

Waste Reduction and Recycling Plan

2025-2030



Acknowledgement

Douglas Shire Council acknowledges the traditional Country of the Eastern Kuku Yalanji Peoples and the Djabugay Nation People of the coastal areas and rainforest of the Douglas Shire.

We recognise that these have always been and continue to be places of cultural and spiritual significance. We acknowledge and cherish the important contribution made by Aboriginal and Torres Strait Islander people to the Douglas Shire community, and pay respects to their Elders – past, present and emerging.

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Message from the Mayor

As Mayor of Douglas Shire, I am proud to present the Waste Reduction and Recycling Plan 2025-30. This comprehensive plan reflects our commitment to sustainability and our vision for a cleaner, greener future for our community.

Douglas Shire is renowned for its natural beauty, from the lush rainforests to the pristine beaches. It is our responsibility to protect and preserve these treasures for future generations. This plan outlines the priorities and actions that will guide us in reducing waste, increasing recycling, and promoting sustainable practices across the Shire.

Our approach is collaborative, involving residents, businesses, and local organisations. Together, we can make significant strides in minimizing our environmental footprint. The plan emphasises education, innovation, and community engagement, ensuring that everyone has a role to play in achieving our waste reduction goals.

I encourage all members of our community to embrace the principles outlined in this plan.

By working together, we can create a more sustainable and resilient Douglas Shire. Let us take pride in our efforts and continue to lead by example in environmental stewardship.

Thank you for your support and dedication to making Douglas Shire a better place for all.



Lisa Scomozzon
Mayor, Douglas Shire Council



Introduction

Purpose

The purpose of the Waste Reduction and Recycling Plan (WRRP) is to define Council's overall priorities for recycling and waste management within the Shire. This plan supports the Council's vision of working together to enhance our environment, lifestyle, culture and community.

The WRRP focuses on addressing current resource recovery and waste management challenges in the Shire whilst looking ahead to shape the region's future direction in the management of waste as a resource. This document outlines how Council will work with the community, local businesses and industry to better manage its waste and recovered materials until 2030.

Snapshot of the Shire

The Douglas Shire region is located in Far North Queensland, Australia. The region extends from Degarra in the north to south of Wangetti. Famous for its 'rainforest to reef' setting, the Shire is at the interface of two World Heritage Listed areas, the Great Barrier Reef and the Wet Tropics which includes the ancient Daintree rainforest. Approximately 70% of the Shires residents reside in Port Douglas and Mossman. Other urban areas include the beachside communities of Wonga Beach, Newell and Cooya Beach.

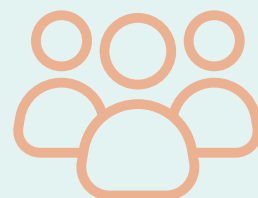
2435

square kilometres
of land area



12,500

residents (2021 ABS)



DOUGLAS SHIRE



Opportunities and Challenges

Domestic and international tourism remains the cornerstone of the Douglas Shire economy, attracting approximately 1.2 million visitors annually.

While seasonal fluctuations in visitor numbers create variability in waste volumes, they also present opportunities to implement innovative, tourism-focused waste reduction and recycling initiatives by partnering with local tourism providers.

Beyond tourism, key industries such as transport, health care, education, construction, commercial fishing, tropical horticulture, cattle farming, the creative arts, and professional services contribute to a diverse waste stream. This creates potential for tailored resource recovery initiatives across different sectors.

Community engagement and education represent some of the most powerful tools for improving recycling and reducing contamination.

Douglas Shire has significant opportunities to work closely with schools, residents, and commercial operators to foster a culture of sustainability.

Education programs can be developed and delivered in schools to build early awareness of recycling and environmental stewardship. For households, community workshops, targeted campaigns, and digital resources can help residents better understand what can be recycled, reduce contamination, and promote at-home composting or participation in local organics initiatives.

For the commercial sector, tailored education and support programs can help businesses understand their waste profiles and identify opportunities to reduce, separate, and recover waste materials more effectively.

This could include partnerships with hospitality venues to improve back-of-house recycling, food waste reduction, and organics diversion.

By embracing these education and engagement opportunities, Douglas Shire can significantly enhance participation in recycling programs, reduce contamination, and support the growth of a local circular economy, benefitting both the community and the environment.

Across Far North Queensland (FNQ), the resource recovery sector is navigating a period of transition.

Challenges such as changing policy settings, vast transport distances, low economies of scale, limited local recycling markets, community behaviour patterns, and ageing or insufficient infrastructure continue to affect recovery rates.

However, these same factors present valuable opportunities to explore regional solutions, invest in improved infrastructure, foster local processing capabilities, and build market demand for recovered materials.

Additionally, FNQ is particularly vulnerable to natural disasters such as cyclones and floods, as well as other significant local events. These events can place sudden and severe pressure on waste management systems, generating large volumes of debris and disrupting regular services.

Strategic Context

Key Policy Drivers

There are a number of national and state legislative and policy requirements that guide the direction of Australia's waste and resource recovery management.

The *Waste Reduction and Recycling Act 2011* (WRR Act) requires every Queensland local government to prepare, adopt and implement a WRRP, which must set clear guidelines for waste management within the local government area.

Federal

Recycling and Waste Reduction Act 2020

National framework to manage waste and recycling, including export bans and economic stimulation with targets.

Australia's National Waste Policy 2018 and Action Plan 2019

Adopts principals that support the vision of a circular economy and sets targets to guide investment.

National Food Waste Strategy 2017

A framework to support action for halving national food waste by 2030.

2025 National Packaging Targets

Sets targets for packaging by 2025, including reusability, recyclability, use of recycled content and the phase out of problematic single-use plastics.

Australasian Recycling Label

On-pack labelling system developed for assisting consumers in understanding appropriate disposal methods for packaging.

National Plastics Plan 2021

A national plan to address plastic waste.

state

Waste Reduction and Recycling Act 2011

Requires the development and implementation of Waste Reduction and Recycling Plans.

Queensland Waste Management and Resource Recovery Strategy 2019

Sets targets for waste disposal in Queensland.

Waste Disposal Levy

Implemented in 2019 to disincentivise disposal of waste to landfill.

Plastic Pollution Reduction Plan 2019

Identifies and prioritises actions to reduce plastic waste

Single-Use Plastic Bans

Legislated bans of single-use plastic bags (2018) and other items including plastic straws (2021). Other items are continually being reviewed for inclusion in the ban.

Organics Strategy and Action Plan 2022-32

Provides framework for improved management of organic material, with the Action Plan providing a road map.

Corporate Alignment

This plan has been developed with national, state and local policies, objectives and targets in mind.

Douglas Shire Council is committed to leading our community towards a cleaner, greener future. Our vision is to reduce waste generation, maximise resource recovery, and protect our unique natural environment through innovation, education, and collaboration.

By fostering a circular economy, encouraging responsible consumption, and supporting sustainable practices, we will ensure that Douglas Shire remains a vibrant and resilient region for generations to come.

Our vision is to reduce waste generation, maximise resource recovery, and protect our unique natural environment through innovation, education, and collaboration.

Douglas Shire Council Corporate Plan 2025-2030

Waste management has the potential to impact a wide range of areas and consequently has strong linkages throughout various corporate strategies. The WRRP has been developed to compliment the councils Corporate Plan and Operation Plan, specifically under the following themes:

- 1. Liveability
1.7 Investigate and promote environmental, green, eco-friendly and nature focused initiatives.
- 3. Service Delivery
3.9 Preserve, protect and improve our unique environment.

FNQROC Regional Resource Recovery Plan

This plan aligns with the Far North Queensland Regional Organisation of Councils (FNQROC) regional plan which presents a series of actions to collaboratively deliver resource recovery outcomes and provide positive impact across all participating council regions.

Qld Waste Targets

Queensland Waste Management and Resource Recovery Strategy 2019 (“Queensland Waste Strategy”) sets short to medium term targets for waste avoidance, landfill diversion and recycling rates. Council’s WRRP aligns with the Queensland’s Waste Strategy targets outlined in this section.

Waste & Resource Management Hierarchy

The waste and resource management hierarchy underpins the Queensland Waste Strategy and this WRRP. This framework guides the order of preference for managing waste. It emphasises waste avoidance as the priority, after which options for reuse, recycle, recover and treatment should be explored, before the least preferable option of disposal. Council prioritises the adoption of circular systems, aiming for materials to be kept in their original use for as long as possible.

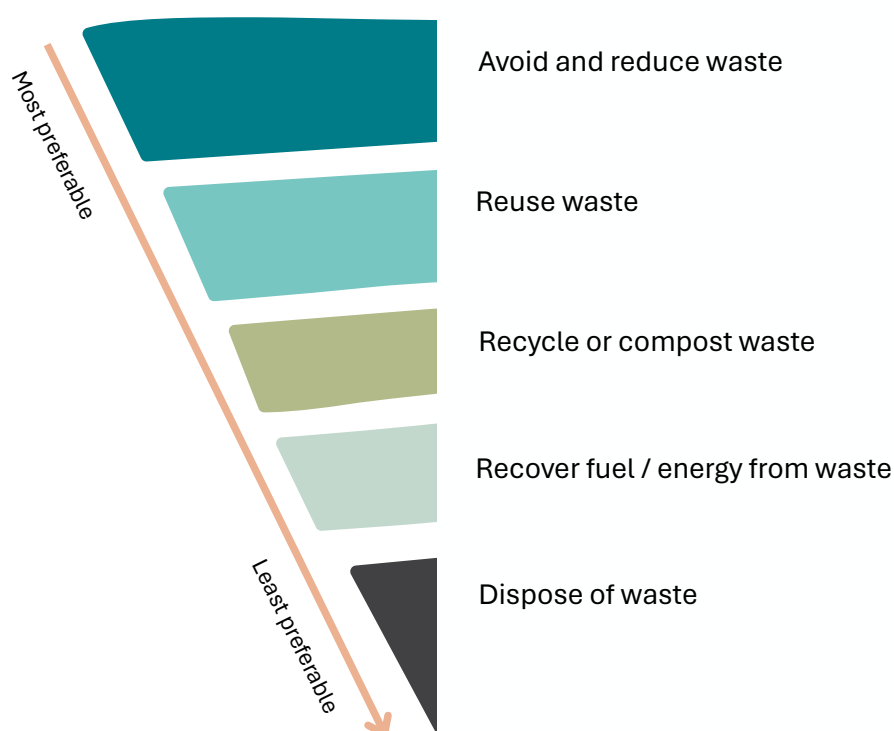


Figure 1: The Waste and Resource Management Hierarchy

Waste Avoidance Targets

The waste avoidance target seeks to reduce the amount of waste that each household in Queensland generates. Table 2 shows Queensland’s Waste Strategy waste reduction targets for households (per capita).

Stream	Baseline (2018)	2025	2030	2040	2050
MSW	0.54 tonnes	10%	15%	20%	25%

Table 2: Queensland’s Waste Avoidance Targets

Landfill Diversion Targets

Landfill diversion targets set in Queensland's Waste Strategy are shown below in Table 3.

Stream	Baseline (2018)	2025	2030	2040	2050
MSW	32.4%	55%	70%	90%	95%
C&I	47.3%	65%	80%	90%	95%
C&D	50.9%	75%	85%	85%	85%
Overall	45.4%	65%	80%	80%	90%

Table 3: Waste diversion from landfill targets – recovery rate as a percentage of total waste generated

Recycling Rate Targets

Increased recycling rates is supported in the Queensland's Waste Strategy through the development of markets and the delivery of infrastructure to meet market demand for recycled material. The percentages in Table 4 relate to waste that is reported as recycled or reused, specifically excluding material from which energy is recovered.

Stream	Baseline (2018)	2025	2030	2040	2050
MSW	31.1%	50%	60%	65%	70%
C&I	46.5%	55%	60%	65%	>65%
C&D	50.9%	75%	80%	>80%	>80%
Overall	44.9%	60%	65%	70%	75%

Table 4: Recycling rates - as a percentage of total waste generated

Douglas Shire Waste Profile

Current Services and Infrastructure

Council provides services and facilities for waste disposal and recycling throughout the Shire. This includes a general waste and recycling kerbside collection services for properties within the collection service area and four transfer stations. Killaloe landfill was active from 1989 until the end of 2021 when it reached capacity resulting in offsite transport of all residual waste.

Approved properties outside of the kerbside collection service area are levied a Special Refuse Charge to utilise transfer stations, including one transfer station in the adjacent local government area of Cook Shire.

Transfer Stations

Council operates four transfer stations, with Killaloe Transfer Station being the primary facility in the Shire. The remaining three transfer stations: Newell, Daintree and Cow Bay transfer stations service the remote areas of the Shire. All facilities are supervised during opening hours and are secured when closed.

Eligible properties outside of the kerbside collection service area are issued a Special Refuse Card for use at transfer stations for the disposal of waste and recyclables. Approximately 240 properties are outside of the kerbside collection area and rely on transfer stations for waste disposal.

Council has an arrangement with the adjacent local government area of Cook Shire to allow residents in the Degarra area to utilise Ayton Transfer Station.





Douglas Shire Council

Cook Shire

Wujal Wujal Aboriginal Shire

AYTON TRANSFER STATION

DAINTREE TRANSFER STATION

COW BAY TRANSFER STATION

Mareeba Shire

NEWELL TRANSFER STATION

KILLALOE TRANSFER STATION

Location of transfer stations within the Shire

Kerbside Collection Service

Council's kerbside collection service is available to approximately 7550 residential and 550 commercial properties within the Shire. This consists of a weekly kerbside service of 240L waste bins and a fortnightly kerbside service of 240L yellow-lidded co-mingled recycling bins.

Kerbside waste was previously delivered to an advanced resource recovery facility in Cairns where processible waste was recovered, however a significant fire at this facility in January 2025 has resulted in all waste collected being diverted to landfill on the Tablelands until a long-term regional solution is implemented. Recyclables collected in the kerbside collection service are transported directly to the Material Recovery Facility (MRF) in Cairns. Recyclables are sorted and separated into plastics, paper, steel and aluminium, baled and exported for recycling. Glass is separated and crushed for use in Cairns Regional Council's operations, including concrete cycle and pedestrian path construction.

A waste-only kerbside collection service is also available for commercial properties north of Forest Creek, over the Daintree River. Investigations into the viability for expansion of this service to include domestic properties will be investigated during the term of this Plan. The Container Refund Scheme, Containers for Change, is very active in this area and captures majority of eligible beverage containers for recycling. Residents and commercial operators are encouraged to self-haul remaining co-mingled recyclables to one of Council's transfer stations where they are accepted free of charge.



Waste Profile

The waste profile for Douglas Shire is presented below and includes approximate annual tonnages of waste generated by waste stream and waste type.

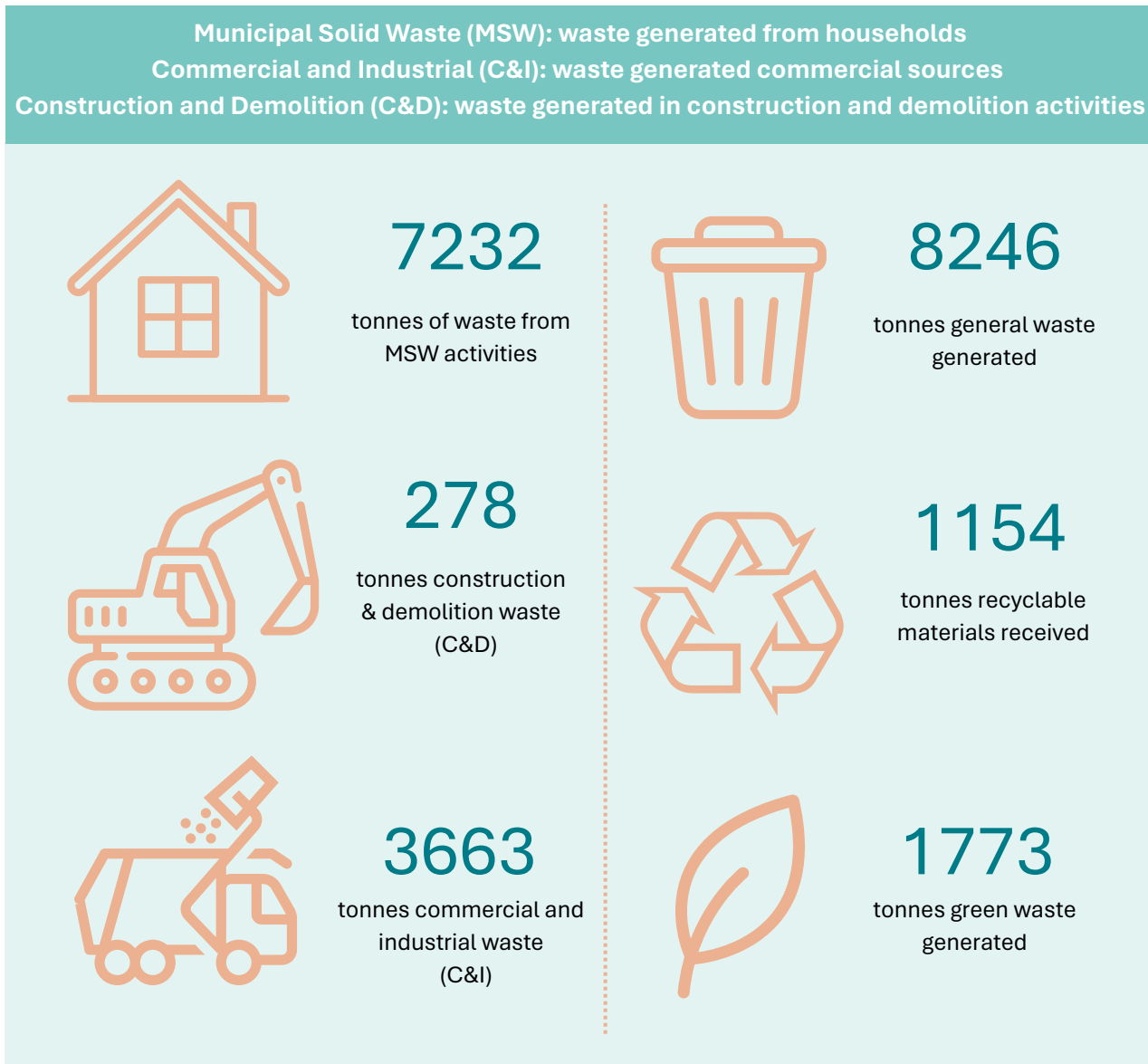


Figure 2: Snapshot of Douglas Shire Waste Profile in 2023 - 2024

The 2023-2024 MSW waste total of 7,232 tonnes indicates an average waste generation of 0.57 tonnes per capita annually (2021 ABS), which is in line with the Queensland baseline of 0.54 tonnes set in 2018. This indicates broadscale waste reduction must be prioritised in this WRRP to move toward achieving the Queensland Strategy Targets 15% reduction target by 2030.

Douglas Shire already exceeds the 2030 MSW landfill diversion target of 70%, however the significant fire at the advanced resource recovery facility in Cairns will impact this until a long-term regional solution is implemented. Council is in line with the 2025 landfill diversion target for C&I of 65% but needs to focus on improvements in the C&D sector moving forward.

Waste characterisation audits of household bins have shown contents of household waste bins typically contain 50% organic material, 20% recyclables and 30% landfill waste. This represents lost resources of 70% in the waste bin in the form of organics which could have been reduced or composted, and recyclables which could have been put into the yellow-lidded recycling bins.

Household yellow-lidded recycling bins contain approximately 8% contamination, that is material which is not accepted in this bin, indicating a opportunity to improve the quality of this material by diverting this waste into the kerbside waste bins, transfer stations or other specialised recyclers.

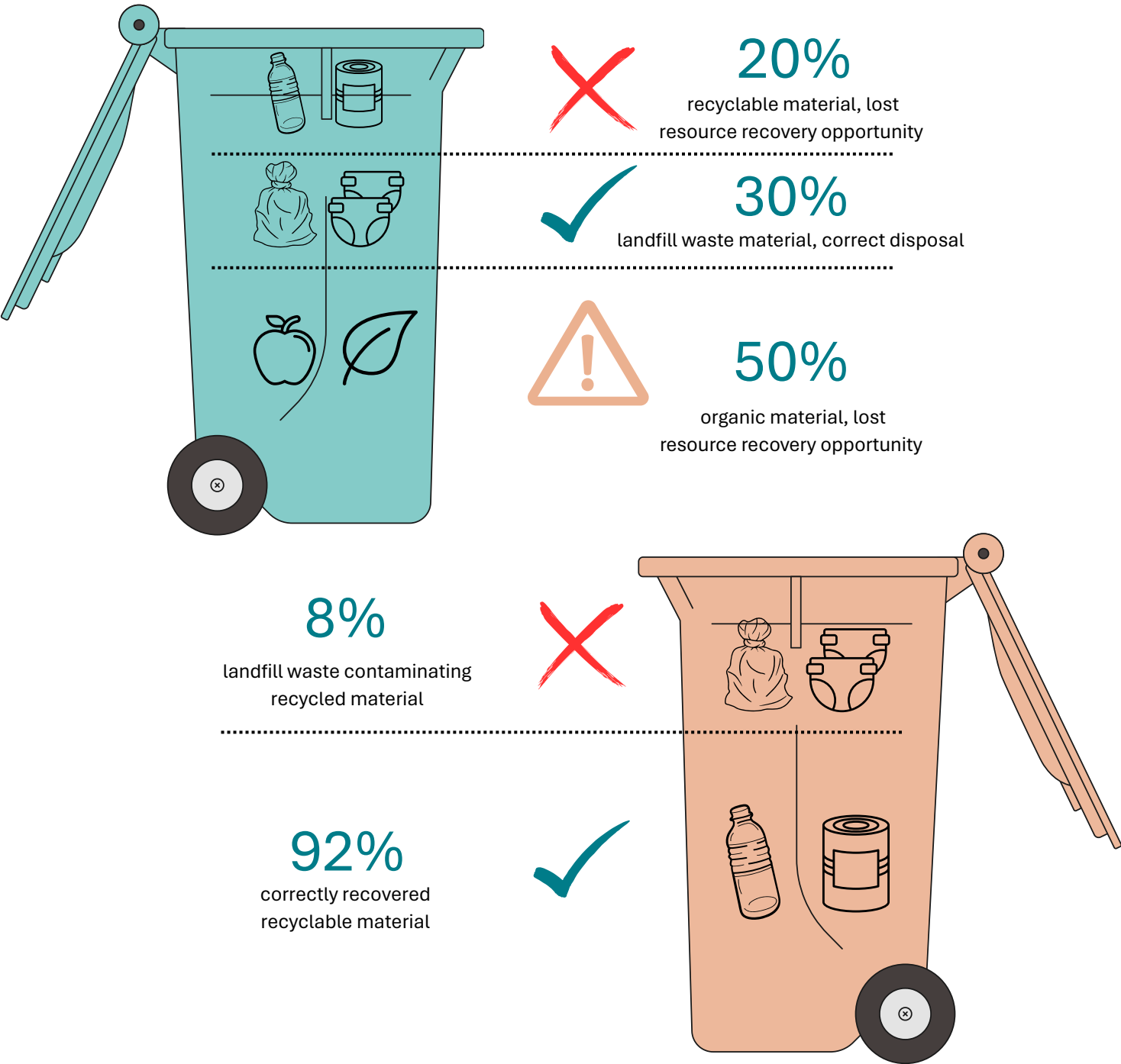
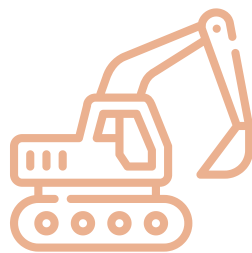
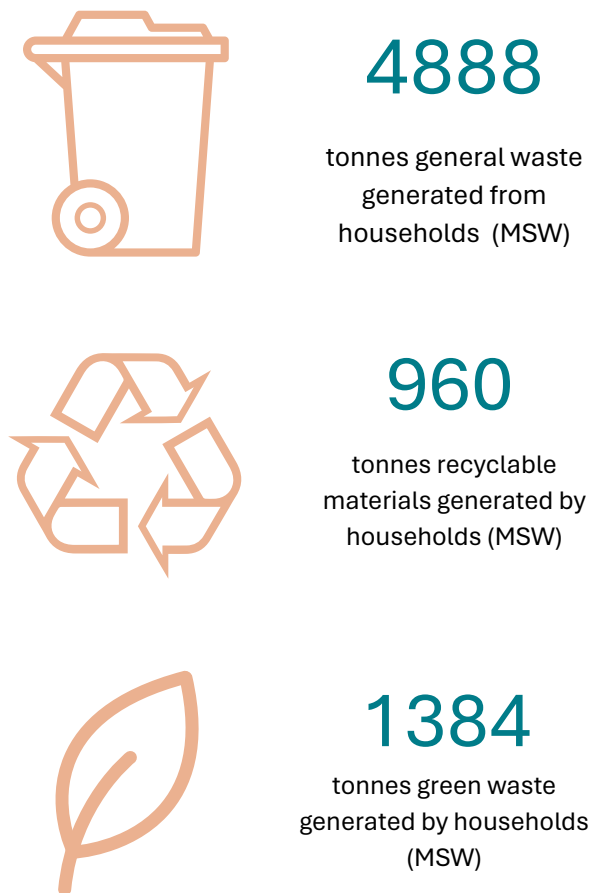


Figure 3: Approx. Composition of Household Waste and Recycling Bins

Waste Stream Breakdown



278

tonnes construction & demolition waste (C&D)



32

tonnes recyclable materials generated from Council activities



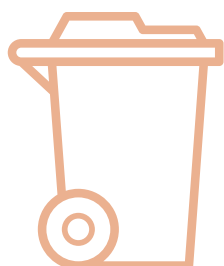
331

tonnes green waste generated from Council activities



278

tonnes general waste generated from Council activities



1885

tonnes kerbside waste collected from commercial and industrial



194

tonnes recyclable material collected from commercial and industrial



1195

tonnes other general waste collected from commercial and industrial



389

tonnes green waste collected from commercial and industrial

Figure 4: Approx. Composition of Waste in Douglas Shire 2023 -2024

Resource Recovery Activities

To date Council have implemented numerous strategies, programs and initiatives to reduce waste generation and increase resource recovery, including:

- Waste characterisation audits to determine the contents of household bins and identify ways to improve resource recovery.
- The appointment of a Waste Education Officer in 2021 to deliver a waste education program offered free of charge to early learning centres, schools, businesses and community groups.
- Free waste assessments and advice offered to event organisers to ensure sustainable practices at events in the Shire.
- Monitoring of bin contamination events as logged by Council's Waste Collection Contractor to allow targeted education of properties requiring information or direction on proper waste management.
- A bin tagging program, funded by the State Government's Let's Get it Sorted Partnership's program, to educate and reward residents for proper waste disposal. This program operated from November-December 2024 and resulted in an overall improvement by households of 7%, with those properties receiving green tags in the second round compared to orange or red in the first round.
- Support offered to the Container Refund Scheme, Containers for Change, to ensure access to the scheme in all areas of the Shire.
- Support of the Plastic Free Cairns and Douglas program, funded by the State and delivered by Boomerang Alliance, to support businesses transition to compliance with the single-use plastic items bans which came into effect in 2021, and a second round in 2022. This program continues with the implementation of a reusable coffee cup system in 2025.
- Operation of Council's Tip Shop at Killaloe Transfer Station, the "Scrap Shack" which allows residents to drop off good quality, reusable items for other members of the community to take free of charge. This has resulted in the of thousands of items from landfill since its opening in 2016.
- Support and advocacy for the battery stewardship program in Queensland, "B-Cycle". Council operates drop off points to allow greater access to the scheme for residents.
- Investigations into end-of-life solutions for other material destined for landfill, such as untreated timber, wet cardboard, textiles, solar panels and household batteries are also continuing in an effort to increase landfill diversion rates.

The noted resource recovery activities implemented by Council resulted in the landfill diversion rates shown below in Table 1.

Waste Stream	2014/15	2020/21	2023/24
Municipal Solid Waste (MSW)	90%	70%	76%
Commercial and Industrial (C&I)	80%	75%	64%
Construction and Demolition (C&D)	1.2%	83%	33%
Overall	57%	75%	72%

Table 1: Landfill Diversion Rates for Douglas Shire

Significant changes to recovery rates between 2014/15 and 2020/21 are attributed to improvements in reporting with the introduction of the waste levy. Operational changes relating to the sorting of residual waste have also resulted in increased recovery of C&D waste, particularly concrete.

The high levels of recovery for MSW are due to kerbside general waste being transported to an advanced resource recovery facility in Cairns until January 2025 where organic material was recovered. All waste collected is now being diverted to landfill on the Tablelands until a long-term regional solution is implemented.

Changes in local population and difficulties in waste stewardship programs resulted in a slight decline in over rates of waste diverted from landfill. Household resource recovery increased slightly due to several proactive education activities.



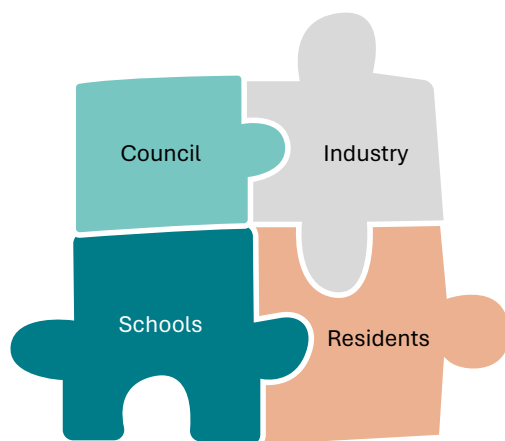
Waste Priorities

Council does not anticipate significant population growth over the term of this WRRP. As a result, no significant additional waste infrastructure or services are expected to be required during this period.

Regional collaboration with other local governments in the FNQ region and state departments remains ongoing to support future planning aimed at enhancing existing resource recovery and expanding economic opportunities for the far north.

Council's waste reduction and recycling actions aim to reduce overall volumes of waste generated within the Shire, increase participation rates in kerbside recycling and result in improved resource recovery rates at transfer stations.

Implementing education and engagement initiatives in the community and various industry sectors will increase recycling participation, reduce contamination rates, and strengthen the foundations of a local circular economy.



Actions have been set with regard to the Waste and Resource Management Hierarchy, aiming to move waste up the hierarchy in an effort to achieve the goals and targets outlined in the Queensland's Waste Strategy.



Waste Reduction and Recycling Actions

Strategic Priority 1 – Reducing the impact of waste of the environment		
#1	Continuation of the Resource Recovery Officer role to support the implementation of the WRRP.	Immediate
#2	Develop and implement annual Waste Education and Behaviour Change Plan targeting community wide waste reduction, recycling and organics diversion.	Immediate
#3	Encourage the diversion of organic waste from landfill, continue ongoing investigations for long-term opportunities.	Long Term
#4	Encourage sustainable events by fostering a culture of BYO or reusables and providing recycling bins where they are unavailable commercially.	Short Term
#5	Implement a targeted illegal dumping program through a combination of educations, investigation and enforcement.	Short Term
#6	Recovery of waste (concrete, pavement and other suitable materials) from Council's operations for reuse.	Short Term
Strategic Priority 2 – Transitioning to a circular economy for waste		
#7	Advocacy and support of individuals and groups working to divert waste from landfill.	Ongoing
#8	Support the implementation of circular economy initiatives.	Ongoing
#9	Support environmentally responsible internal procurement in accordance with Council's Procurement Policy.	Ongoing

Waste Reduction and Recycling Actions

Strategic Priority 3 – Building economic opportunity		
#10	Regional collaboration across FNQ councils to create economies of scale and meet infrastructure needs.	Long Term
#11	Maintaining relationships with state departments, including Department of Environment, Tourism, Science and Innovation and Queensland Treasury to identify economic and development opportunities.	Ongoing
#12	Investigate market opportunities for waste with an existing resource value, find alternative end of life solutions for material destined for landfill.	Long Term

Annual KPI's and Projects



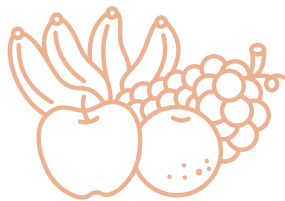
10

multi-unit dwellings supported to reduce waste and increase resource recovery



20

commercial premises supported to reduce waste and increase resource recovery



5

active organic diversion programs in place



6

early education facilities supported



300

primary school students participating in waste education initiatives



100

high school students participating in waste education initiatives



2

remote communities supported to utilise the Containers for Change services



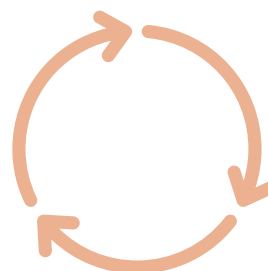
5

stewardship programs supported and maintained to manage problem wastes



1000

residents using the Recycle Mate waste guidance tool



2

circular economy initiatives supported within the region



