

# Resource Recovery STRATEGY

BUILDING A CIRCULAR ECONOMY



Reaching  
**zero**  
waste

Rockhampton  
Regional Council

# Contents

Message from the Mayor .....	3
Introduction.....	4
Our Vision .....	5
Key Policy Drivers .....	6
Guiding Principles .....	8
Where Are We Now? .....	11
Challenges & Opportunities .....	12
Strategic Targets .....	14
Strategic Priorities .....	15
Priority 1: Behaviour Change .....	16
Priority 2: Building Resource Recovery Capacity .....	18
Priority 3: Restructuring the Market.....	21
Strategic Action Plan .....	23
Measuring Our Success .....	24
Appendix 1: Waste Stream Forecasts .....	26
Appendix 2: Strategic Progress 2020-2022 .....	29







# Message from THE MAYOR

Waste management has become one of the most important and high-profile issues in recent years. Our ever-increasing consumption and desire for convenience, combined with our continued dependence on a make-use-dispose economic model is imposing a burden on the environment and on our economic wellbeing.

The policy response to this from all levels of government has been clear and focused; Australia must now embrace the principles of a circular economy. As a community, we can no longer think in terms of waste, we need to think in terms of resources, and in particular, how those resources can be returned into productive use over and again.

In the three years since we published our first Waste Strategy, I am very proud of the progress Council has made, including the commencement of landfill gas capture at our Lakes Creek Road facility, installation of only the second polystyrene processing facility anywhere in Queensland, introduction of solar panel diversion, and the completion of a 12-month FOGO trial.

It has not all been positive news however. In the three years to 2022, total waste generation in our community increased year on year. Furthermore, despite policy commitments from all levels of government, economic barriers continued to deter investment in resource recovery infrastructure here in our region. The continuing reality in regional communities such as ours is that landfill remains the cheapest available waste disposal option.

This new iteration of our “Resource Recovery” Strategy is therefore a timely opportunity to address these structural challenges as we redouble our commitment to achieving zero waste.

Our first priority is to shift the economics of resource recovery here in Regional Queensland. Council is committed to delivering the ambitious targets being set by Commonwealth and State Governments in respect of resource recovery. However, it must be recognised that the financial burden of meeting this ambition cannot be borne entirely by ratepayers. Suitable regulatory support and financial investment in infrastructure is required to make resource recovery a reality for regional communities.

I gratefully acknowledge the support of the Queensland Government in developing the first Central Queensland Waste and Resource Recovery Management Plan, and its commitment to support this plan with a suitable level of investment. This is an important collective effort that will support investment in major resource recovery infrastructure here in our region.

The second core theme of this strategy is the collective effort that is now required from every one of us. If we are to continue to enjoy the benefits of living in this beautiful part of the world, each of us must now step up and fully embrace a circular economy. We can no longer expect the same right to throw away valuable materials, and certainly not without paying the appropriate price for the privilege. Instead, individuals, business, governments need to challenge our consumption behaviours, cherish what we already have, and find ways of generating value out of what we no longer need.

It is with great pleasure that I therefore present this Resource Recovery Strategy, and look forward to working alongside you all as we journey together towards zero waste.

# Introduction

The purpose of this strategy is to present Council's long-term goals for the management of waste here in our region. Council is committed to aligning with national and state policies and targets that support the move towards zero waste and net zero emissions.

Reducing waste to landfill is the primary goal of this strategy. Doing so will not only significantly reduce our carbon footprint, but will create up to three times more jobs and additional economic value to our region.

Council currently handles approximately 109,000 tonnes of waste material per annum. In 2022, 49% of this material was recovered, with the remaining 51% being buried to landfill. To achieve the zero waste ambitions of the State Government, an additional 45,000 tonnes would need to be recovered, comprising mostly of mixed commercial and domestic waste.

This strategy lays out a two-stream approach, aligned with the CQ Regional Waste and Resource Recovery Management Plan 2023.

- In the first instance, Council is committed to achieving a 60% recovery position by 2030, to be driven by the introduction of a kerbside organics service, improvement to existing resource recovery activities, and the proactive support of the whole of our community to reduce our waste generation by investing in the principles of the circular economy.
- The second stream focuses on achieving the remaining recovery target by 2040, which will require investment in an energy from waste solution as an alternative to landfill for the residual mixed waste from both commercial and domestic sources. The implementation of such a solution still has technological and economic challenges, with any such investment only viable with significant funding and policy support from State and Federal Government.

Achieving zero waste is of course critical if our community is going to reach net zero carbon emissions. Sending waste to landfill is damaging to our environment, both in terms of the methane emissions, but is also a waste of valuable resources that could be generating local economic benefit and reducing our reliance on virgin resources.

Achieving these ambitions will need collective action from the whole community, with a change in the way we think about consumption being essential. We must all actively participate in building the circular economy, starting with reducing the amount of waste we each generate. This strategy aims to provide that blueprint.

**“This blueprint must include pathways, actions and targets that will enable no net emissions of greenhouse gases by 2050, the decoupling of economic growth from resource use, and emphasis on product design that focuses on reusability, repairability, recyclability”**





## Our Vision

**To live in a community without waste.**

**We will become a “zero-waste” community by 2040, diverting 90% of waste from landfill.**

### ENVISIONED FUTURE

Our community will have fully embraced the principles of a circular economy and waste minimisation.

We will be diverting a minimum of 90% of our waste from landfill, the remainder being made up of only waste for which there is no other available disposal options such as regulated wastes.

We will adopt zero waste strategies across every waste stream, seeking out and nurturing viable local markets for the continuous recovery of materials, keeping the flow of resources as local as possible.

Business, social enterprise and the public sector will work in partnership to maximise the economic value out of all the resources we use, creating new economic activity and jobs in our community.

We will become an exemplar for best practice in waste management, being recognised for the sustainable ways in which we manage our waste.

Council’s waste management services will be delivered at a cost and a level of service that achieves the very highest in national standards.

# Key Policy Drivers

The following national and state legislation and policy directly informs Council's strategic direction.

## NATIONAL WASTE POLICY

The National Waste Policy (2018) and National Waste Policy Action Plan (2019) establishes the national approach to waste management, applying the principles of a circular economy whilst also giving effect to Australia's international obligations.

## QUEENSLAND WASTE MANAGEMENT STRATEGY & POLICY FRAMEWORK

The **Queensland Waste Management and Resource Recovery Strategy (2019)** outlines a vision of a zero-waste society, setting a series of targets for waste reduction and resource recovery to 2050.

The **Queensland Waste Levy** provides the funding mechanism to support the implementation of the State strategy, as well as acting as an economic incentive for resource recovery by increasing the relative cost of landfill.

Since 2019, a series of supporting policy instruments have been developed in Queensland, including:

- **Energy from Waste Policy (2020)** – establishes the minimum standards for energy from waste solutions, including feedstocks, environmental, and energy recovery requirements.
- **Plastic Reduction Plan (2020)** – establishes the goals to reduce plastic waste and pollution.
- **Organics Strategy & Action Plan (2022)** – provides a strategic roadmap for halving food waste and diverting 80% of organic material from landfill by 2030.

## WASTE REDUCTION & RECYCLING ACT 2011

The *Waste Reduction & Recycling Act 2011* provides the waste management legislative framework in Queensland. All councils are required to adopt a Waste Reduction and Recycling Plan, setting out how they intend to achieve the objectives of the Act. This strategy is the Waste Reduction and Recycling Plan for Rockhampton Regional Council.

## REGIONAL WASTE AND RESOURCE RECOVERY MANAGEMENT PLAN

The Regional Waste and Resource Recovery Management Plan provides prioritisation of strategic actions to be taken at both a regional scale and by individual councils, so as to optimise waste and resource recovery outcomes. In doing so, it will provide a roadmap for investment decisions by State Government and other stakeholders. The RRC Resource Recovery Strategy is necessarily closely aligned with the Regional Waste and Resource Recovery Management Plan.

## ROCKHAMPTON REGIONAL COUNCIL PLANNING FRAMEWORK

This strategy has been developed with regard to Council's broader corporate planning framework, in particular:

**Council's Corporate Plan (2022-2027)** – outlines the performance targets for Rockhampton Regional Waste & Recycling in its role as a commercial business unit of Council.

**Sustainability Strategy (Towards 2030)** – outlines Council's commitments to building a low carbon economy and Council's transition to net zero emissions.

**Circular Economy Framework** – establishes the priority areas where circular economy principles can be applied to maximum effect within our regional economy.





# LET'S GO FOGO

Commencing in October 2021, Rockhampton Regional Council was one of three Councils who, in partnership with the State Government, undertook a 12-month FOGO Trial. The trial tested three different service configurations across 760 households in Rockhampton and Gracemere.

The trial provided important insights into contamination rates, recovery rates of garden organics vs food organics, rates of diversion from landfill, bin volume impacts, as well as detailed data on user satisfaction and the barriers to participation they encountered.

Waste and Recycling Councillor Shane Latcham said the findings are fundamental to developing an organics business case to determine what is needed for a community-wide roll out of the service.

*"Evaluating the FOGO trial is a really important step for us to move forward to develop the business case," Cr Latcham said.*

*"Through this evaluation we have been able to assess the efficiency, effectiveness, impact, and sustainability of a kerbside organics service and how it would perform when rolled out across the whole of the Rockhampton region.*

*"A community wide kerbside organics service is estimated to have the potential to divert over 8,500 tonnes per annum of organic materials currently going to landfill via the general waste bin.*

*"That's around a 50% reduction - which is impressive as we work our way toward our goal of zero waste, or 90% being diverted from landfill.*

*"Throughout the trial we were very pleased at how the community adapted to the service and we are hoping that with the right support, the rest of the community will adapt just as well, if not even better!*

*"The findings and lessons learned from the trial will be used to inform a business case which will give us a better understanding of the costs associated with a community-wide roll out."*

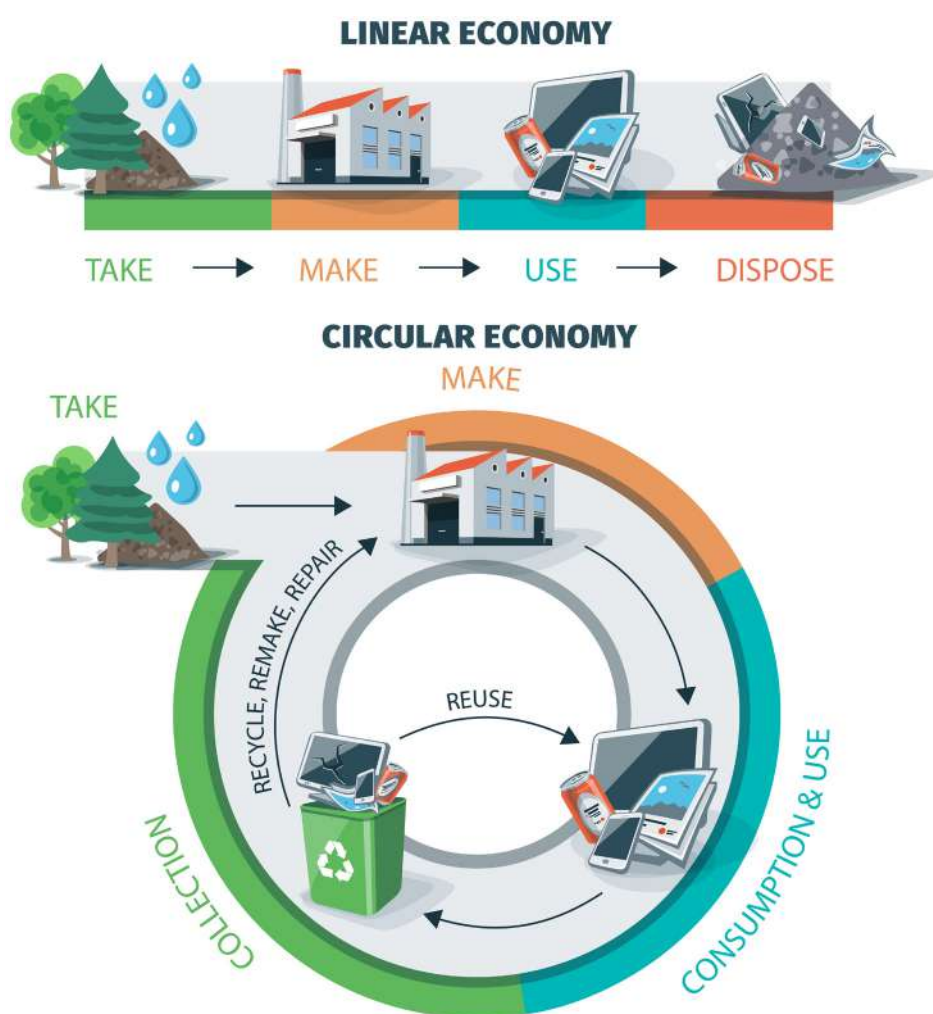
Councillor Latcham said that while Council develops the business case, further discussions with other levels of government will be taking place to highlight how our region is supporting state and federal goals and opportunities to partner together.

*"We have demonstrated time and again that great things can happen when all levels of government work together, and a community-wide roll out of FOGO service is key to the shared goal of achieving zero waste."*

# Guiding Principles

## CIRCULAR ECONOMY

Rather than follow the current linear “take-make-use-dispose” approach, a circular economy finds opportunities across the entire supply chain to retain and circulate resources in the economy at their highest value for as long as possible. A circular economy builds on long-lasting sustainability concepts, including life cycle thinking and resource efficiency.

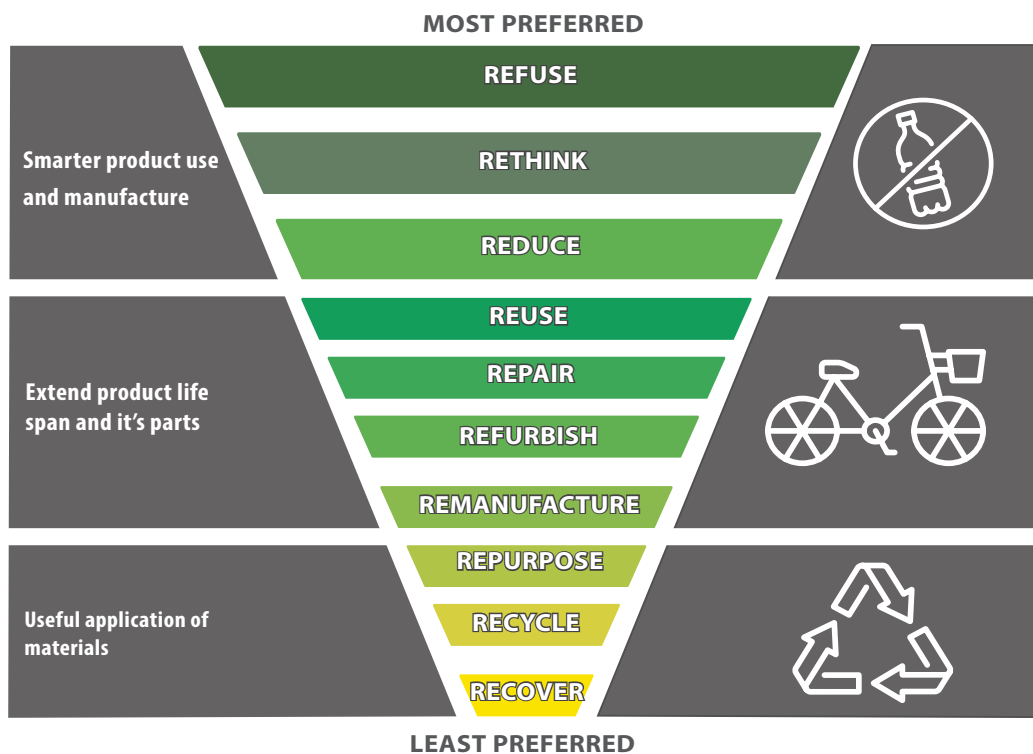


## WASTE HIERARCHY IN THE CIRCULAR ECONOMY

The waste and resource management hierarchy is a framework that guides the order of preference for managing waste. Waste should be avoided as a first priority, only after which options for reuse and recycling should be explored. Where residual waste cannot be avoided, fuel production, energy production are then considered, and only when no other viable solution exists, do we turn to disposal.

A common method of combining the principles of the waste hierarchy with practical examples of circular activities is to think in terms of the 10Rs.





When considered in these terms, many potential examples of positive behaviours start to emerge:

- Business and consumers can be encouraged to hire, rent or lease rather than purchase products outright, particularly for occasional use or costly items.
- Businesses can offer buy-back or return options.
- Repairability designed into products, combined with improved access to repair services.
- Online exchange platforms and marketplaces to encourage reuse and repurposing.

## INTER-GENERATIONAL EQUITY

Council is committed to making waste management decisions which ensure the health, diversity and productivity of our environment is maintained or enhanced for the benefit of future generations. When pricing our services therefore, it is important that the full cost of the service is charged to the service use, and not to future generations e.g. the cost of future site remediation of today's landfill needs to form part of today's pricing.

## LOCAL SOLUTIONS

Creating and supporting local markets retains the economic benefits within our community, creating new skills and opportunity, and attracting new investment from outside our region. This in turn increases economic and community resilience, an essential consideration for regional and rural communities as we tackle the longer-term impacts of climate change.

# Where Are We Now?

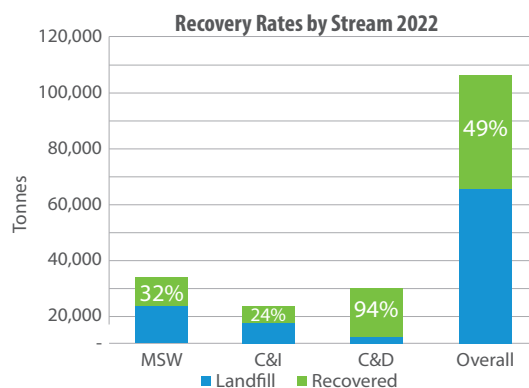
In 2023, Rockhampton Regional Council has an estimated population of 83,687, which is projected to grow at 0.9% to 98,102 by 2041. The region currently has approximately 36,000 dwellings, forecast to increase to 42,146 over the same period. This growth has been factored into the waste flow projections presented here.

The Rockhampton region's economy has lost pace with the rest of Queensland over recent decades, in 2021 contributing a 1.49% share to Queensland's Gross Regional Product (GRP) compared with 1.72% in 2001. In recent years, local economic activity has been impacted by the cyclic nature of the resources industry, and of course by the Covid pandemic. Due to this inherent unpredictability, economic growth forecasts have not been factored in the waste flow projections in this strategy.

## WASTE PROFILE

Total waste generated in 2021-22 was 109,000 tonnes. Of this 54,000 tonnes were recovered and the remaining 55,000 was buried in landfill, an overall recovery rate of 49%.

Stream	Landfill tonnes	Recovered tonnes	Recovery Rate	Qld 2025 Target
MSW	28,823	13,346	32%	50%
C&I	24,318	7,767	24%	55%
C&D	1,990	32,399	94%	75%
Overall	55,132	53,513	49%	60%



The biggest waste stream is **Municipal Solid Waste** (see side bar on opposite page for definitions) at 42,000 tonnes per annum, with 32% being recovered, predominantly from green waste, metals and commingled recycling.

**Commercial and Industrial (C&I)** waste accounted for 32,000 tonnes per annum, with 24% being recovered, predominantly from green waste and metals.

**Construction and Demolition (C&D)** waste accounted for 34,000 tonnes, with 94% being recovered, predominantly from concrete, asphalt and clean earth materials.

## SNAPSHOT OF WASTE IN ROCKHAMPTON 2021-2022

**108,644 tonnes**  
total waste generated



**506kgs**

**51%**  
of waste goes to landfill

**49%**  
of waste is recycled or recovered

of domestic waste generated per capita

**23,387 tonnes**

**4,321 tonnes**  
of domestic recycling picked up by council kerbside collection



of domestic waste picked up by council kerbside collection



**13,057 tonnes**  
of greenwaste processed



## KERBSIDE COLLECTIONS

Council currently provides 33,000 properties with a kerbside general waste service using its own labour force and fleet of 10 collection vehicles. External contractor JJ Richards provides 33,000 properties with a fortnightly kerbside recycling collection service. All kerbside collections use 240 litre wheelie bins.

Until 2020, a privately owned material recovery facility (MRF) received and sorted around 11,500 tonnes per annum of the kerbside recyclables from four participating councils in our region. Of this total, Rockhampton provides approximately 5,000 tonnes per annum. In November 2020, this facility was destroyed in a fire. Since that time, kerbside recyclables have been transported to MRFs in Mackay and Brisbane as an interim measure, pending the procurement of a replacement long term solution here in our region.

## WASTE FACILITIES

Council operates one active landfill site located at Lakes Creek Road, Rockhampton, a state of the art “piggyback” landfill that will sit over the top of the existing closed landfill. This landfill will eventually consist of up to 10 adjoining cells, with ongoing construction scheduled over several years.

The Community Recycling Centre is also located at the Lakes Creek Road site. It comprises of a large covered recycling drop off zone and adjoining reuse shop, a purpose-built waste transfer station, and several dedicated resource recovery areas recovering metals, green waste and construction & demolition materials.

Council operates a network of six regional waste facilities located at Gracemere, Mount Morgan, Bouldercombe, Alton Downs, Bajool and Bushley. These facilities accept a wide variety of self-hauled materials from the general public, including general waste, commingled recyclables, green waste, metals, tyres, mattresses, solar panels, chemical containers, oil, batteries and salvaged household goods.

Our local government area also has an estimated 30 closed landfill sites which council is required to manage and monitor in line with EP regulation.



# Types of Waste EXPLAINED

**Municipal Solid Waste (MSW)** is a combination of domestic and waste arising from other council activities managed on behalf of the general public, such as parks, illegal dumping and road sweepings.

**Commercial and Industrial (C&I)** is waste generated by businesses, including waste from schools, restaurants, retail, offices, agriculture, manufacturing, community groups and sports clubs.

**Construction and Demolition (C&D)** is waste generated from construction and demolition activity, typically brick, timber, concrete and metals.

# Challenges & Opportunities

CHALLENGES	OPPORTUNITIES
Policy Landscape	
<p>Despite the development of a large amount of new policy from all levels of government, progress towards ambitious diversion and recovery targets continues to be slow.</p> <p>The introduction of the Waste Levy has increased the burden on local business, but has not been sufficient to encourage investment in alternatives to landfill, nor is the funding from State &amp; Federal Government yet flowing at the pace necessary to deliver change.</p> <p>Ongoing regulatory uncertainty is a further barrier to investment in new resource recovery infrastructure.</p>	<p>Council can be a strong advocate for regulatory and funding interventions that directly support regional communities.</p> <p>This strategy and the Regional Waste and Resource Recovery Management Plan can act as a catalyst for State investment in resource recovery infrastructure.</p> <p>Council can leverage other strategic commitments such as the carbon emission reduction obligations, to bring a stronger urgency to bear in delivering the commitments of this strategy.</p>
Market Development	
<p>Market demand for recovered resources in our local economy are limited to a very small number of materials.</p> <p>A lack of scale is a barrier to investment in locally based processing facilities. As a result, the majority of recovered materials are transported out of region, incurring a transportation cost burden, as well as being a lost opportunity for our local economy.</p>	<p>This strategy and the Regional Waste and Resource Recovery Management Plan will identify opportunities where local markets can be developed.</p> <p>State Government can provide suitable funding support and remove regulatory barriers.</p> <p>The development of local market opportunities for recovered materials can create jobs and economic growth. Council can support this by creating procurement opportunities for recovery materials within its own supply chain.</p>
Cost to Ratepayer	
<p>The lack of economies of scale and distance from commodity markets are both cost barriers for regional communities looking to invest in resource recovery solutions</p> <p>Any transition away from landfill has the potential to impose an additional legacy cost on Council in terms of managing existing landfill assets to their end of life.</p>	<p>Council can continue to advocate for policy change and increased funding provisions to ensure equity for regional communities.</p> <p>This strategy and the Regional Waste and Resource Recovery Management Plan can ensure that only financially viable solutions are recommended for investment.</p> <p>Council can additionally seek to retain sufficient control over revenues and price setting in any new infrastructure.</p>

## CHALLENGES

## OPPORTUNITIES

### Behaviour Change

The ever-growing consumption of consumer goods, single use items and excessive packaging act to drive up waste generation, whilst creating mixed waste streams not easy to recover.

Despite strong support for better waste management, few people actively commit to a change in lifestyle and consumer choices required to resolve the problem.

Contamination of kerbside bins by a minority of users continues to be an ongoing problem.

The community already considers waste disposal to be expensive and have no appetite to take on any additional cost.

Council can be a leader for change in our community by delivering education and behaviour change campaigns.

Council can implement user pays pricing strategies and regulatory penalties to shift poor behaviours.

Council can directly reduce its own waste generation with structural changes to its procurement policies and behaviours.

State Government funding can be secured to deliver education and behaviour change campaigns.

### Land Use Planning

Council has no land set aside for the specific purpose of locating waste and recovery infrastructure.

Local businesses in the waste management sector are specifically identifying the lack of suitable sites that meet regulatory requirements.

Making such land available is a costly undertaking, whilst not having a suitable site is itself a significant barrier to securing funding for resource recovery infrastructure projects.

Resource recovery precincts are a concept supported by State Government. Council can leverage this policy position to secure investment in an identified site.

Establishing such a precinct can attract private investment, provide Council with a location for its own infrastructure, and give local businesses opportunity to expand their operations.

### Technology Investment

The industry is currently awash with a wide range of early concept technological solutions, each with a complex and largely untested mix of technical and commercial risks and rewards.

Poor decision making could lock council into an inappropriate or failed solutions.

Both this strategy and the Regional Waste and Resource Recovery Management Plan can adopt a strong decision framework to inform investment decisions, drawing on advice from regulators, technical consultants, private sector partners, industry representative bodies and other councils.

### Performance Management

The metrics employed to date to monitor progress against our strategic targets are not well suited to short-term performance tracking.

The use of percentage rates has been seen to lead to perverse short-term reporting results.

The measure of absolute quantities can be used in addition to percentage rates to better monitor progress.

A range of soft measures and lead indicators can be adopted to also be used to better monitor short-term progress.



# Strategic Targets

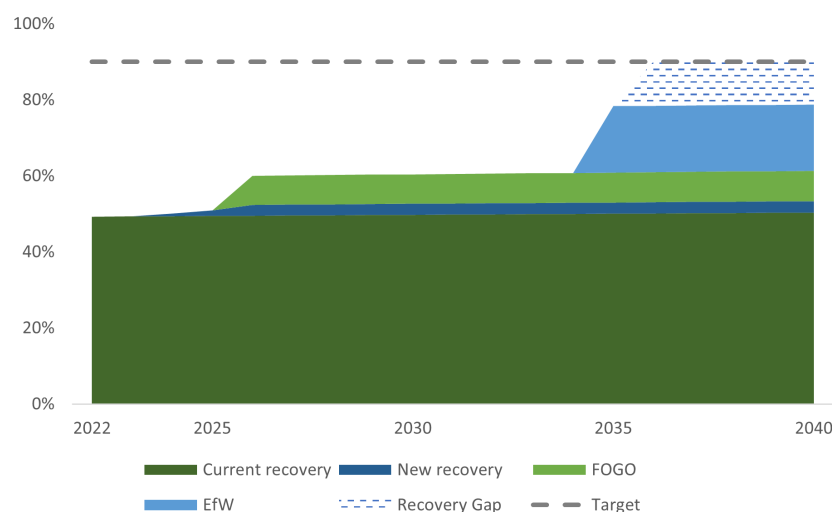
**Our long-term goal, in pursuit of our vision to live in a community without waste, is to become a zero-waste community by 2040.**

Council remains committed to the long-term goal of zero waste, which is defined as 90% diversion from landfill to allow for residual wastes for which there is no viable alternative, such as asbestos or contaminated soils.

The target date of 2040 to achieve this goal reflects the urgency with which we need to tackle the issue of waste management, as well as to preserve the valuable remaining life of our Lakes Creek Road landfill.

Within the constraints already discussed, this strategy is currently only able to identify solutions to a maximum recovery of 78%. This falls below the state-wide targets set out in the Queensland Waste Management & Resource Recovery Strategy. Furthermore, this level of recovery will require very significant external investment, without which, it will not be economically viable.

Total Waste Stream	2022	2025	2030	2040
Waste Generated (tonnes)	108 664	110,411	113,462	119,988
General Recovery Activities %	49%	51%	52%	53%
FOGO%	0%	0%	8%	8%
Energy from Waste %	0%	0%	0%	17%
<b>Total Diversion %</b>	<b>49%</b>	<b>51%</b>	<b>60%</b>	<b>78%</b>
Qld Government Target		65%	80%	85%
Residual to Landfill (tonnes)	55,132	54,226	44,926	26,231



# Strategic Priorities

This strategy takes a two-stream approach, aiming to achieve a 60% diversion rate by 2030 with the adoption of a range of readily available interventions, whilst seeking a viable longer-term solution for the residual mixed waste stream by 2040.

- Stream one will deliver 60% recovery by 2030. Approximately 8% of the increased recovery will come from the implementation of a kerbside organics service, with the remainder coming from improvements in existing recovery performance, and new recovery solutions for niche materials such as textiles or timber.
- Stream two will focus on securing an appropriate energy from waste solution to divert the remaining residual mixed waste stream. It is assumed that to be viable, such a solution would need to be at a regional scale. The CQ Regional Waste and Resource Recovery Management Plan has identified that a processed engineered fuel solution (see EfW sidebar for further explanation) would yield a regional recovery rate of 72%, whilst a thermal combustion solution a recovery rate of 78%.

Three strategic priorities have been identified as necessary to successfully achieve the above outcomes:

**Priority 1: Behaviour change** is required across the whole community; everyone needs to understand and embrace the required changes to the way we consume and the waste we generate

**Priority 2: Building resource recovery capacity** is the investment required in infrastructure to physically manage the waste flows

**Priority 3: Restructuring the market** is critical to ensure there is viable demand for recovered materials

Strategic Priority	60% Diversion by 2030	72-78% Diversion by 2040
Behaviour Change	Community wide behaviour change campaigns	
Building Resource Recovery Capacity	Locally based MRF solution	Energy from waste solution
	Organic kerbside collection service	Residual landfill solution
	Niche processing solutions e.g. textiles, timber	
	Establish a resource recovery precinct	
Restructuring the Market	Restructuring Council's own procurement & planning frameworks	
	Policy and advocacy	



Strategic Priority

## 01: Behaviour Change

### **Empowering the community to embrace the principles of a circular economy.**

To achieve our goal of zero waste by 2040, every one of us must play our part. Our whole community must rethink our relationship we have with the materials we consume and dispose of, from the product design, purchase decision, reparability, and the process by which the materials can be returned into productive use. A circular economy is not a version of business as usual. It is a paradigm shift in the way we manage the lifecycle of the materials we purchase and consume.

Council will enable this change by creating a powerful and impassioned narrative to inspire collective action, supported by an investment in a series of ongoing education and behaviour change campaigns. This will include introduction of a new organics collection service, tackling the commingled resources still not being recovered, driving waste avoidance behaviours in the home,

and encouraging new, circular behaviours by both business and consumers.

Council will be looking to State Government to assist with resourcing this change. There needs to be a strong and consistent narrative from all levels of government, with campaign resources targeted at tackling specific behavioural issues. This will require significant investment in understanding the current attitudes and behaviours, as well as measuring the impact of specific campaign tactics.



# KEY ACTIONS

1.1

**Deliver a suite of community wide behaviour change strategies**



1.1.1.

**Deliver ongoing waste reduction campaigns.** A series of campaigns focused on reducing household waste generation, working alongside State Government and other agencies in the sector.

1.1.2.

**Deliver ongoing kerbside campaigns.** A series of campaigns focused on reducing resource loss in the general waste stream, and on reducing contamination in the commingled bin and future organic bin.

1.1.3.

**Deliver regulatory mechanisms in support of behaviour change.** Implement suitable regulatory mechanisms to support desired behaviour change at the kerbside.

1.2

**Deliver the annual waste education plan.** The annual plan establishes the scope and objectives of the education program. Each annual plan will be designed to support the priorities of this strategy at that particular point in the strategic cycle.

1.3

**Support the behaviour change and education priorities of the Regional Waste and Resource Recovery Management Plan.** Actively participate in formulating and delivering regional campaigns, establishing consistent messaging and leveraging off the use of shared resources.



1.4

**Implement an event waste management plan.** Develop and implement a suite of policy and procedures that meet event waste management best practices, for use at all events held in our region.

*Note: against each of the strategic actions, the following symbols are used:*



*This action will very likely need to be pursued within the scope of the Regional Waste and Resource Recovery Management Plan*



*This action has the potential to be pursued within the scope of the Regional Waste and Resource Recovery Management Plan*



Strategic Priority

## 02: Building Resource Recovery Capacity

### Maximising resource recovery opportunities across our community.

By 2040 our community will be generating an estimated 120,000 tonnes of waste per annum. The recovery targets can only be achieved with a significant investment in sorting, separating and processing infrastructure here in our region.

This strategy focuses on finding solutions for the biggest waste streams, including food, plastics, textiles, construction waste and mixed residual waste from both commercial and domestic sources. It further seeks to invest in locating infrastructure here in our region, to mitigate the carbon impact as well as the cost burden and lost economic opportunity of transporting valuable resources out of region.

To address regulatory and investment barriers currently faced by potential proponents of resource recovery solutions, this strategy includes an important commitment to advocate State Government to develop precincts to provide a shovel ready location for the co-location of resource recovery infrastructure.

# KEY ACTIONS



## 2.1 Organic waste

- 2.1.1. **Implement a kerbside organics collection service.** Establish a kerbside service that optimises diversion of our organic waste stream at best value to the community.
- 2.1.2. **Procure an organic processing solution.** Establish an organics processing facility in the region that meets the needs of the chosen organic collection service delivery model. Explore viable ownership and partnership models. 
- 2.1.3. **Commercial food waste action plan.** Implement a long-term strategy aimed at maximising commercial food waste diversion. Exploring a range of collection options and/or on-site processing options, education campaigns, financial incentives, private operator partnerships. Targeting large and small generators.

## 2.2 Commingled recycling

- 2.2.1 **Procure a regional MRF solution.** Procure a long-term material recovery facility (MRF) located within our region. Explore viable ownership and partnership models. 

## 2.3 Mixed residual waste

- 2.3.1. **Establish the case for a regional energy from waste solution.** Undertake full business and technical analysis to establish best fit energy from waste solution to process residual mixed waste, to meet the 2040 diversion target. 
- 2.3.2. **Ongoing construction of the Lakes Creek Road landfill.** Continue the construction of the piggyback landfill and associated infrastructure in line with the design masterplan, meeting the future landfill airspace demand to 2040.
- 2.3.3. **Establish a long-term residual waste disposal solution.** Develop a business case and implementation plan for the disposal of the residual waste stream beyond the life of the Lakes Creek Road landfill facility. 



## 2.4

### Regulated and difficult waste

- 2.4.1. **Develop a textile waste recovery action plan.** Develop a long-term plan for viable recovery of textiles from the waste stream, establish potential market demand and viable recovery options. +
- 2.4.2. **Develop a timber recovery action plan.** Develop a long-term plan for the recovery of timber from various mixed waste streams, identifying potential markets and viable recovery options. +
- 2.4.3. **Evaluate the potential for a local tyre processing solution.** Evaluate the viability of establishing a processing facility located in our region. +
- 2.4.4. **Evaluate the potential for a regional plastic processing solution.** Evaluate the viability of establishing a processing facility located in our region. +
- 2.4.5. **Expand the Upcycle Village concept.** Develop opportunities to expand participation in and scope of the Upcycle Village, exploring potential to increase the existing footprint or expand to additional sites.

## 2.5

### Infrastructure management

- 2.5.1. **Establish one or more resource recovery precincts.** Establish the co-location of processing facilities in a pre-defined location that meets regulatory and infrastructure needs of proponents. Working in partnership with the State Government. +
- 2.5.2. **Move to energy generation phase from the landfill gas capture system at the Lakes Creek Road landfill.** Work with the landfill gas extraction contractor to facilitate the move to energy generation phase at the earliest point the gas flow becomes commercially viable.
- 2.5.3. **Implement a long-term management plan for closed landfill sites.** Implement a risk-based plan to monitor and manage legacy landfill sites across our region.

**Energy from Waste (EfW)** refers to a range of technologies that process mixed residual waste, converting it into an energy source. Typical technologies include anaerobic digestion, process engineered fuels, pyrolysis, gasification and incineration.

Anaerobic digestion can be adopted at a relatively small scale, but requires a consistent, homogenous feedstock such as farm organics or abattoir waste. Processed engineered fuels are created by shredding and drying waste, then compacting to create a solid fuel that can be used as a fossil fuel substitute in certain industrial processes. Pyrolysis and gasification heat the waste to very high temperatures in an oxygen restricted environment, whilst incineration is the more traditional burning of waste to create heat to convert to electricity. Most of these technologies generate bi-products such as fly or bottom ash, which need to be appropriately managed.

Whilst many of these technologies are widely employed overseas, most are relatively new to Australia. At present, EfW facilities processing mixed residual waste are only commercially viable at very large scale. It is however anticipated that innovations in technology will meet the growing demand for regional scale solutions over the coming decade.



Strategic Priority

## 03: Restructuring the Market

### Creating an environment in which a circular economy can thrive.

Retaining and circulating resources in the economy at their highest value for as long as possible will maximise the economic return on those resources. By keeping that economic activity local the benefits accrue to the local community in jobs, investment and secondary activities. Our local environment benefits from the lower demand on virgin materials.

It is recognised that much of the change required falls outside of Council's direct control. As such, Council will engage in advocacy to ensure that government, industry and regulators all play their part. Specific initiatives to which Council will be seeking action will include securing appropriate funding mechanisms, removal of unnecessary regulatory barriers in the use of recovered materials, and mandatory product stewardship schemes for problematic waste materials.

For its own part, Council will need to work to remove policy barriers, create demand for circular approaches to doing business, and leveraging its own position as a major purchaser in our region. This can include seeking to support circular concepts such as the share economy, rent not own business models, and mandating minimum recycle content in products.

Council is further exploring a range of opportunities, including ecological sustainable design (ESD) for new buildings and renovations, improved technical specification for minor works, plant and equipment, and sustainable infrastructure policy.

## KEY ACTIONS

- 3.1** **Advocate for regulatory and funding support.** Take an active role in advocating for suitable regulatory and funding support to ensure delivery of State and Federal Government targets are not placing an unfair burden on local ratepayers.
- 3.2** **Support product stewardship schemes.** Actively support programs and mechanisms that place responsibility back on to manufacturers of difficult waste materials.
- 3.3** **Embed circular economy principles into Council's own planning frameworks.** Undertake a review of internal planning and development policy to ensure there is alignment with principles of a circular economy in respect of planning, approving and delivering development activities in our community.
- 3.4** **Embed circular economy principles into Council's own procurement frameworks.** Undertake a review of internal procurement policy and procedure to ensure there is alignment with the principles of a circular economy in respect of the purchase of goods and services across all our operations.



# Strategic Action Plan

Note: against each of the strategic actions, the following symbols are used:

- + This action will very likely need to be pursued within the scope of the Regional Waste and Resource Recovery Management Plan
- + This action has the potential to be pursued within the scope of the Regional Waste and Resource Recovery Management Plan

	Regional Plan	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>Priority 1: Behaviour Change</b>																			
1.1	Develop a suite of community wide behaviour change strategies	+																	
1.1.1	Deliver ongoing waste reduction campaigns																		
1.1.2	Deliver ongoing kerbside campaigns																		
1.1.3	Deliver regulatory mechanisms to support kerbside behaviour change																		
1.2	Deliver an annual waste education plan that aligns with strategic priorities																		
1.3	Support the behaviour change priorities of the Regional Waste and Resource Recovery Management Plan	+																	
1.4	Implement an event waste management plan																		
<b>Priority 2: Building Resource Recovery Capacity</b>																			
2.1	Organic Waste																		
2.1.1	Implement a kerbside organics collections service																		
2.1.2	Procure an organic processing solution	+																	
2.1.3	Commercial food waste action plan																		
2.2	Comingled recycling																		
2.2.1	Procure a regional MRF solution	+																	
2.3	Mixed residual waste																		
2.3.1	Establish the case for a regional energy from waste solution	+																	
2.3.2	Ongoing construction of the Lakes Creek Road landfill																		
2.3.3	Establish a long-term residual waste disposal solution	+																	
2.4	Regulated and difficult wastes																		
2.4.1	Develop a textile waste recovery action plan	+																	
2.4.2	Develop a timber recovery action plan	+																	
2.4.3	Evaluate the potential for a local tyre processing solution	+																	
2.4.4	Evaluate the potential for a local plastic processing solution	+																	
2.4.5	Expand the Upcycle Village concept																		
2.5	Infrastructure management																		
2.5.1	Establish one or more resource recovery precincts	+																	
2.5.2	Move to energy generation phase from the gas capture system at the Lakes Creek Rd landfill																		
2.5.3	Implement a long-term management plan for closed landfill sites																		
<b>Priority 3: Restructuring the Market</b>																			
3.1	Advocate for regulatory and funding support																		
3.2	Support product stewardship schemes																		
3.3	Embed circular economy principles into Council's own planning frameworks																		
3.4	Embed circular economy principles into Council's own procurement frameworks																		

# Measuring Our Success

Over the life of this strategy, we will implement a wide range of actions and work with many partners from across the community. Some of these actions will be easy to track and have a very clear measure of success, whereas other actions will require less direct measurement to determine progress.

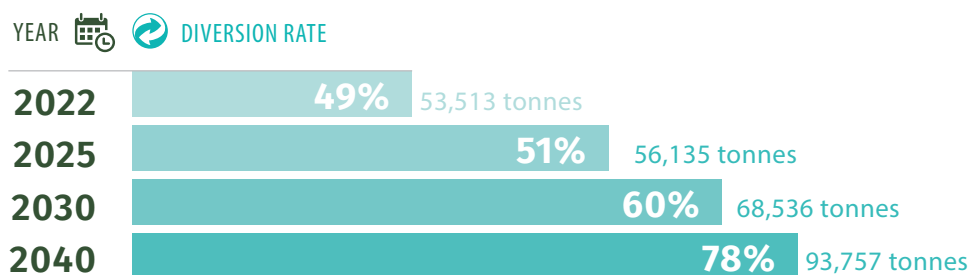
Five key performance indicators (KPIs) will be used to track long-term performance against our overall goal of a zero-waste community by 2040.

Indicator	Unit of Measure	Purpose
Diversion from landfill	% rate and tonnes per annum	Measuring progress towards the goal of zero waste by 2040
Municipal solid waste generation per capita per annum	Kg per person per annum	Measuring community progress in reducing our overall waste generation
Resource recovery rate at kerbside	% rate	Measuring the overall efficiency of the kerbside services
Contamination at kerbside	% rate and tonnes per annum	Measuring the effectiveness of our behaviour change interventions

In addition to these KPIs, a range of lead measures will be used to track progress on specific actions. These might include measures of educational reach, behaviour change, recovery rates for specific material types, etc.



## DIVERSION OF TOTAL WASTE FROM LANDFILL

Measuring progress towards the goal of zero waste by 2040



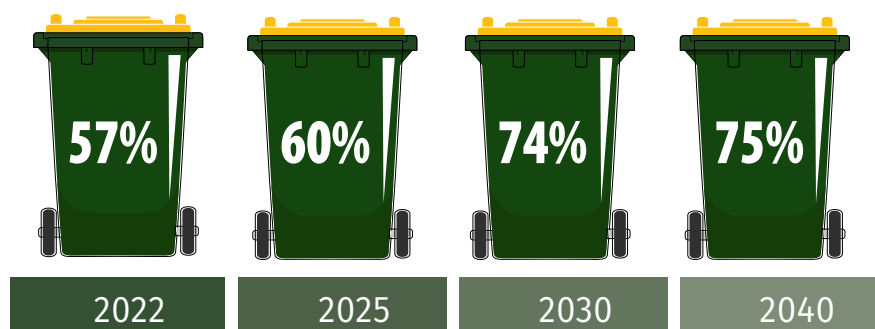
## MUNICIPAL SOLID WASTE GENERATED PER CAPITA

Measuring community progress in reducing overall waste generation

MSW KGS PER CAPITA 	506	492	471	430
YEAR 	2022	2025	2030	2040

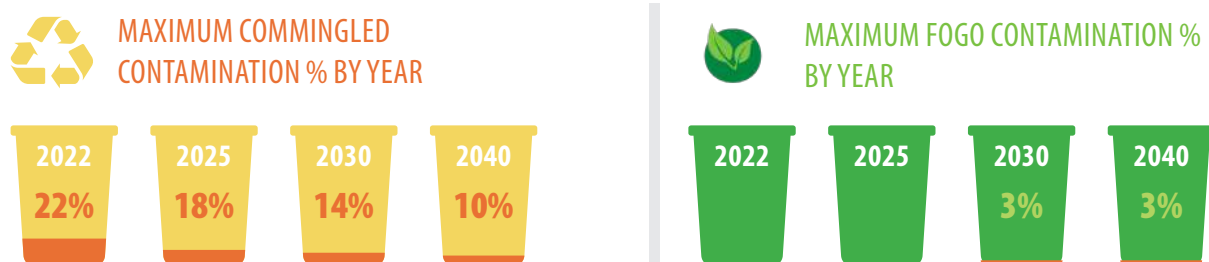
## RESOURCE RECOVERY RATE AT KERBSIDE

Measuring the overall efficiency of the kerbside service



## CONTAMINATION RATES

A measure of the effectiveness of our community engagement



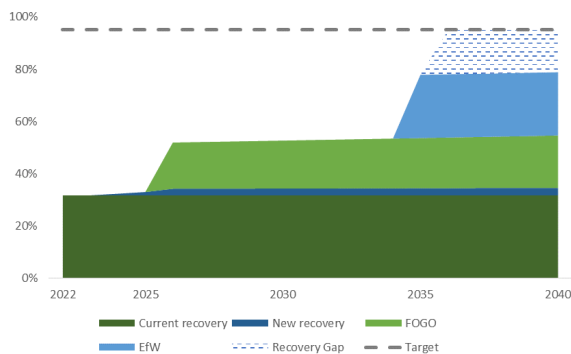
The RRC Resource Recovery Strategy will be reviewed in line with legislative requirements (currently every three years) and the key actions will be reviewed on an annual basis.

# Appendix 1: Waste Stream Forecasts

## MUNICIPAL SOLID WASTE (MSW)

This strategy is committed to reduce domestic waste by 25% by 2050, in line with the Queensland strategy. This is a critical component of the waste stream modelling, as it significantly reduces the forecast waste that Council will be required to manage. This places a large collective responsibility on every member of our community, which in turn will need to be supported by Council via the delivery of a suite of behaviour change campaigns and policy reforms.

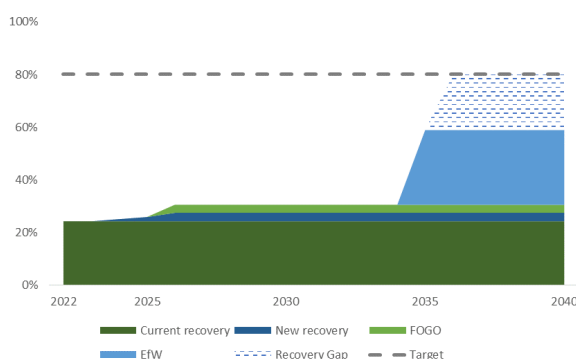
Allowing for the above reduction combined with population growth, incoming MSW in 2040 is projected to be 42,000 tonnes. Total recovery is forecast to reach 78% by 2040. 35% will come from recovery of recyclables, green waste and metals, 20% from a kerbside organics service, and the remaining 24% will come via an energy from waste solution.



Municipal Solid Waste	2022	2025	2030	2040
Waste Generated (tonnes)	42,170	42,152	42,123	42,064
General Recovery Activities %	32%	33%	34%	35%
FOGO %	0%	0%	18%	20%
Energy from Waste %	0%	0%	0%	23%
<b>Total Diversion %</b>	<b>32%</b>	<b>33%</b>	<b>53%</b>	<b>78%</b>
Qld Government Target		55%	70%	90%
Residual to Landfill (tonnes)	28,823	28,278	19,956	9,254

## COMMERCIAL AND INDUSTRIAL (C&I)

Incoming C&I waste by 2040 is forecast at a little under 38,000 tonnes (up from 32,000 in 2022). This waste stream will require the biggest increase in diversion from current performance. Recovery activities are forecast to reach 59% by 2040. 27% recovery will come from recovery of recyclables, green waste and metals, a kerbside organics service will recover a further 3%, and the remaining 28% will come from an energy from waste facility.



Commercial & Industrial	2022	2025	2030	2040
Waste Generated (tonnes)	32,085	32,946	34,433	37,611
General Recovery Activities %	24%	26%	27%	27%
FOGO %	0%	0%	3%	3%
Energy from Waste %	0%	0%	0%	27%
<b>Total Diversion %</b>	<b>24%</b>	<b>26%</b>	<b>30%</b>	<b>58%</b>
Qld Government Target		65%	80%	90%
Residual to Landfill (tonnes)	24,318	24,437	23,939	15,850



## CONSTRUCTION AND DEMOLITION (C&D)

Incoming C&D by 2040 is 40,000 tonnes per annum (up from 35,000 tonnes in 2022). It is important to note that this incoming figure can vary significantly year on year, dependent on major projects being undertaken in our region.

Current recovery rate is already very high in this waste stream, far in excess of the State Government targets. Since this waste stream is largely inert materials, it is not suited to waste to energy processing. The current recovery rates are therefore anticipated to continue with only small improvements to 2040 derived from improved processing facilities.

C&D	2022	2025	2030	2040
Waste Generated (tonnes)	34,389	35,312	36,906	40,313
General Recovery Activities %	94%	96%	97%	97%
FOGO %	0%	0%	0%	0%
Energy from Waste %	0%	0%	0%	0%
<b>Total Diversion %</b>	<b>94%</b>	<b>96%</b>	<b>97%</b>	<b>97%</b>
Qld Government Target		65%	80%	85%
Residual to Landfill (tonnes)	1,990	1,511	1,031	1,126



## ROCKHAMPTON REGIONAL COUNCIL GENERATED WASTE

The *Waste Reduction and Recycling Act 2011* requires that we set targets for overall waste reduction and recycling rates for Council's own waste. Council's own waste stream will be subject to the same diversion targets as the rest of the commercial and industrial waste stream.

In pursuit of this, Council continues to invest in ongoing reduction of waste generation across its own internal facilities, including education delivered via a network of sustainability reps, implementation of single use plastic policies, and recovery of a full range of office recyclables. Additionally, the recovery rate of materials generated from Council's own civil operations and community services teams are very close to 100%, with only hazardous wastes and post processing residuals being unsuitable for recovery.

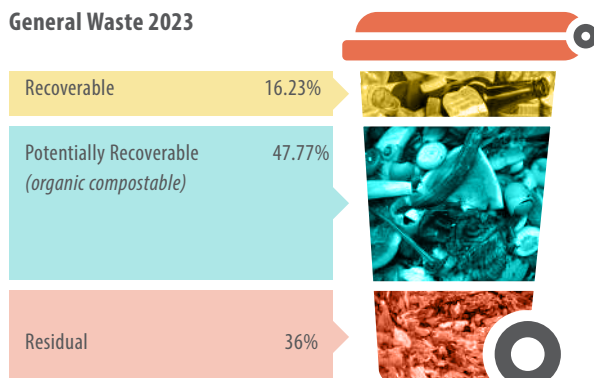
This strategy also makes new commitment to improving our performance in respect of event waste management, whole of Council procurement framework, and establishing the principles of circularity across our planning and development framework.

## KERBSIDE BIN COMPOSITION

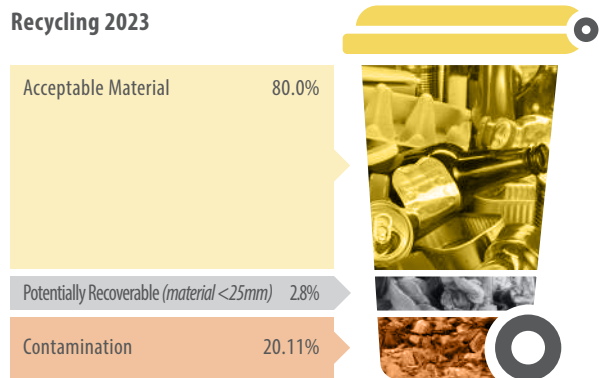
When modelling the data, some information is not directly available from weighbridge data capture, such as material composition of mixed loads arriving at our sites.

For these calculations, estimates of material volumes have been included in the modelling which have been derived from other sources, including industry benchmarking data and our annual kerbside compositional audit. This audit takes a sample of 500 kerbside bins (250 general waste and 250 commingled recycling) to determine the average bin weight and composition by material type. The graphic below shows the results of the 2023 bin audit.

### RRC Domestic Kerbside General Waste 2023



### RRC Domestic Kerbside Recycling 2023



# Appendix 2: Strategic Progress 2020-2022

The first iteration of this strategy was adopted by Council in December 2019. The table below gives a summary of the progress made against the original action plan.

Completed or on track			
Progressing but behind planned timeline			
Not progressing			
<b>Priority 1: Behaviour Change</b>			
1.1	Establish long term community engagement plan		A Communication and Engagement plan delivered in 2020, but failure to properly resource this plan has to date resulted in limited engagement and community awareness on major issues.
1.2	<b>Waste education</b>		
1.1.1	Develop and deliver an annual waste education plan		16 schools participating in the Recycling Hero program as at end of 2022, as well as a range of other education activities implemented in line with the annual Waste Education Plan
1.1.2	Deliver a regional education campaign in partnership with other CQ councils		Ongoing work with State Government to develop consistent campaigns; CQ regional waste management plan will now be the primary vehicle for future regional campaigns. Council co-funded the very successful Plastic Free CQ program
1.3	Deliver an illegal dumping and littering reduction campaign		Successfully delivered funded Hotspots program across 2019-2021
<b>Priority 2: Building Resource Recovery Capacity</b>			
2.1	<b>Organic Waste</b>		
2.1.1	Develop an organic business case to establish best combined collections and processing solution		FOGO Trial completed during 2021-22 directly informing future service recommendations, with business case now close to completion
2.1.2	Procure an organic kerbside collection services based on business case outcomes		Planning processes are well advanced, but no procurement can be undertaken until final Business Case is approved and State Government funding is available
2.1.3	Procure an organic processing solution based on the business case outcomes		
2.1.4	Commercial food waste action plan		
2.2	<b>Comingled recycling</b>		
2.2.1	Procure new MRF solution		Tender process was commenced in late 2022, with submissions still being evaluated at beginning of 2023
2.2.2	Develop a plastics processing business case		Initial analysis failed to offer up any commercially viable options at the feedstock levels available in CQ. On hold pending viable option becoming available
2.2.3	Procure a plastics processing solution		
2.2.4	Procure a plastics processing solution - expanded polystyrene (EPS)		Whilst we have not to date resolved the broader plastics issue, Council did procure and install an EPS recycling facility which is now diverting and processing 100% of polystyrene from landfill
2.3	<b>Mixed residual waste</b>		
2.3.1	Develop an AWT business case		Ongoing discussions with various potential providers have to date yielded no viable options at feedstock levels available in CQ. On hold pending viable option becoming available
2.3.2	Procure an AWT solution		
2.3.3	Develop a C&I and C&D sorting and separation solution		No progress made to date. It is confirmed that a demand exists from local operators for a dedicated site, so a resource recovery precinct development plan is now being explored within this revised action plan
2.4	<b>Regulated and difficult waste</b>		
2.4.1	Develop a solar panel management action plan		All solar panels have been diverted since 2022 (1600 panels in first year)
2.4.2	Develop a textile waste recovery action plan		No progress made due to lack of identified opportunities. Awaiting outcomes of the State Government's upcoming Textiles Action Plan.
2.4.3	Develop a timber recovery action plan		A trial commenced in 2022 to grind timber for use as a replacement material for landfill cover.
2.5	<b>Infrastructure management</b>		
2.5.1	Develop a concept plan for a Lakes Creek Road waste precinct		The Upcycle Village was established in 2022, currently hosting social enterprise Multicultural Australia's Employment Pathways program. Due to various site constraints, the broader precinct concept will now be pursued at alternative location.
2.5.2	Progressive construction of the piggyback landfill at Lakes Creek Road		Ongoing construction, with three new cells completed since 2018
2.5.3	Procure landfill gas extraction infrastructure at Lakes Creek Road landfill		Full capture infrastructure has been installed and has been flaring since 2020. Ongoing work to determine the viability of power generation.
2.5.4	Upgrade of Gracemere waste transfer station		Gracemere site capped and waste transfer station construction commenced at end of 2022, will be completed in mid-2023
2.5.5	Implement a long term management plan for closed landfill sites		Capping completed at Alton Downs, Marmor, Bouldercombe and Mount Morgan Racecourse sites
<b>Priority 3: Market Development</b>			
3.1	Development of a sustainable, local compost market		FOGO Trial and existing green waste processing contract both demonstrate that a viable market demand currently exists
3.2	Development of a sustainable AWT offtake product(s) market		Not prioritised given there is no viable AWT option in the pipeline
3.3	Development of a sustainable, local glass reused market		Local glass reuse been put in place, including roadside, pipe bedding and concrete construction
3.4	Prioritise Council's own procurement of recycled materials		Incremental improvements to some procurement streams, but it has not been possible to resource a whole of organisation review or reform to date





**Waste and Recycling Councillor Shane Latcham and Ronan Foolkes**



*"Adapting to FOGO has been a very easy transition for us and the sooner the service is offered to the whole community the better."*

**Trial Participant Ronan Foolkes**







# LANDFILL GAS CAPTURE

In November 2020, Rockhampton Region Waste and Recycling (RRWR) ignited the fire on its journey toward a more sustainable future with the recent installation of an innovative biogas system.

The Biogas Flare, installed by industry leaders LMS Energy, is a big step toward reducing the carbon footprint of the Lakes Creek Road Waste Management Facility.

Waste to Resource Recovery Councillor Shane Latcham said it was fantastic to see this system up and running.

*"The Biogas Flare might not look like much from the outside, but there's a lot going on below the surface – literally!" said Cr Latcham.*

*"There's a series of wells that have been drilled and installed throughout the landfill site.*

*"This system works by extracting potentially harmful greenhouse gases, such as methane, which are produced when organic matter in the landfill breaks down.*

*"Instead of being trapped in the landfill or being emitted into the atmosphere, these biogases are now channelled to this flare where they're safely destroyed.*

*"In the future we may even be able to add a power module to harness the energy generated from this process and put it back into the grid.*

*"This is a very exciting project, and LMS Energy has been great to work with every step of the way."*

Jason Dockerill, LMS Energy Contract and Client Manager, said it has been great to partner with Rockhampton Regional Council on this project.

*"LMS has manufactured 100 landfill biogas flares similar to this one, all of which are continuing to safely remove and destroy harmful greenhouse gases across Australia," said Mr Dockerill.*

*"This is a fantastic project that will have some real environmental benefits.*

*"Each year, this Biogas Flare at the Lakes Creek Road Waste Management Facility is saving approximately 20,000 tonnes of carbon from entering the Earth's atmosphere."*



*"Each year, this Biogas Flare at the Lakes Creek Road Waste Management Facility is saving approximately 20,000 tonnes of carbon from entering the Earth's atmosphere."*

LMS Client Manager  
Jason Dockerill







# POLYSTYRENE RECYCLING COMES TO TOWN

In 2021, Rockhampton became the second council in Queensland to recycle polystyrene, providing a drop off for all domestic and commercial customers at all of Rockhampton Council's Waste Facilities across the region.

Polystyrene has always been the exception to the rule of how to recycle right, it is stamped with the Recycling Symbol but has never been accepted in the yellow-lid bin in the Rockhampton Region.

Expanded Polystyrene (EPS) is a problem waste, generally being a single use plastic-based item that is disposed of in landfills. A pollutant to our environment that takes up a very large amount of airspace in landfill. The recycling process will be another important step to achieving our region's goal of zero waste.

Rockhampton Council were successful in gaining funds from DES as part of this program, which was used to purchase an EPS hot melter recycling machine.

The polystyrene is loaded into a hopper where it is crushed into small pieces. These pieces flow into a heat tube to be melted into a singular long piece of condensed polystyrene. An automated knife chops the hot length into smaller balls which float through a water bath to cool, an auger collects the balls out of the water and passes them out to a storage bag. The machine reduces the volume of waste by about 100:1.

The recycled material is on sold to be remanufactured into products such as photo frames, architraves and speed bumps.

The investment in this equipment will now save Council hundreds of thousands of dollars in landfill airspace cost per annum, and is recycling an otherwise very difficult waste stream.

# SCHOOL RECYCLING HERO PROGRAM CONTINUES TO WIN HEARTS & MINDS

St Peter's Catholic Primary School became the newest member of our region's growing legion of 'Recycling Hero' schools fighting for a zero-waste future.

Waste and Recycling Councillor Shane Latcham said it was a privilege to congratulate the school on their hero status at assembly today.

*"I can see the hard work that students and staff have been putting in over the past few months and the results have been phenomenal," Cr Latcham said.*

*"Since March the school has introduced a number of fantastic initiatives, from student monitored bin stations at lunch time and collection points for soft plastics and 10c containers to composting and mulching.*

*"Recently we worked with the students to do a waste audit and check in on their process, and found that the school had been incredibly successful in diverting recyclables and other resources from general waste. Their total general waste generated over a 3-day period has reduced from 80kg to 16.4kg – which is an incredible effort.*

*"Students have been hands on at every stage of the process. They have driven the change and they can prove the difference it has made."*

St Peter's Principal Anthony Greene said it was great to see how enthusiastic the students are in implementing change.

*"This is a fantastic program to be part of and I am very proud of what we've achieved since we introduced it earlier this year," Mr Greene said.*

*"Not only is this a valuable investment in our school, because it saves us money in waste services, it's also an incredible investment in our environment and in our students.*

*"It's wonderful for the students to learn that they can really make a difference."*

Cr Latcham said there are 6 schools across the region working with Rockhampton Region Waste & Recycling (RRWR) to achieve hero status.

*"The Recycling Hero School model was created by officers at RRWR, and is unique to our region," said Cr Latcham.*

*"This isn't just a one-off session, it's a title that a school earns through the delivery of a full education program involving a series of lessons and hands-on activities that can be linked to the national curriculum for a number of subjects and year levels.*

*"The school will demonstrate ongoing education and perform regular audits to keep their title – which means we can really measure the long-term impact the program is having.*

*"This initiative is part of Council's broader Waste Strategy, which outlines our plan to achieve zero waste by 2050. One important element of this strategy is to ensure our kids are approaching waste responsibly now, and taking those good habits home to their families."*







# UPCYCLE VILLAGE

In May 2022, Council launched an innovative recycling program at the Lakes Creek Road Landfill.

The program, called the Upcycle Village, gives discarded materials a new life whilst providing a working space for local organisations to establish and run upcycling programs and projects.

Council's Waste and Recycling Councillor Shane Latcham said the Upcycle Village goes hand in hand with Council's goal of becoming a zero-waste community.

*"The program not only diverts waste from landfill by enabling upcycling ideas into financially sustainable enterprises, but it also delivers social benefits and promotes our goal of zero waste," Cr Latcham said.*

*"The first program in the Village involves a 12-month partnership with Multicultural Australia and their newly launched program, the Building Foundations construction program.*

*"This program helps unemployed locals to get construction skills, whilst turning incoming waste materials into new and restored furniture to be used for social housing - which is a fantastic opportunity for not only recycling but also for locals seeking employment.*

*"In fact, in the first three months of the program, three of the 13 trainees have already found full time employment because of the program which is just wonderful to see.*

Resource Recovery Australia are also a key partner in the program, sourcing and handling suitable materials for use at the Upcycling Village.

*"The Upcycling Village is a great example of a multi-agency partnership helping to deliver a program that has positive employment, social and environmental outcomes".*





*"The Upcycle Village is a great example of a multi-agency partnership helping to deliver a program that has positive employment, social and environmental outcomes."*

Cr Shane Latcham





# Resource Recovery STRATEGY

BUILDING A CIRCULAR ECONOMY