

Resource Recovery Strategy

Reaching
zero
waste

BUILDING A CIRCULAR ECONOMY

Our vision

Rockhampton Regional Council's Resource Recovery Strategy presents the long-term goals for the management of waste in our region. The Strategy provides a blueprint to move towards zero waste by identifying local strategic priorities and key actions in line with national and state policies and targets.

Reducing waste to landfill is the primary goal of the Strategy with priorities strongly aligned with delivering local solutions identified in the CQ Regional Waste and Resource Recovery Management Plan 2023.

VISION: To live in a community without waste.
We will become a "zero-waste" community.

Zero waste means that the only waste that goes into landfill is waste for which there is no alternative environmentally, socially or economically viable solution. Council's Strategy identifies zero waste actions 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.

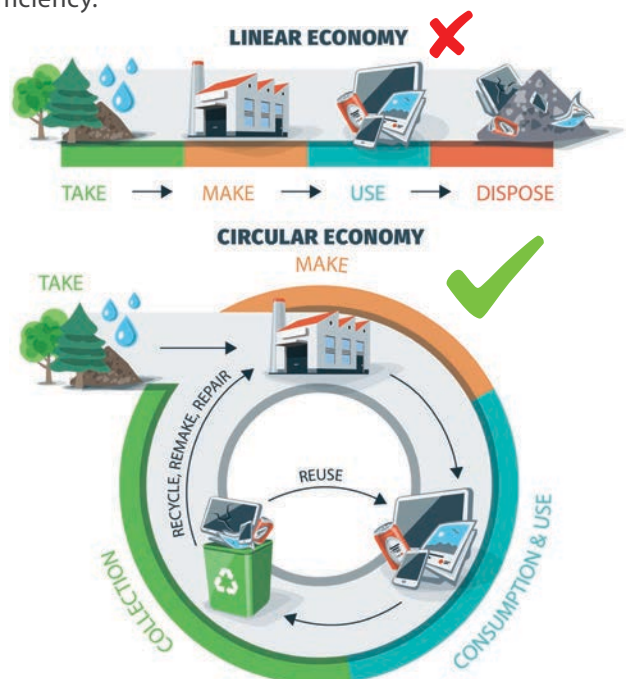
The following national and state legislation and policy directly informs Council's Resource Recovery Strategy:

- National Waste Policy
- Queensland Waste Management Strategy & Policy
- Queensland Waste Management and Resource Recovery Strategy (2019)
- Queensland Waste Levy
- Queensland Energy from Waste Policy (2020)
- Plastic Reduction Plan (2020)
- Organics Strategy & Action Plan (2022)
- *Waste Reduction & Recycling Act 2011*
- Regional Waste and Resource Recovery Management Plan

BUILDING A LOCAL CIRCULAR ECONOMY

The policy direction from all levels of government is clear and focused; Australia must 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.

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.





Current snapshot...

SNAPSHOT OF WASTE IN ROCKHAMPTON REGION 2021-2022



As at 2023, Rockhampton Regional Council has an estimated population of 83,687. Council currently provides 33,000 properties with a kerbside general waste service, and a fortnightly kerbside recycling collection service is provided via a contractor. Council operates one active landfill site in Rockhampton including a 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 as well as operating a network of six regional waste facilities.

The biggest waste stream is **Municipal Solid Waste** 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.

Reaching zero waste...

Our long-term vision is to become a zero-waste community.

Our guiding principles on our journey towards zero waste are:

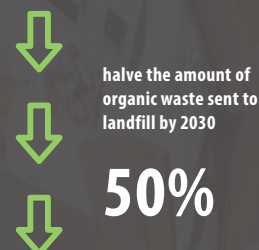
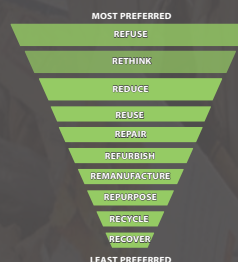
Building a **circular economy** finds opportunities across the entire supply chain to retain and circulate resources in the economy at their highest value for as long as possible. A circular economy builds on long-lasting sustainability concepts, including life cycle thinking and resource efficiency.

Embedding the **waste and resource management hierarchy** framework within households, communities, business, industry and government to minimise and manage waste.

Making waste management decisions which ensure the health, diversity and productivity of our environment is maintained or enhanced for the benefit of **inter-generational equity**.

Creating and supporting **local solutions** and markets retains the economic benefits within our community, creating new skills and opportunity, and attracting new investment from outside our region.

ALIGNING WITH NATIONAL WASTE POLICY TARGETS



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Strategic priorities & key actions

Priority 1 - Behaviour change

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.

1.1 Deliver 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 in support of behaviour change

1.2 Deliver annual waste education plan

1.3 Support behaviour change and education priorities of the Regional Waste and Resource Recovery Management Plan

1.4 Implement an event waste management plan

Priority 2 - Building resource recovery capacity

2.4 Regulated and difficult waste

- 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 regional 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 landfill gas capture system at Lakes Creek Road landfill
- 2.5.3 Implement a long-term management plan for closed landfill sites

Priority 2 - Building resource recovery capacity

Building resource recovery capacity is the investment required in infrastructure to physically manage the waste flows

2.1 Organic Waste

- 2.1.1 Implement a kerbside organics collection service
- 2.1.2 Procure an organic processing solution
- 2.1.3 Commercial food waste action plan

2.2 Commingled 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

Priority 3 - Restructuring the market

Restructuring the market is critical to ensure there is viable demand for recovered materials

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

Note:

- + 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

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ROCKHAMPTON REGIONAL COUNCIL
RESOURCE RECOVERY STRATEGY OVERVIEW

Rockhampton
Regional Council

Progressing local actions

FOGO TRIAL



Rockhampton Regional Council, in partnership with the State Government, undertook a 12-month Food Organics and Garden Organics Trial. The trial tested three different service configurations across 760 households.

The findings are fundamental to developing an organics business case to determine what is needed for a community-wide roll out of the service.

UPCYCLE VILLAGE

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.

The program not only diverts waste from landfill by reusing resources, but also delivers social benefits and progresses our vision of zero waste through financially sustainable enterprises.



LANDFILL BIOGAS



The Landfill Biogas system works by extracting greenhouse gases, such as methane, which are produced when organic matter in the landfill breaks down.

These biogases are channelled to flaring and each year, this Biogas Flare at the Lakes Creek Road Waste Management Facility is saving approximately 20,000 tonnes of carbon dioxide equivalent from entering the atmosphere.

RECYCLING POLYSTYRENE

Expanded Polystyrene (EPS) is a problem waste, generally being a single use plastic-based item that is disposed of in landfills.

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.

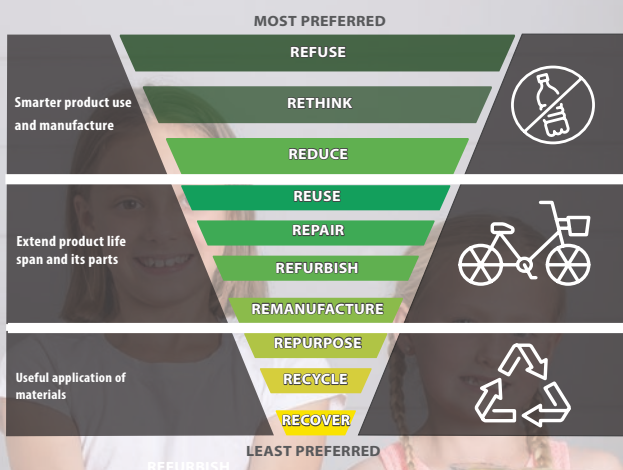


SCHOOL PROGRAM



Recycling Hero Schools Program is an 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. This valuable program not only helps save schools' money in waste services, but is also an incredible investment in the students' environmental education and fosters ongoing life skills.

Reaching zero waste



Achieving our vision 'to live in a community without waste' 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.

We can do this by following the waste and resource management hierarchy, the framework that guides the order of preference for managing waste. There are lots of resources available to help households, businesses and industries put the waste and resource management hierarchy into practice to minimise and manage waste more effectively.

Together, we are moving towards a zero waste community.



Find out more about Council's Resource Recovery Strategy, key projects planned for local and regional outcomes and resources to assist the community towards zero waste on Council's website.



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