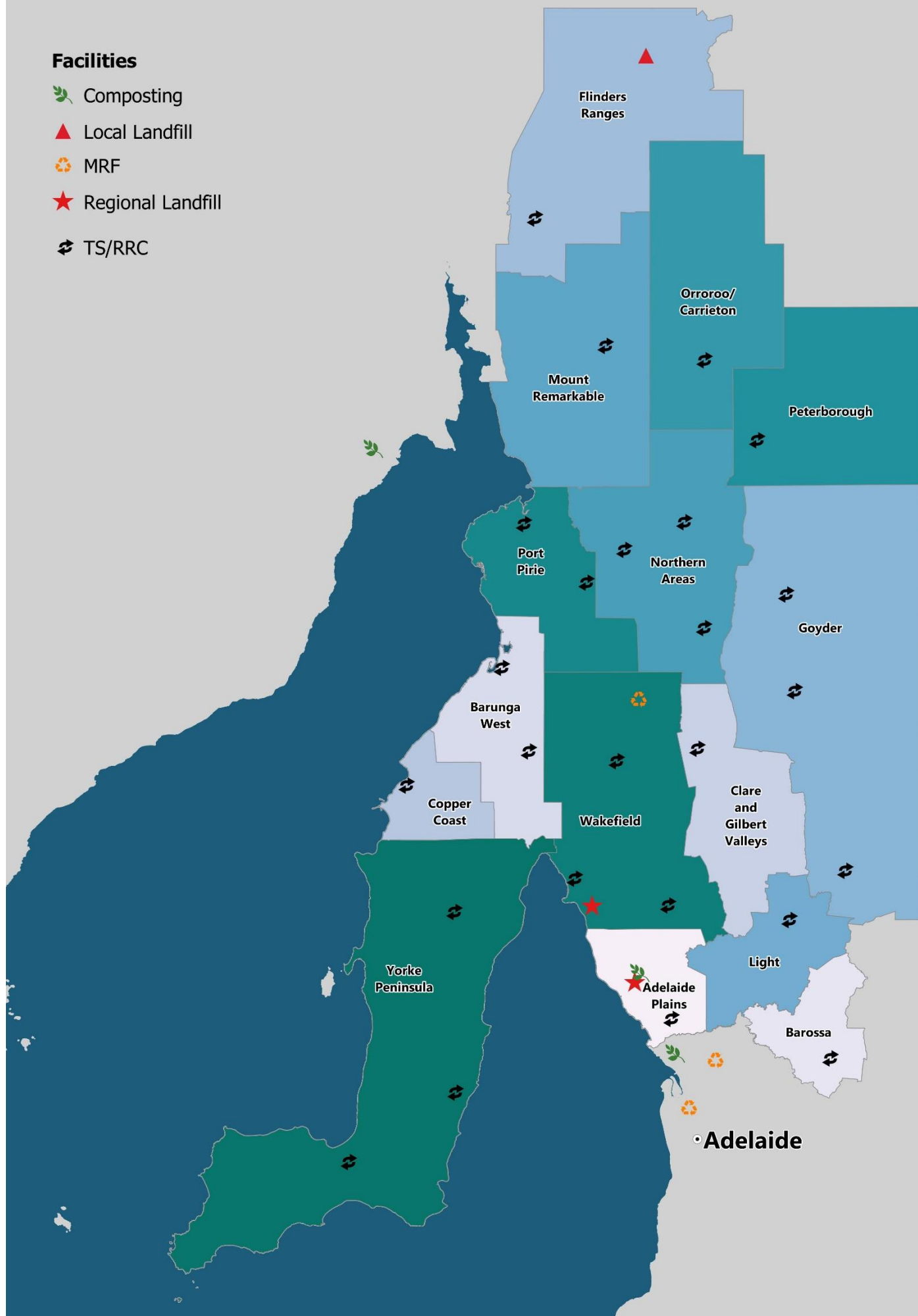
This strategy has been developed in consultation with member councils. The process has included:

- Site visits/meetings with key staff at each council and a survey to identify opportunities and priorities for the region.
- High-level modelling and briefing paper presenting the main options for the region.
- Workshop to discuss the briefing paper. All councils were invited to attend.
- Development and review of the draft strategy and action plan by the project reference group.
- Updating and finalising the strategy and action plan based on the feedback.

¹ The trading name of the Central Local Government Region

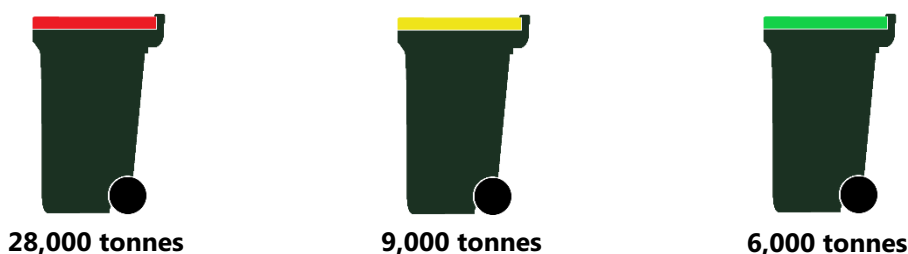
Facilities

-  Composting
-  Local Landfill
-  MRF
-  Regional Landfill
-  TS/RRC



Kerbside system and performance

Across our region Councils collect ~43,000 tonnes of material from kerbside bins and we divert 35 per cent of this from landfill.



Council	General waste	Comingled recycling	Organics recycling*	Est. current landfill diversion
Adelaide Plains	✓	✓	FOGO	37%
Barossa	✓	✓	FOGO ²	41%
Barunga West	✓	✓ ³	GO	34%
Clare & Gilbert Valleys	✓	✓		25%
Copper Coast	✓	✓	FOGO ⁴	23%
Flinders Ranges	✓	✓		27%
Goyder	✓	✓		20%
Light	✓	✓	FOGO	47%
Mount Remarkable	✓	✓	GO ⁵	8%
Northern Areas	✓	✓		20%
Orroroo Carrieton	✓	✓		29%
Peterborough	✓	✓		20%
Port Pirie	✓	✓	GO	46%
Wakefield	✓	✓	GO	34%
Yorke Peninsula	✓	✓	GO	35%

* GO = Garden organics only, FOGO = Food organics and garden organics

² Barossa Council changed to a mandatory FOGO bin for township residents in July 2021 - the diversion rate does not consider this change.

³ Barunga West has a fourth bin for cardboard recycling.

⁴ Copper Coast introduced FOGO in July 2021 and changed the collection frequency to fortnightly - the diversion rate does not consider this change.

⁵ Mt Remarkable introduced a GO bin in July 2021 - the diversion rate does not consider this change.

Context

Legatus Group Council's current and future waste and recycling services will be influenced by and consider a range of factors.

Supporting the circular economy: SA waste strategy 2020 - 2025

The 2020 - 2025 waste strategy identifies the priorities and pathways for the state to achieve higher resource recovery, waste avoidance and developing the circular economy. Key aspects include requiring regional councils to set progressive landfill diversion targets, providing residents access to three-bin systems and maximising the quality and performance of these systems.

SA food waste strategy: valuing our food waste

Green Industries SA released the state's first food waste strategy in 2021. It identifies food waste as a high priority and identifies a pathway to reducing food waste, increasing circularity and creating economic opportunities. It will also help contribute to the Australian Government National Food Waste Strategy that aims to halve food waste by 2030.

SA solid waste levy

Councils pay a fee for every tonne of material they send to landfill. This levy has increased significantly in recent years and can be expected to keep growing. Increasing source separation and capturing valuable materials for resource recovery can help to reduce the costs of the levy for councils and increase the value of the circular economy.

Legatus led initiatives

The Legatus Group has been progressing various waste, resource recovery and circular economy initiatives to support local government. This includes exploring regional waste and resource recovery infrastructure on behalf of SA Regional Organisation of Councils and working with university partners to explore the regional circular economy and regional composting opportunities. Reports produced from these projects are available on the Legatus website (legatus.sa.gov.au).

The waste hierarchy

Council's waste and recycling services will align with the waste management hierarchy and we will target actions that are higher up the hierarchy (Figure 1).

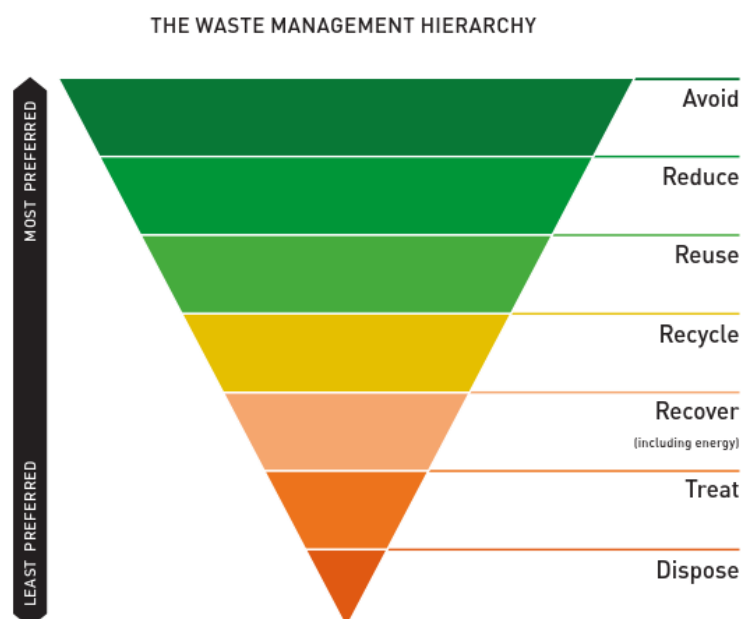


Figure 1: Waste management hierarchy (Image courtesy of Green Industries SA)

The circular economy

The circular economy aims to transition from a 'make, use and dispose' model to a system that keeps materials and products at their highest value for as long as possible. Keeping materials circulating reduces reliance on virgin materials, helps limit greenhouse gas emissions and create local job and investment opportunities.

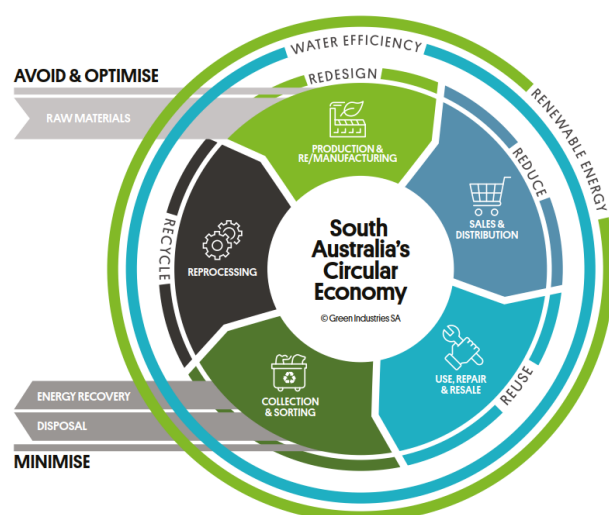


Figure 2: Summary of the circular economy (Image courtesy of Green Industries SA)

Vision

Grow the regional circular economy to provide local social, business and employment opportunities and empower behaviour change in the community to reduce waste generation and increase resource recovery.

Objectives

Our objectives will guide our actions and help measure success.

Objective 1 | Implement high performing waste and recycling systems

Implement systems that increase landfill diversion, capture valuable resources for the circular economy and reduce the region's carbon footprint. Performance indicators include:

- Achieving our landfill diversion targets (summarised below).
- Reduced contamination in comingled recycling and organics recycling bins.
- All councils have a fortnightly three-bin system in townships.
- Consistent waste and recycling education across the region

Objective 2 | Increase service efficiency and cost effectiveness

Increasing the efficiency of waste and recycling services so councils can reinvest and expand services to the community. Performance indicators include:

- Collaborative procurement systems are in place.
- Improved data collection of materials managed by councils.
- Expanding services to the community without significantly increasing costs.

Objective 3 | Implement local and regional solutions

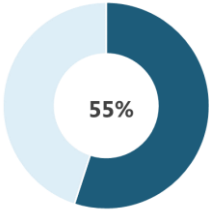
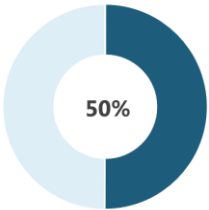
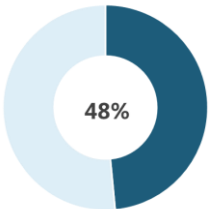
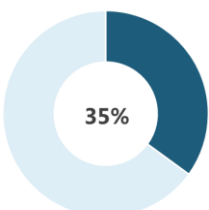
Identify ways to add to the social and economic opportunities of our region's communities, businesses and industries. Performance indicators include:

- Develop a regional organics processing facility.
- The maximum amount of materials managed by councils are beneficially reused in the region.
- Increase partnerships between Councils, the community and business and industry groups.

Kerbside landfill diversion targets

Average kerbside landfill diversion for regional SA is 37.7 per cent compared to an average of 50.5 per cent for metropolitan councils. Our target is to divert 51 per cent of materials from landfill and this will be achieved through changes to our kerbside system and increased recovery of organics.

Each council's landfill diversion target considers their starting point and the minimum improvement they can achieve. They will contribute to sub-regional and a whole region target, calculated using a weighted average based on population. Meeting these targets will depend on introducing food organics and garden organics (FOGO) and transitioning to fortnightly collection of general waste.

Sub-region ⁶	Sub-regional target	Individual target	
Barossa, Light, Adelaide Plains		Adelaide Plains	55%
		Barossa	55%
		Light	55%
Barunga West, Copper Coast & Yorke		Barunga West	45%
		Copper Coast	55%
		Yorke Peninsula	45%
Mid North		Clare & Gilbert Valleys	45%
		Goyder	30%
		Northern Areas	45%
		Port Pirie	55%
		Wakefield	50%
Southern Flinders Ranges		Flinders Ranges	35%
		Mount Remarkable	35%
		Orroroo Carrieton	35%
		Peterborough	35%

⁶ The sub-regional groupings are suggested for reporting and consider geographic location, council size, resources and resident density. They do not necessarily align with councils that already collaborate and are not meant to limit collaboration between councils

Initiatives

Initiative 1: Implement alternative kerbside collection services

To manage costs, deliver efficient services to our communities and achieve our landfill diversion targets, councils will explore in detail a three-bin system, with each bin collected fortnightly. Adelaide Plains Council and Copper Coast Council already have this system in place.

Some councils will introduce a FOGO bin and others will switch from only garden organics to FOGO. All councils will explore reducing general waste collection bins from weekly to fortnightly. This is the key pathway to meet our kerbside diversion targets and the benefits of this change include:

- increasing diversion of food waste from landfill
- reducing greenhouse gas emissions from food waste in landfill
- managing ongoing costs and exposure to the SA solid waste levy.

These options have been modelled at a high-level and show significant cost savings as a region. However each council needs to complete detailed analysis that considers their individual considerations.

To help residents adapt to this change councils will explore providing kitchen caddies and compostable bags to help recycled food waste and options for additional bins or bin size for residents with exceptional circumstances.

Initiative 2: Develop regional resource recovery infrastructure

Organics processing in the region

Capturing FOGO materials from kerbside bins and organics from transfer stations creates an opportunity to establish composting capability within the region. Transforming organic waste into compost for local application creates significant economic, environmental and soil health benefits for the region.

Our region is home to vast agriculture, horticulture and viticulture industries which are a source of organic waste materials and a limitless market for high-value compost. We will support councils will explore the feasibility of composting in the region, including:

- the ideal facility location(s) and size
- material supply and product demand
- detailed costs to develop the facility
- operational model and potential partner organisations.

This opportunity is closely linked to transitioning to new kerbside collection services and recovering enough organic materials to make local composting feasible.

Upgrades to transfer stations and resource recovery facilities

Transfer stations/resource recovery centres are key pieces of infrastructure for councils and are an opportunity to engage with the community. Councils can upgrade these facilities to increase resource recovery, operational efficiency and safety and provide better services to the community. Upgrades will be designed to deliver:

- increased source separation and efficiency managing materials
- greater safety for the community and council staff
- community engagement through new services/facilities (e.g. re-use shop, repair/remanufacture shed, sale of recovered materials).

Initiative 3: Increase regional collaboration to achieve financial and service improvements

Joint procurement of transfer station materials processing and transport

Councils accept similar materials at transfer stations and these must be processed onsite or transported out of the region for processing.

We will support councils to cooperate through joint procurement and scheduling of services to reduce these costs by encouraging a 'milk run' through the region. This will allow contractors to efficiently travel to multiple councils and manage these materials, making costs transparent and manageable, providing accurate reporting and managed through a formal a formal contract.

Joint procurement of kerbside collection and associated services

When councils cooperate in joint procurement it leads to better service options and lower costs. Some councils in the region have already worked together to achieve these benefits.

As councils near the end of current kerbside contracts we will help them identify opportunities to partner and go to market together. There are also opportunities to procure other items like bins, kitchen caddies and compostable bags at a cost-effective rate.

Delivering community education

Ongoing community education is important to the success of waste and recycling systems. It is particularly important as we make system changes and implement our initiatives.

We will support councils to work together to implement similar systems across the region and develop consistent education campaigns and messages. They will be directly linked to our strategy and aligned with the state waste strategy and recycling campaign Which Bin.

Explore ways to manage collaboration

Collaboration between councils needs to be managed and resourced appropriately to achieve the benefits of working together and we will consider a waste management advisory committee to progress this. One aspect the committee can consider is a review of governance and managing collaboration, exploring if a waste authority model is appropriate for our region.

Initiative 4: Developing the circular economy

Councils have an important role in developing a local circular economy that will create social and economic benefits for our communities.

Procuring products and materials containing recycled content

Recycling only happens when materials collected from kerbside bins and transfer stations are remanufactured into new products and purchased. Councils can contribute significantly to developing the local circular economy and remanufacturing. We will help councils prioritise products and materials that contain high levels of recycled content in our operations and capital works.

Developing regional partnerships and supporting 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.

Legatus has a memorandum of understanding with the University of Adelaide and the University of SA and relationships with the Northern and Yorke Landscape Board and Regional Development Australia (RDA) Yorke Mid North and RDA Barossa Light Gawler Adelaide Plains and RDA Far North. We 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.

WASTE & RESOURCE RECOVERY STRATEGY 2021 - 2026

ACTION PLAN



Action Plan

This Action Plan summarises key actions and provides high-level guidance to achieve these. This guidance also includes indicative times of how long each step may take and who is involved.

Initiative 1: Implement alternative kerbside collection services

- | | |
|---|---|
| Evaluate a fortnightly three-bin system | <ul style="list-style-type: none"> • Council: Complete detailed business case to support a transition to new alternative kerbside systems |
|---|---|

Initiative 2: Develop regional resource recovery infrastructure

- | | |
|--|---|
| Organics processing in the region | <ul style="list-style-type: none"> • Legatus/Councils: Confirm project scope • Legatus/Councils: Complete detailed business case • Legatus: Provide support for grant funding applications. |
| Upgrades to transfer stations and resource recovery facilities | <ul style="list-style-type: none"> • Councils: Determine facility and community needs and complete detailed business case. • Legatus: Provide support for grant funding applications. |

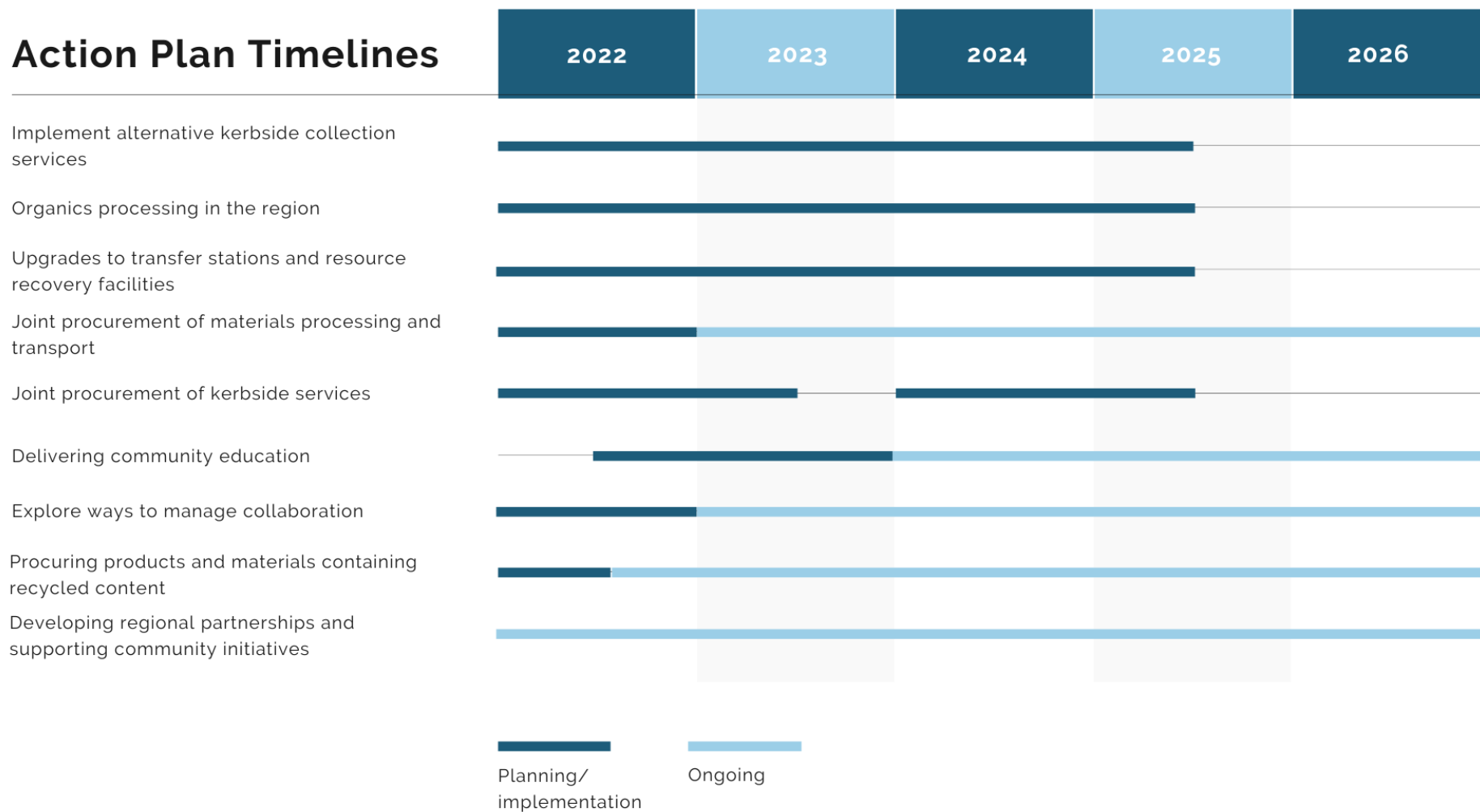
Initiative 3: Increase regional collaboration to achieve financial and service improvements

- | | |
|---|--|
| Joint procurement of materials processing and transport | <ul style="list-style-type: none"> • Council: Confirm participation, material streams and volumes. • Legatus: Prepare standard tender documents. • Legatus: Project manage procurement process and scheduling of services. |
| Joint procurement of kerbside services | <ul style="list-style-type: none"> • Legatus: Maintain details of Council's kerbside contract dates and support cooperation between councils. • Councils: Partner with neighbouring councils to prepare tender documents and go to market for kerbside services. |
| Delivering community education | <ul style="list-style-type: none"> • Councils: Determine preferred education model - direct or third party. • Legatus: Assist with procurement/implementation of the preferred education model |
| Explore ways to manage collaboration | <ul style="list-style-type: none"> • Legatus/Councils: Investigate creating a waste management advisory committee |

Initiative 4: Developing the circular economy

- | | |
|---|---|
| Procuring products and materials containing recycled content | <ul style="list-style-type: none"> • Legatus: Liaise with LGA SA on circular procurement and support Councils to identify opportunities. • Council: Identify product/materials that council purchases that can include recycled content and work with internal decision makers to prioritise these. |
| Developing regional partnerships and supporting community initiatives | <ul style="list-style-type: none"> • Legatus: Identify strategic project opportunities with university and regional partners. • Councils: Consider community initiatives and possible support as they arise. |

Action Plan Timelines



Initiative 1: Investigate alternative kerbside collection services

Implementing a fortnightly three-bin system is the most significant opportunity for councils to save money and achieve their diversion targets.

Key Actions

- **Councils:** Complete detailed business case to support a transition to new alternative kerbside systems

Process	Time required	Responsibility
1. Conduct kerbside audits to determine baseline and build case for change <i>(optional)</i>	4-6 months	Councils/Legatus
2. System design and detailed business case <i>(includes negotiations with current collection contractor or tender process)</i>	6-12 months	Councils
3. Community consultation	6 months	Councils
4. Transition preparation, including communication and engagement plan <i>(develop information, education, signage, purchase bins etc.)</i>	Min. 3 months	Councils
5. Procure bins, caddies and compostable bags	3-6 months	Councils/Legatus
6. Trial of new services <i>(optional)</i>	6-12 months	Councils
7. Implementation and ongoing education	-	Councils



Initiative 2: Develop regional resource recovery infrastructure

Organics processing in the region

Composting allows councils to accept food waste in their organics bin, diverting material from the general waste bin, reducing landfill costs and creating a valuable product. Council FOGO and transfer station organics will be important to underpin a new composting facility and is a significant opportunity to drive landfill diversion.

Key Actions

- **Legatus/Councils:** Confirm project scope
- **Legatus/Councils:** Complete detailed business case
- **Legatus:** Provide support for grant funding applications.

Process	Time required	Responsibility
1. Confirm: <ul style="list-style-type: none">• project scope• available organic materials and tonnes• preliminary budget and funding• potential sites• stakeholder interest and commitment	Min. 6 months	Legatus/Councils
2. Develop detailed business case	3-6 months	Legatus/Councils
3. Confirm commitment, approach to market and operational partner	3 months	Legatus/Councils
4. Approvals process to establish or expand site	Min. 6-12 months	Legatus/Councils
5. Site works and build	12 months	Facility operator
6. Facility commissioning and ongoing operations	1-3 months	Facility operator



Upgrades to transfer stations and resource recovery facilities

Key Actions

- **Councils:** Determine facility and community needs and complete a detailed business case.
- **Legatus:** Provide support for grant funding applications

Process	Time required	Responsibility
1. Identify operational and community requirements and complete detailed business case	4-6 months	Councils
2. Identify funding opportunities and support application	3-6 months	Councils/Legatus
3. Confirm commitment and design and procurement process	6-12 months	Councils
4. Approvals process to establish or expand site	6-12 months	Councils
5. Site works and build	Min. 12 months	Councils
6. Facility commissioning and ongoing operations	1-3 months	Councils



Initiative 3: Increase regional collaboration to achieve financial and service improvements

Joint procurement of transfer station materials processing and transport

Councils working together to manage materials from transfer stations will encourage efficiency from contractors and increase cost effectiveness of processing/transport.

Key Actions

- **Council:** Confirm participation and material streams and volumes.
- **Legatus:** Prepare standard tender documents.
- **Legatus:** Project manage procurement process and scheduling of services.

Process	Time required	Responsibility
1. Confirm participating councils and identify material streams and volumes	1 - 3 months	Councils/Legatus
2. Prepare standard tender documents (includes evaluation plan, probity plan etc.)	Min. 3 months	Legatus
3. Determine draft processing schedules	-	Legatus/Councils
4. Complete tender process	3-6 months	Legatus/Councils
5. Ongoing project management/scheduling	Ongoing	Legatus

Joint procurement of kerbside services

Joint procurement for kerbside collection, transport and processing/disposal and associated services (e.g. bins, caddies and compostable bags) provides administration efficiencies and an opportunity for reduced service costs.

Key Actions

- **Legatus:** Maintain details of Council's kerbside contract dates and support/project manage cooperation between councils.
- **Councils:** Partner with neighbouring councils to prepare tender documents and go to market for kerbside and associated services.

Process	Time required	Responsibility
1. Collect and maintain details of council contract dates	1-2 months/ ongoing	Legatus
2. Confirm participating councils and prepare tender documents (includes evaluation plan, probity plan etc.)	3-6 months	Legatus/participating councils
3. Complete tender process (including evaluation, contract negotiations and award)	6-18 months	Legatus/participating councils
4. Implementation and ongoing contract management	-	Councils

Delivering community education

Ongoing community education is important to the success of waste and recycling systems and will be key to transitioning to alternative systems and achieving landfill diversion targets.

Key Actions

- **Councils:** Determine preferred education model - direct or third party.
- **Legatus:** Assist with procurement/implementation of the preferred education model

Process	Time required	Responsibility
1. Determine education model (<i>e.g. direct, third-party</i>) and procurement process	3-6 months	Councils/Legatus
2. Develop education materials and campaign planning	4-6 months	Councils/Education provider
3. Implementation and ongoing supervision	-	Education provider/Councils

Explore ways to manage collaboration

Managing collaboration between councils across the region will require appropriate resources and ongoing management.

Key Actions

- **Legatus/Councils:** Investigate creating a waste management advisory committee

Process	Time required	Responsibility
1. Determine feasibility of committee including members, priorities and scope.	4-6 months	Legatus/Councils
2. Establish committee and confirm key activities	-	Legatus/Councils

Initiative 4: Developing the circular economy

Procuring products and materials containing recycled content

Purchasing products that contain the types of materials collected from kerbside bins is a tangible way councils can contribute to developing the circular economy and supporting the resource recovery industry.

Key Actions

- **Legatus:** Liaise with LGA SA on circular procurement and support Councils to identify opportunities.
- **Council:** Identify product/materials that council purchases that can include recycled content and work with internal decision makers to prioritise these.

Process	Time required	Responsibility
1. Identify key products/materials that can include recycled content and assessment criteria for evaluation <i>(may include guidance document)</i>	2-6 months	Legatus/Councils
2. Work with council procurement decision makers to implement opportunities	-	Councils

Developing regional partnerships and supporting community initiatives

Key Actions

- **Legatus:** Identify strategic project opportunities with university and regional partners.
- **Councils:** Consider community initiatives and possible support as they arise.

Process	Time required	Responsibility
1. Assess initiatives against the waste and resource recovery strategy, local needs and longer-term viability	-	Councils/Legatus
2. Complete due diligence and consultation with relevant stakeholders	-	Councils/Legatus