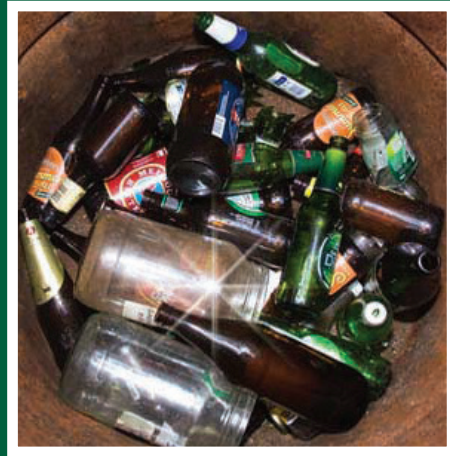


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2025 Vision on Waste
Scenic Rim Regional Council
Waste Reduction & Recycling Plan
2015 - 2025



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INTRODUCTION

The Scenic Rim Regional Council has developed a waste reduction and recycling plan – our “2025 Vision on Waste”. The new plan satisfies the regulatory requirement for Council to have such a plan under Part 2 of the Waste Reduction and Recycling Act 2011 (Regulations 121-130).

This document outlines how Council will meet the challenges of sustainably managing waste now and into the future. Although Council can implement key strategies, adopt new technology, provide infrastructure solutions and plan for the region’s future, successful implementation of a waste reduction and recycling plan will remain highly dependent on a significant behavioural shift within our community. The Scenic Rim community must embrace waste minimisation, beneficial reuse and resource recovery if Council is to meet its 2025 Vision on Waste targets.

Eliminating unnecessary waste generation and improving our ability to recover and recycle will:

- enhance our resource base
- create employment opportunities
- contribute positively to the Scenic Rim economy
- improve environmental outcomes.

While we are facing new challenges, it is important for Council to have a clear understanding of what is required to meet the 2025 Vision on Waste targets and to implement innovative solutions that meet our changing needs.

Currently Council effectively manages waste at seven waste transfer stations and the Bromelton Landfill at a level that meets legislative requirements. It is anticipated that future domestic and commercial growth in the Region will see a

change in waste quantities and waste types.

To improve waste minimisation and management into the future, the 2025 Vision on Waste plan has four overarching goals.

1. To communicate waste avoidance, waste minimisation, litter prevention and other waste management issues to residents and visitors to the Scenic Rim Region
2. To provide quality waste management infrastructure and services at an affordable price
3. To maximise the recovery, reuse and recycling of resources from the Scenic Rim Region waste streams
4. To reduce the volume of waste being disposed to landfill

To achieve these goals, Council will introduce initiatives to improve waste management across all sectors where appropriate - domestic, commerce and industry and Council operations.

It will place particular focus on resource recovery in five key waste streams:

1. improved domestic recycling services
2. improved commercial and industrial recycling services
3. organic materials (food, green and garden waste potentially including biosolids and sludges)
4. construction and demolition materials
5. problem or priority wastes (as determined by the State Government)

These initiatives will see Council providing a convenient and successful waste disposal service to residents and visitors of the Region.

A number of projects (actions) have been developed to assist in achieving these goals and to form an Action Plan. The Action Plan will be implemented through a Council-wide integrated approach incorporating Council's business planning and budgeting framework.

1. Background

Council has given high priority to implementing sustainable policies and actions needed to achieve its vision for the future. The development of the 2025 Vision on Waste will support Council's Corporate and Community Plans.

This Vision on Waste is a working document. It provides Council with meaningful and workable recommendations, solutions and strategy to deal with the Region's waste management requirements now and into the future.

Council is working to invigorate the Region's economy but with the pressures of ever-increasing expectations by residents on Council services, sustainability of service delivery is fundamental in all areas of Council.

While many factors affecting sustainable outcomes are controlled outside Local Government, it is a responsibility Council has embraced to ensure that education on waste minimisation is made available to residents, businesses, schools and other local organisations.

Waste cannot be avoided, therefore through education and communication, it can be managed and ultimately reduced or recovered as a resource. The preferred product lifecycle, as illustrated in diagram 2.0.1 is the ideal. Council's commitment to this process will eventually, reduce our waste, our reliance on landfill and improve resource recovery.



Waste is a mounting problem.

2. A Shift in focus

Currently, the primary considerations in waste management decision-making have by necessity focused on minimal risk to the environment and to public health, while ensuring a high level of community satisfaction with the services provided.

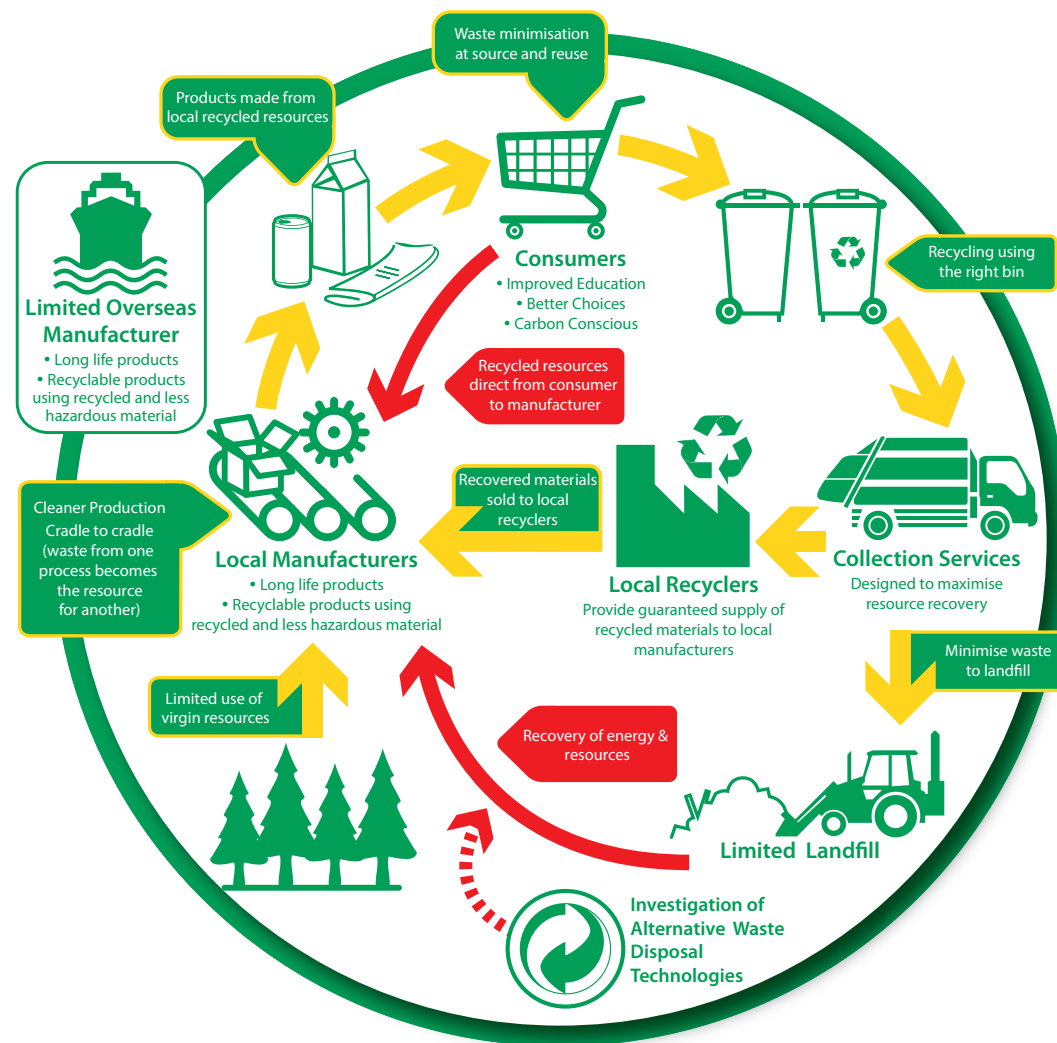
It is important to deliver safe and efficient waste management systems and while current systems are good they can be improved. To make the improvements happen, a shift in focus is required, from the present ‘disposal’ system to the wider arena of waste minimisation, beneficial reuse and resource recovery.

Scenic Rim had a population of 38,399 in 2013 and it is anticipated to increase to nearly 60,000 by 2026 . Naturally, with population growth comes added construction activity, more businesses including manufacturing industries and local infrastructure in general will expand. All of these additions to the region will impact waste.

Today, it is commonly thought that waste disposed to landfill is the inevitable consequence of a prosperous society, regardless of this assumption, a preferred approach is to utilise waste as a resource. For example, in a natural eco-system, the waste from one process becomes the resource for another. Through Councils improvement of services and ongoing education programs, the Scenic Rim community must adopt this view if the Scenic Rim of 2025, with its growing population, is to be prosperous and sustainable.

The 2025 Vision on Waste plan aims to introduce initiatives that result in long-term waste minimisation and resource recovery opportunities. The waste that could be avoided and the resources that could be recovered should be seen as an asset that will enrich our resource-base, create employment opportunities and contribute to the economic fabric of the Scenic Rim Region and ultimately improve environmental outcomes.

Diagram 2.0.1 Preferred product lifecycle



3. Current Waste Operations

3.1 Collection services

Council provides a “standard waste service” to all residential and commercial premises within the defined waste collection areas. The “standard waste service” comprises of a 240 litre weekly waste bin collection and a fortnightly 240 litre recycle bin collection service. Larger size bulk waste bins cater for waste for a number of multi-residential complexes and commercial premises.

Council provides a number of other waste collection services that include:

- park and street bin services (many with public place recycling)
- dead animal removal from public places
- special events services (i.e. shows and fetes etc.)
- management of litter and removal of illegal dumping

Improvements to the collection services being considered for the future include (but are not limited to):

- extending the defined waste collection areas
- offering a range of bin sizes at a range of charges
- green waste services
- commercial bulk recycling
- offering an alternative frequency of standard waste services



3.2 Waste transfer station network

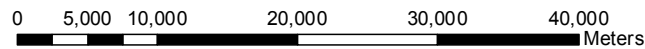
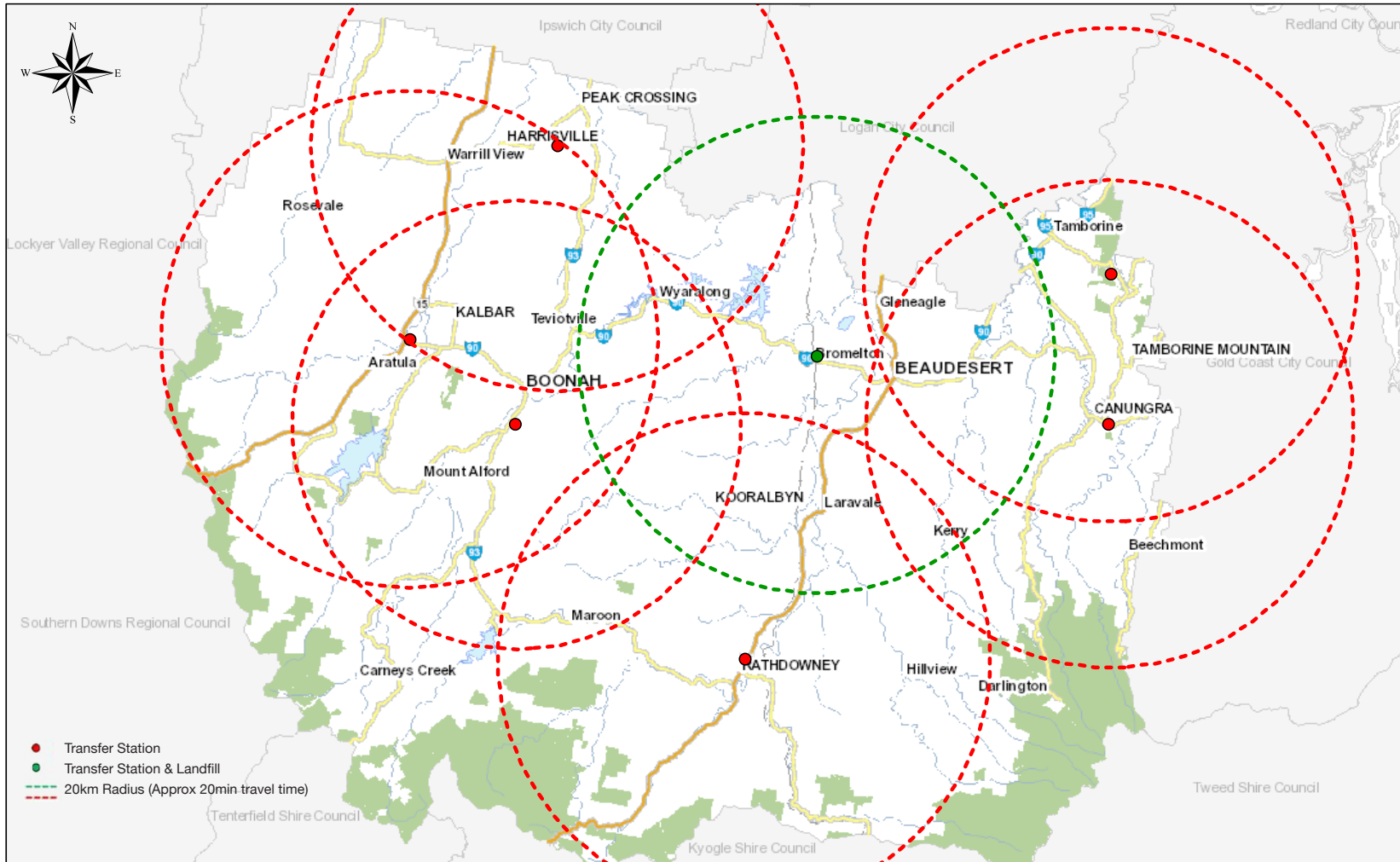
Scenic Rim Regional Council has a network of seven (7) waste transfer stations. The seven sites, operational days and type of waste accepted at each is summarised in Table 3.2.1.

The location of the sites are shown on Map 3.2.2.

Table 3.2.1: Recycling accepted at Transfer Stations

SITE	OPEN DAYS	Green waste	Waste oil	Paper & Carboard	Scrap metal & car batteries	Mobile phones	Toner cartridges	Gas bottles	Tyres	Charity Bins	Non ferrous metals	Concrete	Domestic recycling	Drum Muster
Beaudesert (Bromelton)	7 days/week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tamborine Mountain	6 days/week (closed Wed)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Boonah	6 days/week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Canungra	6 days/week (closed Thurs)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Kalbar	3 days/week Wed/Sat/Sun (half days)			✓						✓			✓	✓
Peak Crossing	3 days/week Wed/Sat/Sun (half days)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Rathdowney	3 days/week Mon/Thurs/Sat	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

Map 3.2.2: SRRC Transfer Station Locations



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Over the next decade, Council's waste transfer station network will see continuous monitoring and improvement to meet community needs in areas such as:

- daily operation of sites
- site security
- recycling facilities
- amenities and equipment

3.3 Central landfill

The Scenic Rim Regional Council has only one operating landfill – Central Landfill at Bromelton, near Beaudesert. Since opening in April 2002, this landfill has received and managed approximately 40,000 tonnes of waste per annum. This fully engineered and well maintained landfill site has a dual liner (a GCL and a plastic liner) for leachate capture. The site has proved itself vital to waste containment with one landfill cell already full. The second cell became operational in October 2014.

Council's Landfill at Bromelton currently services the needs of the region, as well as the area of the former Beaudesert Shire that transitioned to Logan City Council through a service level agreement as required by local government reform legislation. While the landfill currently delivers this service, current approvals and available land provide the opportunity to significantly expand landfill operations. Opportunities exist for Council to achieve a positive financial return through expanding operations to become a regional waste facility. Council is investigating options in this regard, taking into account the location of the landfill in the Bromelton State Development Area.

3.4 Closed landfills

Scenic Rim Regional Council has eight closed landfill sites at:

- Il Bogan (Beaudesert)
- Tamborine Mountain
- Tamborine Village
- Rathdowney
- Canungra
- Boonah
- Kalbar
- Peak Crossing

The Department of Environment and Heritage Protection requires Council to perform environmental monitoring on these sites for up to 30 years. Council will continue to meet its obligations at these sites as required by legislation.

4. Data and Evaluation

Scenic Rim Regional Council was formed in March 2008. Since 2009, Council has been collecting relevant data on waste and recycling. Weighbridge data records tonnages of most waste types transported into Central Landfill and the data is managed through a specific weighbridge computer system. The data collected from the weighbridge system assists Council in reporting for internal and external requirements.

The most recent waste survey was conducted in August 2014 and reported on Domestic Waste and Commercial Office Waste streams. Annual surveys will continue to particularly monitor our domestic waste stream in order to identify areas required for further education and communication with the public. Monitoring and identifying trends or changes in the composition of the waste stream assists Council to improve processes and implement corrective action for waste and recycling services. Waste survey information provides base-line data against any future measurement and therefore has the capability to measure

behavioural change and the effectiveness of community awareness programs, waste management and recycling operations.

A gap in data collection and evaluation of waste generated from industrial and commercial premises ie. manufacturing, agricultural, retail and hospitality, has been identified. Waste types generated from these industries will need to be determined through research and auditing to assist in the success of the waste plan.

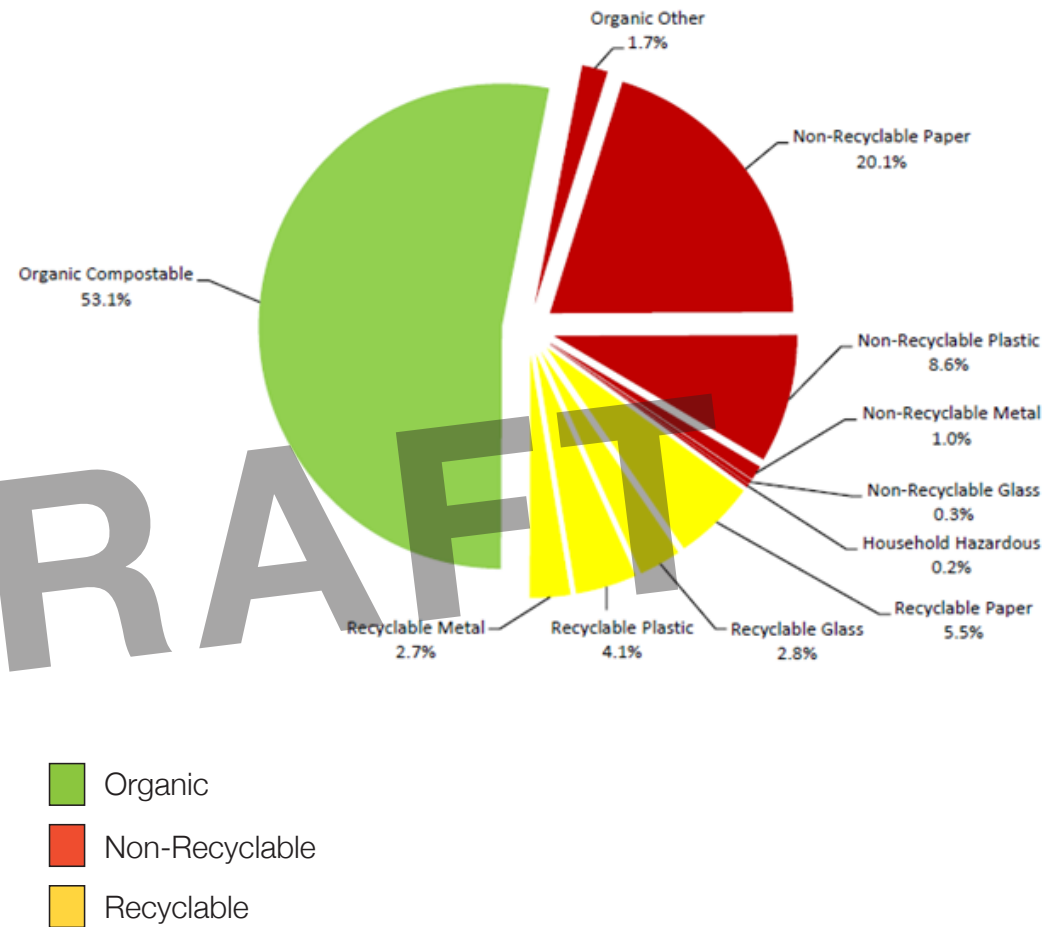
Following are three examples of the composition of Scenic Rim’s waste. Data has been extracted from the 2014 Waste Survey.

4.1 Domestic weekly waste collection and disposal

Each residential property is provided with a weekly collection for general waste. This waste is collected and transported to the central landfill where it is compacted and buried. This waste is not sorted to recover recyclable resources.

Scenic Rim Regional Council serviced about 13,006 waste disposal wheelie bins per week in August 2014. Of the domestic wastes being sent to landfill, our 2014 annual waste survey identified 53.1% as organic and 15.1% is recyclable as shown in Diagram 4.1.1.

Diagram 4.1.1



- Organic waste makes up over half (53.1%) of the weekly domestic collection. Of this 2.5% is garden waste that could be easily composted, and much of the food waste (45.7%) could also be composted.
- Recyclable waste that can be recycled under current contract arrangements makes up another 15.1% of the weekly domestic waste collection. Of this, 5.5% is paper, 2.8% is glass, 4.1% is recyclable plastic and 2.7% is metal.
- General waste makes up the remaining 31.8% of the weekly domestic collection. Non-recyclable plastic bags form 8.6% of this total and non-recyclable paper, 20.1%. Household hazardous waste makes up only 0.2% of the total.

With community support and the application of contemporary well proven technologies, 68.2% by weight of the total domestic waste stream could be diverted from landfill; however the technologies to do this are cost prohibitive at this time.



The level of recyclables in our domestic waste stream in 2014 is 15.1% and this compares favourably with Brisbane City which has 25% - 30% of recyclables in their domestic waste. A communication plan with the aim of educating the general public, should improve this situation.

4.2 Domestic fortnightly kerbside recycling collections

Domestic recyclable resources are collected once a fortnight and processed under contract at a privately owned Materials Recovery Facility (MRF).

The annual 2014 Recycling Survey revealed recyclable materials included the following items:



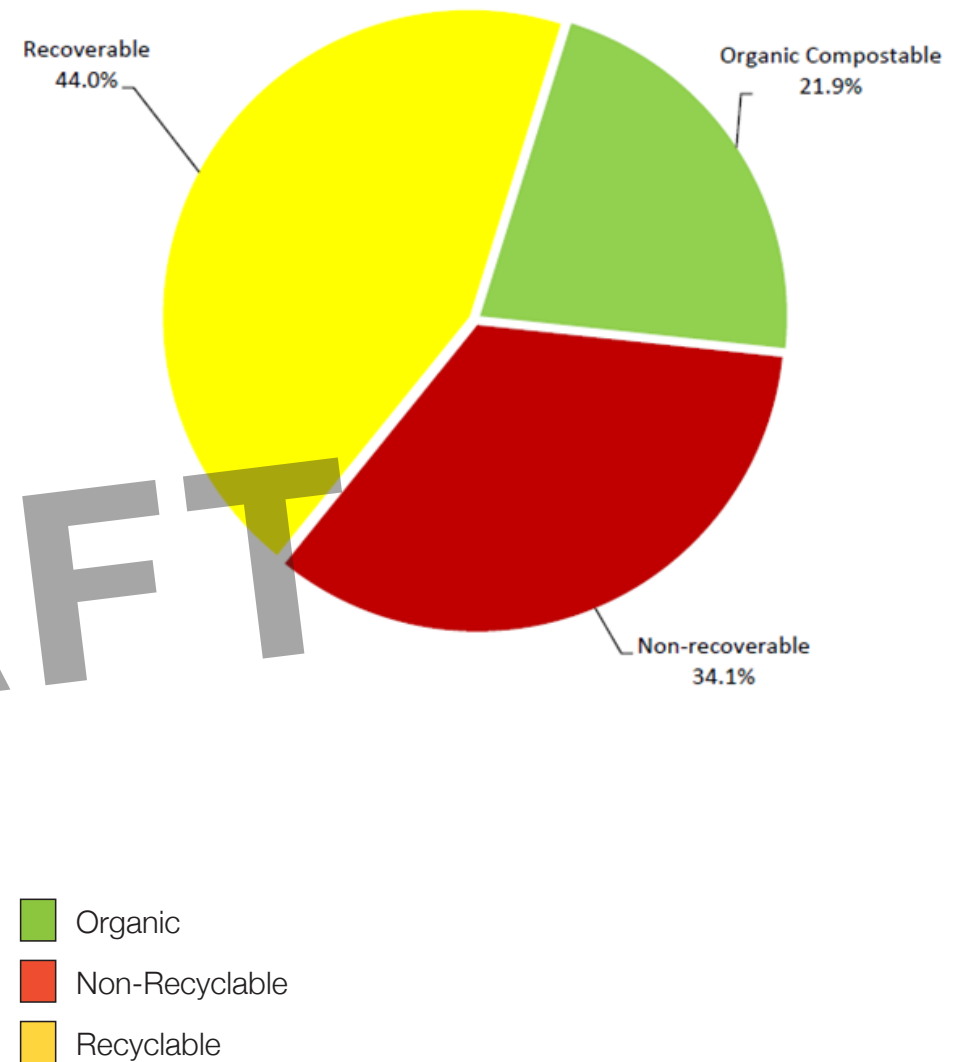
A total of 19.8% of the collected recycled product was contaminated. This level of contamination in recycling bins is high compared to some other Councils (e.g. Brisbane City has 8% contamination). Council will endeavor to reduce contamination through an improved recycling education program.

4.3 Commercial and industrial waste

Council collects commercial and industrial (C&I) waste under the Waste Collection service but the majority of C&I waste is collected by private waste firms. Council does receive and dispose of some C&I waste on a “user-pays” basis at Central Landfill.

Our 2014 survey examined commercial (office) waste. The office surveyed has an internal recycling scheme in place. The amount of recyclables in the waste stream was 24.3%. The amount of contamination (waste) in the recycling stream was 10.3%. Diagram 4.3.1 shows that overall; the office produced 44% of recyclable material, 21.9% of compostable organics and only 34.1% was waste. The introduction of a commercial organic recycling bin would result in the compostable material being reused.

Diagram 4.3.1



Capturing recyclable materials reduces waste buried in landfill.

5. Planning for the Future - A New Way

The predicted growth of the Scenic Rim Region will mean existing infrastructure and resources are likely to change in order to effectively manage the volume and types of waste while meeting the targets set out in this plan. Innovation and communication will become key requirements to inspire Scenic Rim residents to take ownership and assist in minimising the risk of environmental impacts locally and globally caused by waste.

The new initiatives outlined in this strategy will improve waste management in three key areas:

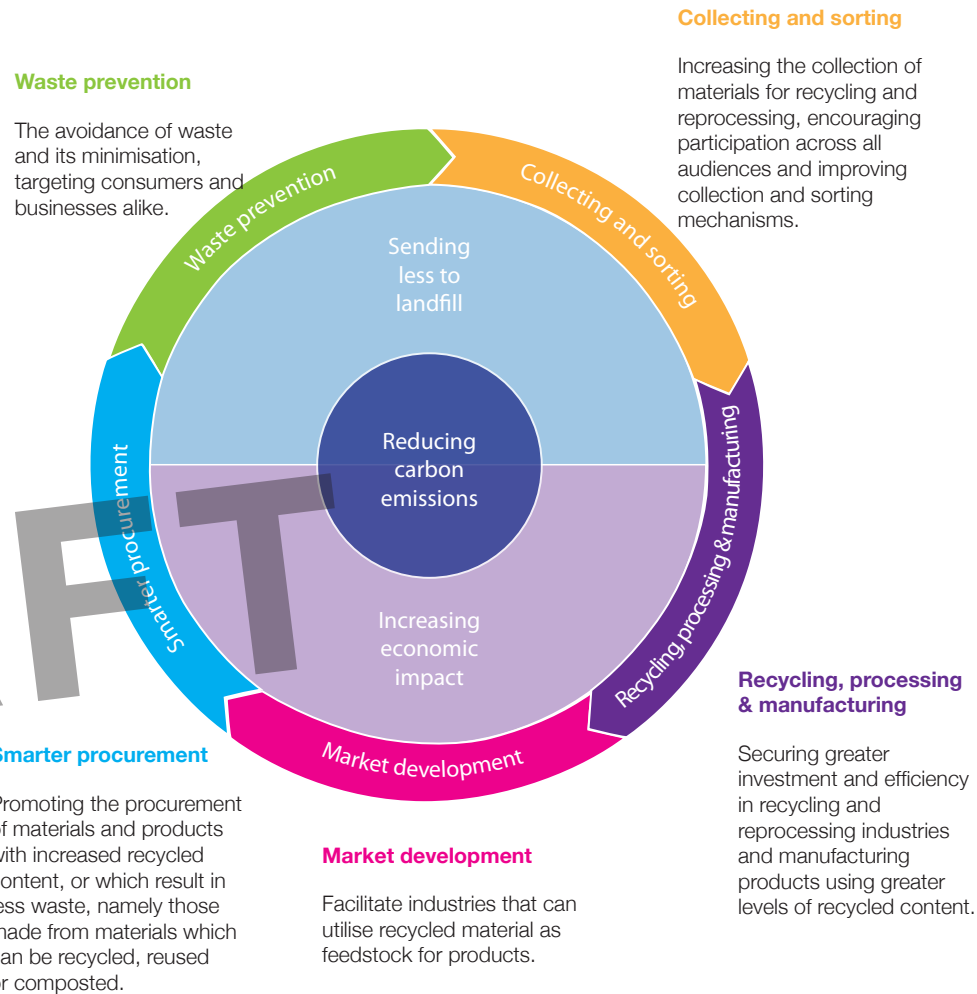
- residential properties
- Council's own facilities and activities
- commerce and industry

Adverse impacts on the environment are now driving the need for more sustainable practices across all industry sectors when it comes to waste. It is evident that reducing the amount of waste we produce is the most effective action we can take.

One of the most immediate recycling challenges today is to educate consumers about the benefits of buying products made from recycled materials. Manufacturing is driven by the marketplace. Buying recycled content products creates long-term markets for recyclable materials and increases recycling program revenues. If demand exists for recycled content products, manufacturers will produce recycled products. Council will consider a whole of Council approach to purchasing green products ie. products made from recyclable material and/or products that have been produced from an environmentally friendly source.

The Resource Efficiency Loop (refer Diagram 5.0.1) clearly determines waste as a resource and also defines the need for manufacturing products using recycled content in order to close the loop. Rather than a waste disposal system, the handling of waste should be considered a resource management system – commodity management with a supply chain focus.

Diagram 5.0.1 The Resource Efficiency Loop



Council will continue providing recycling services through the kerbside and transfer station recycling services as well as improve existing activities and introduce new activities to enhance recycling outside of the home. Council will aim to provide services to residents and visitors of the Region so that they are able to conveniently dispose of waste and recyclables whilst meeting the desired outcomes of this plan.

At the same time we will need to:

- where possible identify, promote and support existing resource recovery programs
- investigate potential waste minimisation and resource recovery opportunities within the Regions commercial sector
- continue to educate and encourage the community to change current purchasing practices which are ultimately contributing to waste generation

5.1 Overarching goals

The three overarching goals align with objectives in Council's Corporate and Community Plans. These goals will also drive the current and future Operational Plan deliverables for waste management.

1. To communicate waste avoidance, waste minimisation, litter prevention and other waste management issues to residents and visitors of the Scenic Rim Region.

A key factor in the success of this plan will be achieving behavioural change in our community. Education and communication that will support this change will be provided on a regular basis through a number of initiatives.

- enhance existing waste education program to ensure residents are educated and kept informed on resource recovery services
- improve our school based waste education program and providing direct assistance to schools
- provision of education programs at local shows, events and festivals

- enhancement of internal Council communication and education programs on recycling and waste avoidance
- update Council website regularly on waste minimisation and recycling issues
- direct liaison with small business and industry to identify issues with waste generation and to assist with methods for improvement, including cleaner production

Council will improve methodologies and effectiveness in communicating the issues and educating residents as it is essential that waste awareness and behaviour improve.

2. To provide innovative waste reduction, recycling and management practices to minimise adverse effects of waste on the environment and impacts on the community.

- investigation of improvements for recycling services for residents, commerce and industry
- improve recycling services for schools
- investigation of a 'green waste' service for recycling garden green wastes and possibly kitchen organics
- improved internal recycling services for Council buildings
- investigation of alternative resource recovery methods that can assist residents and business

3. To maximise the recovery, reuse and recycling of resources from the Scenic Rim Region waste streams.

Council will continue to focus on increasing the recovery of recyclable materials, with a greater emphasis being placed on the fact these materials are a valuable resource, rather than a waste that is a costly liability. Data suggests 15% of current domestic waste disposed at landfills could be recovered and that ultimately the level of recovery could be as high as 68% when including organic waste.

However, to reach either of these targets for recovered resources requires the full support of the community, the development of healthy markets and significant capital investment in infrastructure and technology. A more attainable medium term

target for resource recovery must be developed, along with a budget to achieve the desired level of diversion. This is a core action for this strategy.

In the short term, Council must push the boundaries to attempt to recover resources that are currently lost in landfill. Some areas that can be examined for possible improvements to recover resources from the current waste stream include:

a) Alternative waste technologies (AWT)

While there are emerging alternative waste technologies (AWT) that may assist in resource recovery, they come at significant expense. The experiences of other Councils across Australia suggest a ‘wait and see’ approach be undertaken to ensure that any technology presented is robust and will actually provide a benefit, prior to making a longer term commitment.

b) E-waste resources

Currently, the Federal Government has a national scheme to recycle certain types of e-waste. Council utilised this scheme for a period of 18 months to 31 October 2014. Council will lobby for a national scheme to be restructured and e-waste recycling in the Scenic Rim Region can recommence.

c) Organic resources

Organic resources make up half the waste from households being disposed to landfill. Much of this resource loss is due to lack of education of the environmental impact of organic waste. Organic waste in landfill is also a significant loss of a valuable resource. Council will need to introduce new initiatives to recover a greater volume of this resource. These initiatives would include:

- investigation of a kerbside organics (green bin) collection service
- investigation of an organics recovery program for Council operations
- encourage regional farms to use compost produced from organic waste
- encourage home composting
- encourage residents to divert more green waste from landfill by utilising the greenwaste recovery at Council’s transfer stations

- investigation of the beneficial reuse of green waste eg. process green waste into mulch; then value add by further processing into compost and/or other organic products
- examine a range of organic recovery processes
- lobby the Federal Government to classify quality compost produced from waste as a form of carbon sequestration

d) Construction and demolition resources

As development grows in the Region thousands of tonnes of recoverable wastes like concrete, timber, steel, glass and organic resources may be potentially generated. An opportunity exists for Council to foster the recycling and reuse of construction and demolition (C&D) waste, however this must be done in conjunction with further research and understanding of the incoming waste types.

Increased development will test the Council’s ability to minimise and manage the extra C&D waste generated. To counter and minimise this waste, Council will need to ensure waste strategies are incorporated into the building and planning phase of all future development. Development and construction in the region must become waste effective – that is to use the minimum amount of finite natural resources and use recovered/recycled products.

Other strategies include:

- actions to address development issues (as detailed in Section 5.3 below)
- actions to create and facilitate robust markets for recycled and recyclable resources produced during the projected growth in the Scenic Rim Region, in conjunction with the demolition industry and other members of the resource recovery sector.

Improvements to the recycling process, education and communication and resource recovery initiatives as previously outlined will assist to reduce the volume of waste being disposed to landfill.

Council will work with industry groups and other South East Queensland Councils to develop alliances and cooperative processes to reduce waste to landfill as a primary course of action.

Further investigation into resource recovery and waste separation techniques and services at transfer stations will ultimately see waste diverted from landfill.

5.2 Consumer society

This plan includes actions that will begin to address issues associated with today's fixation on 'buying' and will aim to gradually transform the Region's consumer society into a conserver society.

Advanced technology, inbuilt redundancy, single use items, cheap imports (particularly electrical products) and an excess of disposable income inevitably contribute to waste. The process of waste minimisation is more than reducing the quantity of waste being sent to landfill or establishing a recycling process – the process must begin at the time the product or service is designed and/or purchased.

It is important that consumers (organisations and individuals) understand when they buy products, they are also buying waste. 'Buying' refers to all decisions leading up to the purchase of a product or service - this includes research, design, tendering and final selection. If they choose a product that lasts longer or that can be repaired, or eventually reused or recycled, this will be cost-effective for them in the long term and reduce the waste burden on our society.

Consumers need to be educated about the consequences of their purchasing actions and engage in ways to minimise waste. Council can lead by example in implementing this plan. Council needs to introduce sustainable purchasing initiatives for goods and services used by the organisation.

5.3 Regional Planning Scheme

The Scenic Rim Regional Council currently has three planning schemes. These are being reviewed and updated into one new Regional Planning Scheme. Council needs to ensure that additional provisions relating to waste and recycling are included. Developers need to consider waste and recycling issues during all stages of new developments and redevelopments. This would be a requirement under the Environmental Nuisance Code within the new Town Plan.

The new Regional Planning Scheme process will investigate the requirement for significant developments to implement a three stage Waste Management Plan (WMP) for management of waste and recycling. WMPs covering pre-construction, construction and post-construction phases will be required to identify how resource recovery is planned during the entire project. The WMPs can be designed for flexibility and adaptability over time. Designers/architects will need to consider future waste minimisation initiatives within the site and to enable post-development waste and recycling services to be effectively provided.

5.4 Infrastructure planning

The future growth of the region must be supported by appropriate waste management infrastructure. Council currently has seven waste transfer stations and one operating landfill. Continuous monitoring and review of Council's waste transfer network may see decisions made on operations and services over the course of the plan.

An Asset Management Plan (AMP) has been prepared for each transfer station to identify appropriate maintenance and upgrade work for these facilities. An investigation of the feasibility of opening a recycling drop off centre and sales area for recycled goods has been investigated but is likely to be reviewed. New additional recycling facilities and services will be required as times goes by (e.g. electronic waste, fluoro tubes, alkaline batteries), requiring budgetary planning.

Improved Council Infrastructure will assist with the recovery of waste types that prove difficult for resource recovery ie. construction and demolition waste.

Council will work with our regional partners and members of the resource recovery industry to identify appropriate locations for key South East Queensland infrastructure to reduce impact on residential areas and improve access for transporters.

5.5 Research

Close scrutiny of emerging approaches, techniques and technologies will be required to maintain continued improvement of waste minimisation and resource recovery processes in the Scenic Rim Region.

This will be achieved through the maintenance of a network both in Australia and overseas. Research may include monitoring of field trials and an active watch on world initiatives to ensure best value is obtained in all waste management technologies to be considered for adoption for the Scenic Rim Region in the future.

Evolving issues with our carbon footprint, carbon emissions and emissions trading also need to be researched thoroughly to identify implications for recycling and resource recovery programs.

5.6 Legislation

Council will continue to liaise with the State and Federal Governments on current and proposed legislation concerning waste and recycling issues. Council will also contribute to the development of Queensland Waste legislation in conjunction with the Local Government Association Queensland (LGAQ) and other councils within the South East Queensland region. Federal legislation will also need to be monitored.

5.7 Economic instruments

Rates and landfill fees and charges have long been the source of revenue for funding waste and recycling operations and infrastructure. These are generally based on the ‘user pays’ or ‘polluter pays’ principles and this will continue to be the case. Resource recovery is a growing instrument to raise revenue for funding waste and recycling services. These industries are influenced by market demand. Federal and State Government initiatives also contribute to revenue. Such programs may include:

- Container Deposit Legislation (CDL)
- Advanced Recycling Fees (ARF)
- Public Private Partnership
- Landfill levies

5.8 Regional collaboration

Council is an active participant in the South East Queensland Council of Mayors organisation. Regional collaboration and cooperation on waste and recycling matters is important. Council will continue to collaborate in this area.

5.9 Queensland Waste Strategy

The Queensland Government has released a new Queensland Waste Strategy, *Waste - Everyone’s Responsibility - Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)*. The framework for the Queensland Waste Strategy (see Table 5.9.1) outlines the overall intentions for waste reduction and management in Queensland but in particular details four objectives that Council Actions will reflect:

Objective 1: Driving Cultural Change: All stakeholders recognise their role in meeting the vision of the waste strategy, and are informed and empowered to participate in achieving its goals and objectives.

Objective 2: Avoidance and minimisation: Queensland will realise all opportunities (environmental, economic and social) from maximising sustainable consumption and production.

Objective 3: Reuse, recovery and recycling: Queensland will optimise economic benefits from reuse, recovery and recycling.

Objective 4: Management, treatment and disposal: Queensland will reduce the impact of waste on human health and the environment through improved waste management practices.

The Queensland Waste Strategy Targets (see Table 5.9.2) take into account different circumstances and opportunities in metropolitan and non-metropolitan parts of the state. Council’s individual targets outlined in Section 6 of this strategy, complement and align with State targets. The Queensland Waste Strategy identifies 16 problem (priority) wastes. Council already recycles some of these wastes. Some cannot viably be recycled due to high costs. Some problematic waste are not a problem in Scenic Rim. Table 5.9.4 shows how Council will address Priority Wastes.

Table 5.9.1 Framework for the Queensland Waste Strategy: “Waste - Everyone’s Responsibility”



Figure 1: Strategy framework

Source: Qld Waste Avoidance and Resource Recovery Strategy (2014-2024)

Table 5.9.2 Queensland Waste Strategy Targets

Waste stream	Measure	2012-13 recovery baseline	2024 target
All general waste	Reduction in per capita generation	1.9 tonnes general waste per person per year	Reduce (by 5%) to 1.8 tonnes per person per year
Municipal solid waste (domestic)	Improved recycling rate	33% state <ul style="list-style-type: none"> • 37% metropolitan • 30% regional centre 	50% state <ul style="list-style-type: none"> • 55% metropolitan • 45% regional centre • Improve practices as much as practicable for remote areas
Commercial and industrial waste	Improved recycling rate	42% state	55% state
Construction and demolition waste	Improved recycling rate	61% state	80% state
Landfill diversion target	Reduction in the amount of waste going to landfill	4,675,000 tonnes to landfill	Reduce by 15% over life of strategy
Problem or priority wastes	Improved management of each waste	Individual baselines to be developed	Individual measures to be developed

N.B. Targets are aspirational; not mandatory.

Source: Qld Waste Avoidance and Resource Recovery Strategy (2014-2024)

Table 5.9.3 The Waste and Resource Management Hierarchy

The Waste and Resource Management Hierarchy is an order of preference for options for managing waste, a principle supported in the Queensland Waste Strategy and a tool that Council will adopt when managing waste.

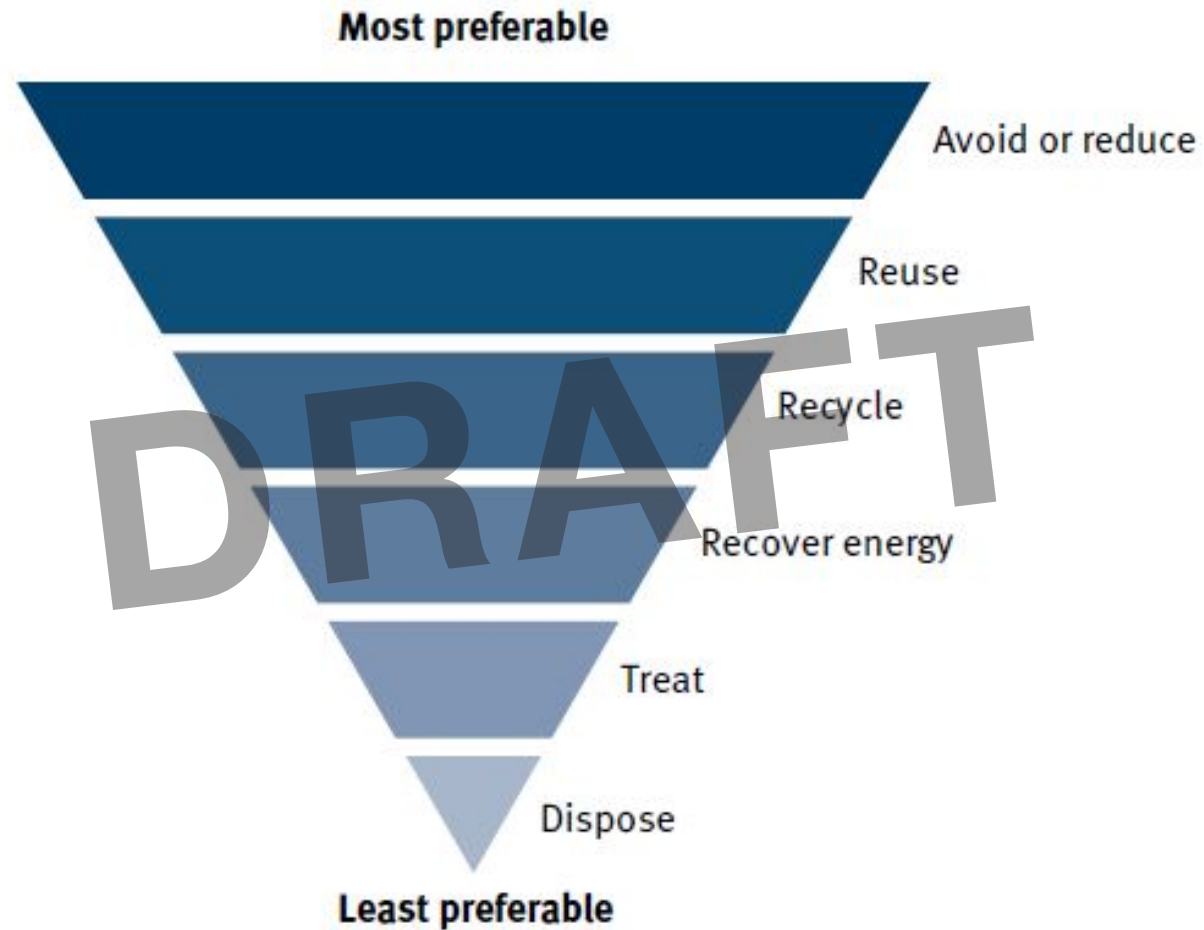


Table 5.9.4 Queensland Priority Wastes and how Scenic Rim Regional Council will address these waste types

Priority waste stream	Priority material	Scenic Rim Current Situation	Actions for the Future
Plastic waste	Agricultural plastics Packaging waste Plastic bottles, bags and other consumer plastics	Currently not an issue Recycling services available Recycling services available	No action planned Promote existing services Promote existing services
Organic waste	Households green waste Households food waste Commercial premises - hospitality Commercial premises - food processing	Free recycling at transfer stations No organic collection service provided Waste generally placed in waste bin - taken to landfill Encourage home composting with compost bin subsidy Limited to small number of businesses. Offer commercial waste and recycling services. Limited industries; waste to landfill. Offer commercial waste and recycling services.	See Action 14 See Action 14 See Actions 3, 12 & 14 No action planned
High volume wastes with an existing resource value	Concrete Treated Timber Plasterboard	Recycling of 'clean' concrete occurs at Central Landfill Disposed of in landfill Disposed of in landfill	Promote existing service No action planned No action planned
Regional impact waste	Mining and industry development Mattresses Orphan agricultural and veterinary chemicals	Currently not an issue Not currently an issue Utilise Drum Muster and <u>Chem Collect</u> programs	No action planned Investigate recycling options Promote existing services
Complementary national product stewardship measures	Fluorescent lights Used tyres Used oil	Not recycled - buried in landfill Accepted at Transfer Stations and recycled (fees apply) Accepted at Transfer Stations and recycled (<u>foc</u>)	No action planned - would consider a National Scheme Promote existing service Promote existing service

6. Waste Reduction Targets

Domestic Waste

Council's major waste stream is Municipal Solid Waste (domestic). 22,977 tonnes of domestic waste and recyclables was handled by Council in 2014. Overall 58% of all material handled by Council was disposed of at landfill. The remaining 42% of material is recovered resources via Council's kerbside collection and transfer stations. Diagram 6.0.1 summarises the domestic waste stream quantities and sources that Council handled in 2014.

Diagram 6.0.1 Domestic Waste and Recycling for 2014

CRITERIA	TONNES	PERCENTAGE	PERCENTAGE OF TOTAL WASTE STREAM
TOTAL DOMESTIC WASTE to LANDFILL			
Domestic Waste via Kerbside Collection	7,467	56%	58%
Domestic Waste via Transfer Stations	5,965	44%	
Total	13,432		
TOTAL DOMESTIC RESOURCES RECOVERED			
Domestic Recyclables via Kerbside Collection	2,611	27%	42%
Domestic Recyclables via Transfer Stations	6,934	73%	
Total	9,545		
TOTAL DOMESTIC WASTE STREAM	22,977	100%	

Diagram 6.0.2 below shows the key targets for domestic waste reduction and recycling for the year 2025 in line with Queensland Waste Strategy targets outlined in Table 5.9.2.

Diagram 6.0.2 Key Targets for Domestic Waste and Recycling

INDICATOR	ACTUAL 2014	TARGET 2025	QLD TARGET
Population	38,399	60,000	-
Domestic Waste Per Capita	0.35 t	0.30 t	Reduce by 15% over life of strategy
Resources Recovered Per Capita	0.25 t	0.36 t	45% Improved recycling rate
Total Domestic Waste to Landfill	13,432	18,000	-
Total Domestic Resources Recovered	9,545	21,600	-
Contamination in Recycling refer to 4.2 of this strategy	20%	10%	-
Organic Waste in Waste Stream refer to 4.1 of this strategy	53%	30%	-

*Population Growth Source: ABS Census of Population and Housing, 2011

Commercial Waste

Council also landfills approximately 6,375 tonnes of commercial and industrial (C&I) waste each year through the Waste Collection Service and through Transfer Stations. Development and business opportunities might see Council actually increase the volume of C&I waste received annually. This waste type requires significant research for resource recovery opportunities in the Region in order to meet the 2025 targets outlined in Diagram 6.0.4.

Diagram 6.0.3 Commercial and Industrial/Construction and Demolition Waste for 2014

CRITERIA	TONNES	PERCENTAGE	PERCENTAGE OF TOTAL WASTE STREAM
TOTAL COMMERCIAL AND INDUSTRIAL WASTE to LANDFILL			
C&I Waste via Kerbside Collection	738	12%	75%
C&I Waste via Transfer Stations/Landfill	5,637	88%	
Total	6,375		
TOTAL C&I and C&D RESOURCES RECOVERED			
C&I Recyclables via Kerbside Collection	258	12%	25%
C&I Recyclables via Transfer Stations	540	25%	
C&D Recyclables - Concrete	1,350	63%	
Total	2,148		
TOTAL C&I and C&D WASTE STREAM	8,523	100%	

Diagram 6.0.4 Key Targets for Commercial and Industrial/Construction and Demolition Waste for 2014

INDICATOR	ACTUAL 2014	TARGET 2025	QLD TARGET
Population	38,399	60,000	-
C&I Waste Per Capita	0.17 t	0.14 t	Reduce by 15% over life of strategy
C&I Resources Recovered Per Capita	0.06 t	0.09 t	55% Improved recycling rate
Total C&I Waste to Landfill	6,375	8,400	-
Total C&I Resources Recovered	2,148	5,400	-
Contamination in Recycling refer to 4.2 of this strategy	10%	5%	-
Organic Waste in Waste Stream refer to 4.1 of this strategy	22%	5%	-

*Population Growth Source: ABS Census of Population and Housing, 2011



Education is vital to improve attitudes to waste disposal

7. Integrated Waste Management

Council is committed to ensuring resources are used more efficiently by moving to minimise the impact of waste on the community and the environment. Council can achieve this outcome by developing a number of key integrated initiatives that directly address waste issues for residential communities, Council facilities, the commerce and industry (C&I) sectors and construction and demolition (C&D) sectors.

7.1 Key initiatives

Our key initiatives will include:

- preventative measures to reduce waste generation
- resource recovery options to retain the embedded value of waste resources
- sustainable procurement to reduce consumption and increase resource efficiency
- recycling and re-use initiatives that produce environmental, economic and social benefits
- community communication and education
- setting measurable KPIs and targets and reporting performance outcomes

These initiatives will be achieved in a way that is mindful of our South East Queensland regional council partners, through facilitation and active participation in the South East Queensland Waste and Recycling Network Group (SEQ WRNG), which has been established for collaboration on regional waste minimisation and management issues.

Council will adopt an advocacy role to bring waste management issues to the attention of the Federal and State governments. Elected representatives and Council officers will jointly provide a voice to implement policy approaches directed at Product Stewardship (PS) or Extended Producer Responsibility (EPR) which may provide more cost-effective mechanisms for minimising waste and improving recovery of resources.

7.2 Achieving these initiatives

A number of projects (actions), have been developed to assist in achieving the initiatives. Details of the projects, the timeframe and a correlation with the key initiatives are contained in the Action Plan in Section eight of this strategy. The Action Plan will be implemented through a Council-wide integrated approach and will be enacted through Council's business planning and budgeting framework.

Implementation will not be the sole responsibility of Council's waste area, just as the process is not only about management of waste that is generated. The onus will be placed on all Council departments to develop business plans that will minimise the generation of waste in the first instance. This will apply to all Council functions, operations and projects completed within and in conjunction with the community.

7.3 Performance measurement

Council departments responsible for implementation of the Action Plan will conduct regular monitoring of performance outcomes for each project. Existing evaluation will continue against pre-determined key performance indicators (KPIs) for waste service provided by Council. KPIs will be subsequently adjusted to develop better measures and obtain continuous improvement. Annual waste audits will continue to be the most effective measure on performance outcomes.

Monthly departmental reporting against Council's Operational Plan will provide a clear indication of performance success and also the realisation of this plan.

7.4 Plan review

The 2025 Vision on Waste plan will be subject to ongoing monitoring to ensure the direction is maintained according to internal and external constraints and demands. In accordance with the Queensland Waste Reduction and Recycling Act 2011, this plan will be reviewed every three years.

Projects detailed in the Action Plan will be reviewed at least annually, as part of the programmed budget process and adjusted as necessary, to ensure 2025 Vision on Waste remains aligned with Council's Corporate, Community and Operational Plans.

8. Action Plan

8.1 Overview of proposed projects

Action 1: Core business services for managing the Scenic Rim Region's waste streams

Scenic Rim Regional Council will continue to provide the following core activities for our residents:

- weekly waste (wheelie bin) collection services
- fortnightly recycling (wheelie bin) collection services
- transport and processing of recyclables at a Materials Recovery Facility (MRF)
- bulk waste bin collection services
- collection of street and park bins
- collection and disposal of dead animals from public land
- operation of our waste transfer stations including their green waste and their recycling facilities
- transportation of waste and recyclables from our waste transfer stations
- operation of Central Landfill site
- extraction and flaring of landfill gas at Central Landfill

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy SHE 5

QUEENSLAND WASTE STRATEGY

- Meets Objectives 3 & 4

Action 2: Review of waste disposal facilities and services

a) Council needs to review and make decisions regarding its waste network, including the seven waste disposal facilities and Central Landfill at Bromelton.

b) The Central Landfill at Bromelton is a valuable asset. A thorough assessment of possible options, given its location in the State Development Area, will need to be developed as part of future planning.

c) Waste Collection Contract - review of waste collection contract and applicable services (current contract expires 30 June 2016). The review will take into consideration targets outlined in this strategy.

d) Council will review its current services annually and consider potential new resource recovery and disposal methods for Priority Wastes identified in the Queensland Waste Strategy. These include:

- agricultural plastic waste and chemicals;
- mattresses;
- organic waste from domestic and commercial sources;
- construction and demolition waste; and
- fluorescent lights, tyres and oils

e) E-waste recycling - Council to lobby the Federal Government for necessary changes to National Scheme.

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy SHE 1

QUEENSLAND WASTE STRATEGY

- Meets Objectives 3 & 4

8.1 Overview of proposed projects

Action 3: Business guidance (cleaner production)

Businesses have issues in correlation of the reduction of business costs with the development of sustainable management practices.

This project will offer assistance to businesses by allocating time and budget towards the necessary research of waste types generating in the Region. Once this research is complete and priorities determined, Council can then provide additional services to businesses including:

- visits from Council officers to discuss waste issues directly
- providing a simple audit of their waste
- providing assistance with the implementation of cleaner production principles and techniques
- offering Council recycling services if applicable
- seek State Government funding for this initiative

TIMEFRAME

2017 - ongoing

SECTOR

- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy SHE 1, SHE 5, SHE 7

QUEENSLAND WASTE STRATEGY

- Meets Objectives 1, 2 & 3

Action 4: Communication and education program

The single most important facet of any project is the communication of facts and requirements between all parties involved.

For community education to be effective, information needs to be regularly communicated. This program will progressively review and develop community education methodology to improve key message delivery to our customer.

Key actions include:

- develop an ongoing waste/recycling education plan
- provide regular information updates to the community through various modes of media
- educate all current and potential customers on all waste and recycling services provided by Council
- annual delivery of recycling calendar, plus waste and recycling leaflet to all residents
- provide routine good news stories to the community and business via rates notices, websites, local newspapers
- incorporate litter, consumption issues and purchasing efficiencies into the waste/recycling education plan
- provide regular communication updates to Council staff on organisational actions and achievements
- develop an education program on the benefits of home composting
- continue to improve the school education program in connection with local schools

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy SHE 1, ORG 1

QUEENSLAND WASTE STRATEGY

- Meets Objectives 1 & 2

8.1 Overview of proposed projects

Action 5: Sustainable procurement project

Several organisations are examining “smart procurement” or sustainable procurement. Council needs to examine their findings and build on the work of the LGAQ, Brisbane City Council, University of Newcastle, University of Queensland and the Department of Main Roads.

This project will:

- assist Council staff to implement sustainable procurement initiatives that assist in reducing waste generation in the Scenic Rim Region
- encourage wise choices of goods and services that are recyclable or have a high recyclable content or are simply sensible, sustainable, greener choices
- communicate key messages to alert the community on consumption issues and sustainable procurement methodology through the Community Education Program

Action 6: Scenic Rim Regional Planning Scheme

The Scenic Rim Regional Plans are being reviewed to create a new, single planning schedule.

To assist waste management infrastructure the new Scenic Rim Regional Town Plan needs to:

- Identify and minimise barriers to achieving waste and recycling outcomes within the DA process
- Include new clauses to ensure developments make adequate provision on-site for waste and recycling services
- Ensure our current and future waste facilities are correctly zoned
- Require waste management plans for significant developments

TIMEFRAME

2017 - ongoing

SECTOR

- Domestic
- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy SHE 3, SHE 5, ASR 1

QUEENSLAND WASTE STRATEGY

- Meets Objectives 3

TIMEFRAME

2015 - 2017

SECTOR

- Domestic
- Commerce and Industry
- Council operations

CORPORATE PLAN

- Strategy ASR 1, SHE 1, SHE 7

QUEENSLAND WASTE STRATEGY

- Meets Objective 4

8.1 Overview of proposed projects

Action 7: Internal recycling and waste minimisation scheme

Before Council can expect to see results in reducing waste generation from the community, it is necessary that improvements are made internal to Council in the areas of recycling, waste minimisation and waste avoidance.

- a) Improve the internal recycling scheme for Council buildings
- b) Improve Council staff awareness on recycling and how to minimise or avoid the production of waste.

TIMEFRAME

2015 - ongoing

SECTOR

- Council operations

CORPORATE PLAN

- Strategy SHE 1, SHE 5

QUEENSLAND WASTE STRATEGY

- Meets Objectives 2 & 3

Action 8: Public Place recycling and waste project

To support a community behavioural change campaign, Council needs to reinforce recycling in public places (recycling away from home). Public Place recycling and events recycling will not only support education programs it will improve our streets and parks by decreasing litter.

This project will:

- continue to install recycling facilities in parks and on streets (where feasible)
- encourage recycling at events and festivals throughout the region
- provide assistance and/or advice to individual organisations about providing recycling at events.

TIMEFRAME

2015 - ongoing

SECTOR

- Council operations

CORPORATE PLAN

- Strategy SHE 1, SHE 5, ASR 1

QUEENSLAND WASTE STRATEGY

- Meets Objective 4

8.1 Overview of proposed projects

Action 9: Litter prevention campaign

- Active response to litter and dumping complaints from Council's Compliance Team
- Cooperation with the State's Litter and Illegal Dumping Team in enforcement matters
- Promotion of the State Government's Littering and Illegal Dumping Reporting Form
- Promotion and participation in the National Litterbug campaign

TIMEFRAME

2016 - ongoing

SECTOR

- Domestic
- Council operations
- Commerce and industry

CORPORATE PLAN

- Strategy SHE 1, SHE 2, SHE 5, ORG 1

QUEENSLAND WASTE STRATEGY

Meets Objective 4

Action 10: Recycling at schools project

Council already liaises with local schools under our Schools Education Program. Continuing education for children on recycling and waste minimisation is crucial.

This project will:

- ensure that schools have sufficient resources and support to implement recycling effectively within the school community
- provide incentives to assist in school programs (eg worm farms or compost bins)
- reinforce the concept of 'recycling at school, work and play like it is done at home'
- utilise the education of children at school to assist in improving waste minimisation and recycling outcomes within the community

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Commerce and industry

CORPORATE PLAN

- Strategy SHE 1, SHE 5

QUEENSLAND WASTE STRATEGY

Meets Objectives 1 & 2

8.1 Overview of proposed projects

Action 11: Regional Collaboration

Council will continue to:

- Participation in meetings of the SEQ WRNG under the auspices of COM SEQ
- Cooperation with the LGAQ on waste and recycling issues
- Liaise with the DEHP on State legislative and policy issues
- participate with other regional groups/organisations as appropriate (eg WMAA)

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Council operations
- Commerce and industry

CORPORATE PLAN

- Strategy SHE 3

QUEENSLAND WASTE STRATEGY

Meets Objective 3

Action 12: Research

Council is to continue to monitor research on new and emerging waste and recycling technologies for possible adoption for the Scenic Rim Region.

Some research options include:

- research latest waste and recycling technologies
- partnering with universities, governments or private enterprise on potential research projects
- research commercial waste generation and disposal methods of business in the Region

TIMEFRAME

2015 - ongoing

SECTOR

- Council operations
- Domestic
- Commerce and industry

CORPORATE PLAN

- Strategy SHE 1, SHE 5

QUEENSLAND WASTE STRATEGY

Meets Objective 3

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8.1 Overview of proposed projects

Action 13: Economic Instruments

Scenic Rim Regional Council relies largely on revenue from waste collection rates and landfill fees to fund for its waste infrastructure and services. There is a need to examine new economic instruments for waste and recycling matters.

These may include:

- alliances
- container deposit legislation (CDL)
- advanced recycling fees (ARF)
- public private partnerships (PPP)

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Commerce & Industry
- Council operations
- Commerce and industry

CORPORATE PLAN

- Strategy SPE 1, SHE 5

QUEENSLAND WASTE STRATEGY

Meets Objective 4

Action 14: Organic waste

A fortnightly or weekly domestic organics collection service in 240 litre bins for suitable household organics will be investigated.

- investigate feasibility of introducing an organics collection service
- if it is introduced, this new service would be “user pays” and offered to commerce and industry also
- development of markets for organics recovery/reuse is essential for this project to succeed
- travel distances/travel time for collection vehicles is a major deterrent for this new service
- improve efforts to encourage residents to undertake “home composting”

A significant amount of organic waste is generated through Council operations and is currently disposed at landfill. Organics have high potential for beneficial reuse and therefore Council needs to consider how to effectively collect and reuse these organics.

These include:

- investigation of an Council office green waste recovery and reuse program
- developing markets for organics recovery
- incorporating organics recovery with Council's internal recycling scheme

TIMEFRAME

2017 - ongoing

SECTOR

- Domestic
- Commerce and industry
- Council operations

CORPORATE PLAN

- Strategy SHE 1, SHE 5, SHE 7

QUEENSLAND WASTE STRATEGY

Meets Objective 3

8.1 Overview of proposed projects

Action 15: Monitoring and reporting

A number of routine tasks are currently undertaken as part of management and evaluation of the waste management services provided to Scenic Rim residents.

These include:

- maintaining routine monitoring and reporting of environmental performance at all disposal facilities in accordance with site based environmental management plans
- ensuring all waste management assets and collection activities meet or exceed legislative requirements
- evaluating customer satisfaction on waste contracts and services through satisfaction surveys
- providing customer feedback following complaints
- annual environmental report to the DEHP on Central Landfill
- monthly, quarterly and annual reporting to Council on our operations and solid waste key performance indicators
- review annual waste audit processes to ensure the process is current and valid

TIMEFRAME

2015 - ongoing

SECTOR

- Domestic
- Council operations
- Commerce and industry

CORPORATE PLAN

- Strategy ORG 1, SPE 4

QUEENSLAND WASTE STRATEGY

Meets Objective 3

Appendix

List of acronyms & initialisms

ARF	Advanced Recycling Fees	RCSC	Regional Collaboration Steering Committee
AWT	Alternative Waste Technology	RRC	Resource Recovery Centre
COM	Council of Mayors	SEQ	South East Queensland
C&D	Construction and Demolition	SEQ WRNG	South East Queensland Waste and Recycling Network Group
CDL	Container Deposit Legislation	SRR	Scenic Rim Region
CPRS	Carbon Pollution Reduction Scheme	SRRC	Scenic Rim Regional Council
C&I	Commercial and Industrial	TS	Transfer Station
COMSEQ	Council of Mayors - South East Queensland	UQ	University of Queensland
DA	Development Application	WAMP	Waste Asset Management Plan
DFD	Design for Deconstruction	WM	Waste Management
DFE	Design for End of life	WMAA	Waste Management Association of Australia
DEHP	Department of Environment and Heritage Protection	WMP	Waste Management Plan
EPR	Extended Producer Responsibility	WMS	Waste Management System
E-waste	Electronic waste		
GCL	Geo-synthetic clay liner		
HDPE	High Density Polyethylene		
HHW	Household Hazardous Waste		
KPI	Key Performance Indicators		
LGAQ	Local Government Association of Queensland		
MRF	Materials Recovery Facility		
PPP	Public- Private Partnership		
PPR	Public Place Recycling		
PR	Product Stewardship		

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