

# Waste Reduction and Recycling Plan 2021–2030

### TOWARDS A ZERO WASTE FUTURE







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### MAYOR'S MESSAGE

### Council's new Waste Reduction and Recycling Plan – towards a zero waste future

The Redlands Coast Waste Reduction and Recycling Plan 2021-2030 – towards a zero waste future is the first stage of a broader 30-year strategy to create a zero waste society by 2050.

Waste is one of the biggest challenges we face as a city and this plan is all about reducing our waste footprint through some simple but important practices.

The key focus is to encourage residents to 'lift the right lid' and ensure waste is going into the correct bin to reduce the amount of waste going to landfill.

We know that about half of what currently goes in the general waste red lid bin could be kept out of landfill, either through recycling in the yellow lid bin or organic material in the green lid bins.

We also know our community is committed to doing the right thing, as evidenced through high recycling rates, and this plan will support them in continuing to dispose of waste thoughtfully.

This new waste reduction and recycling plan aligns with progressive goals set by the Queensland Government and Council's own performance targets for waste management and resource recovery.

To support these goals, we have been working with our neighbouring Councils on joint projects to help deliver value-for-money waste infrastructure and resource recovery services for our community.

This plan lays the foundations for a collaborative partnership between all levels of government, the community and industry to ensure Redlands Coast remains the naturally wonderful city in which we all love to live, work and play.





## **EXECUTIVE SUMMARY**

Redland City Council's *Waste Reduction and Recycling Plan* 2021–2030 (the Plan) outlines a clear path forward on how the Redlands Coast community will move towards becoming a zero-waste society by 2050. Sustainable waste management principles underpin the Plan to protect and enhance our naturally wonderful environment and the lifestyle we enjoy.

The Queensland waste and resource recovery sector is rapidly evolving, presenting great opportunities, and some challenges for local governments. The Plan aligns with the Council of Mayors South east Queensland (CoMSEQ) Waste Management Plan (2021) developed collaboratively by SEQ Councils to move our region towards the State targets for household waste.

The Plan provides the framework and principles for the long term with the flexibility to respond to changes. It includes a strategy to 2030 and actions for annual implementation. This will enable Council to respond to the changing waste regulation at all levels of government while also meeting Council's objectives of recovering more resources from waste and futureproofing against projected additional costs from landfill disposal.

The Plan includes Council's commitment to the 2030 waste reduction and recycling targets set by the Queensland Government to:

- reduce the amount of waste generated by residents by 15%
- increase the amount of materials recycled to 60%

The Plan outlines how Council will support the community and work collaboratively to:

- reduce recyclables, green waste and food waste lost through the red bin;
- halve recycling contamination in the yellow bin;
- increase the number of households with a green waste bin; and
- transition to a food waste collection service at the right time.

Currently, each Redlands Coast resident generates just over 700 kilograms of waste annually. We generate more per capita than the South east Queensland average of 540 kilograms per capita. We need to change our habits from a 'bury it and forget it' approach to one where residents avoid and reduce waste as a first priority and reuse wherever possible.



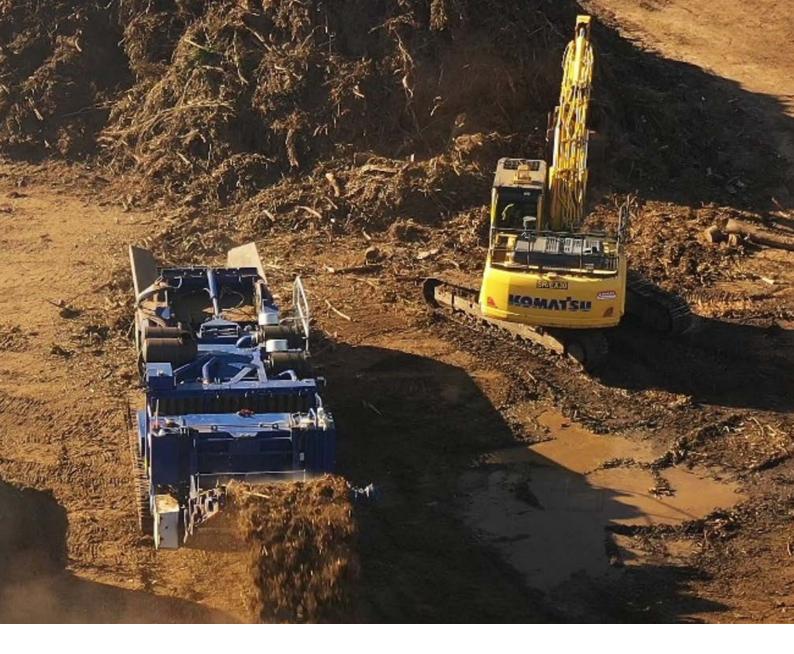
Redlands Coast's overall recycling rate is high, however, we know that households are only correctly recycling 27% of the waste, recycling and organic materials that they are placing in their kerbside bins. This means that there is a significant amount of recyclables, green waste and food being placed in the red bin and lost to landfill.

We need residents to recognise that materials are valuable by placing recyclables in the yellow bin, green waste in a green bin and being encouraged to compost food waste at home. These actions will allow residents to contribute to creating a circular economy for resources.

In response to feedback from our community on the Draft Plan and the growing focus on regional collaboration and household food waste, the Plan focuses on four themes for action:

#### Theme 1: Lift the Right Lid

The kerbside bins are our priority to support residents to 'lift the right lid' to recycle everything that can be recycled and ensure that only true residual waste is sent to landfill. Council will support residents to lift the right lid by providing clear, easy-to-understand information about how to recycle well at home.



#### **Theme 2: Transforming Organics**

The Queensland Organics Strategy and the Council of Mayors SEQ Waste Plan revealed that addressing the loss of food waste and green waste through kerbside red bins is of critical importance for reducing waste to landfill. Through the CoMSEQ Waste Plan, Council has made a commitment to establishing a transition to a food waste collection service by 2030, if affordable. This would provide residents an easy way to recycle their food waste. The implications of this service change are significant and an organics roadmap is included in this plan to outline the path forward. Growing the existing green bin take-up provides an important foundation for a food waste collection service. Providing education will be a key element to ensure that residents lift the right lid and use their bins correctly as Council leads the community in this transition.

#### Theme 3: Creating a Zero Waste Redlands

A zero waste approach prioritises avoidance, reduction and reuse over recycling and disposal. Council will support the community to avoid, reduce and reuse and will work to further embed a sustainable approach to resources into Council's own activities.

#### Theme 4: Providing Effective Services

Council will ensure that the waste and recycling services continue to be cost effective, fit-for purpose and provide a great user experience by planning for the future and engaging in regional collaborations.

Themes 1 & 2 are discussed in depth on pages 22 to 33.

An implementation plan is included with actions defined for each theme. Action for implementation in year one are defined, as well as future actions which will be programmed at annual reviews in line with external opportunities.

Taking action as outlined in the Plan will help to futureproof Redlands Coast against waste disposal cost increases, mitigate any future impact from the Queensland Government's waste levy and save valuable resources.

### INTRODUCTION

Rubbish, waste, garbage. Whatever you call it, it's become a big problem. Almost everything we do creates waste and as a society we are currently producing more waste than ever before.

Put simply, waste is what people throw away because they no longer need or want it. Landfill is the oldest and most common form of waste management and while today's landfill sites are highly engineered, changes are needed if we are to make better use of our resources.

Communities around Australia have expressed growing concern about waste and how it's managed. Governments have responded by introducing significant reforms to policies and developing targeted strategies and plans. The final pages of the Waste Reduction and Recycling Plan (the Plan) summarise the key global, national and state drivers for action on waste.

In 2019, the Queensland Government released the Waste Management and Resource Recovery Strategy which set a framework for moving towards a zero waste society in Queensland. In recognition of the challenges and opportunities presented by organic waste, a Draft Organics Strategy was published for consultation in 2021 by the State.

At the end of 2021 the South east Queensland Council of Mayors published the SEQ Waste Plan which set a target 2030 state for waste management in the region. Additionally December 2021 saw the announcement of significant changes to the landfill levy and council annual payments that will see the cost to landfill household waste steadily increase over the next 10 years.

The Plan is a requirement of the Queensland Waste Reduction and Recycling Act (2011) to demonstrate actions to be taken to improve waste reduction and recycling of waste generated by households, Council and the community.

The Plan aligns with state and regional direction with a vision to 2050, targets set to 2030 and actions for annual implementation. The implementation plan details actions Council will take in collaboration with the Redlands Coast community, governments and educators to increase resource recovery and minimise waste to landfill.

This approach provides flexibility for Council to adapt and respond to the evolving regulatory requirements, strategic drivers, costs of disposal and recycling and expectations from the community.





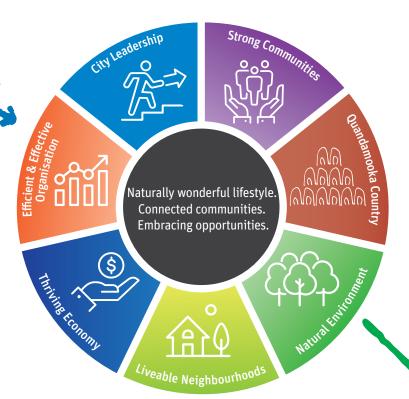
### STRATEGIC CONTEXT

#### Our Future Redlands - A Corporate Plan to 2026 and Beyond

Our Future Redlands – A Corporate Plan to 2026 and Beyond commenced on 1 July 2021 introducing a new city vision – Naturally wonderful lifestyle. Connected communities. Embracing opportunities. It is a key strategic document that lays the foundations for delivering services, projects and facilities to the community and identifies seven goals for 2041.

#### **Queensland Waste Disposal Levy**

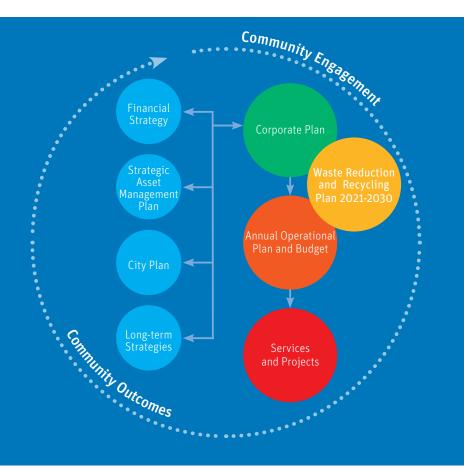
The introduction of the Queensland waste disposal levy in 2019 has increased the cost of landfilling waste. Redlands Coast residents have been protected from the impact of the levy through the household levy annual payment to Councils. From 2023, this payment will reduce incrementally each year from covering 105% of household disposal levy costs, down to 20% by 2030. In addition, the landfill levy rate per tonne will increase each year by \$10. Council must plan actions to reduce household waste to landfill or pay significantly increasing disposal levy costs.



#### **Strategic Planning**

Waste and recycling are identified as key contributing services to the success of Council's Corporate Plan. The Waste Reduction and Recycling Plan 2021-2030 is identified as a supporting strategy within the Corporate Plan.

The Waste Reduction and Recycling Plan aligns with Council's Corporate Plan Natural Environment Goal 4 and the circular economy approach to reducing waste. Managing resources presented in the Plan can deliver benefits across all of Council's six other goals.



#### Council of Mayors SEQ Waste Management Plan 2021

The CoMSEQ Waste Plan sets out a directional path forward for action and collaboration across south-east Queensland Councils. The Plan addresses the key challenges and opportunities for our region with a focus on three core waste streams managed by Councils:

- · Commingled recycling
- Organics (food & green waste)
- · Residual waste.

#### **Redland City Council Annual Operational Plan**

The Annual Operational Plan translates the commitments set out in Council's Corporate Plan into annual measurable activities and actions that Council will undertake.

#### Redland City Council Waste Annual Performance Plan

The City Waste Annual Performance Plan sets out how Council's waste service activities will be resourced and

carried out. It is the delivery mechanism for the Waste Reduction and Recycling Plan to ensure that Council provides an efficient and environmentally sustainable waste and resource recovery service that protects and supports our naturally wonderful lifestyle

#### Redland City Council Annual Solid Waste Asset and Service Management Plan

The Waste Asset and Service Management Plan is aligned with Council's Strategic Asset Management Plan to demonstrate responsive management of solid waste assets and compliance with regulatory requirements.

While Council waste services are often linked to protecting our natural environment, the Waste Reduction and Recycling Plan will create benefits across all seven of Council's goals through a circular economy approach to reducing waste and managing resources.



Corporate Plan - Goal 4

#### NATURAL ENVIRONMENT

Our environment enhances our identity, lifestyle, wellbeing, economy and cultural values. Opportunities to be immersed in our naturally wonderful environment are harnessed, and drive our commitment to protect and enhance our natural assets.



Actively encourage reduction, reuse and recycling of waste to support sustainable waste management principles.

#### 2021 – 2026 Initiatives

**Initiative 6.** Support the transition to a circular economy for waste and participate in regional collaboration and other partnership opportunities to improve resource efficiency.

**Initiative 9.** Work with the community to provide education opportunities to support, enhance and encourage environmental understanding and grow environmental connections.

## WHAT'S THE ISSUE WITH WASTE?

If not managed well, waste created in our everyday lives can have significant impacts on the environment, affecting the air we breathe, the water we drink and the natural places we love to enjoy. Good management of waste is our business, and it requires significant resources to collect, transport, process, treat and dispose of these materials in an environmentally responsible manner.

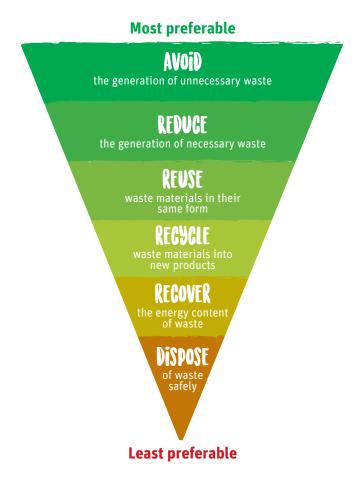
Waste in landfills represents a lost resource. It's a waste of the raw materials, energy and water that went into creating the once useful items that are now 'waste'.

Beyond this, organic materials (like food waste and green waste) present an additional issue in landfill as they release methane as they break down – a potent greenhouse gas. A large proportion of household waste placed in kerbside red bins is organic material and presents a large opportunity to reduce the impacts of landfill waste and create nutrient rich soil products.

### Waste and Resource Management Hierarchy

Waste avoidance and reduction are the most preferable management options as per the waste and resource management hierarchy below.

Council provides an extensive recycling service that is underutilised by residents. Therefore, the Plan focuses on improving recycling so that only true residual waste that cannot be recycled is sent to landfill.





### WHAT WE DO

Redlands Coast is located approximately 26 kilometres from the Brisbane CBD and covers 537 square kilometres, stretching across mainland and island communities. In 2018, the estimated population of Redlands Coast was 156,863, consisting of 61,204 households. The region's population is expected to grow by 23% to over 192,000 by 2041.

COUNCIL OFFERS A FEXIBLE 'BIN MENU'. RESIDENTS CAN SAVE MONEY AND REDUCE THEIR WASTE TO LANDFILL BY GETTING A GREEN WASTE BIN WITH OUR 'SUSTAINABLE BIN SET'.

#### **Kerbside Services**

All Redlands Coast residents have access to kerbside wheelie bin collection services. This includes a weekly waste and fortnightly recycling service. Mainland residents can also receive an optional fortnightly green waste collection service for garden organics.

The kerbside bin system includes 140-litre wheelie bins for waste and recycling, 240-litre wheelie bins for waste, recycling and garden organics (green waste) and 340-litre wheelie bins for recycling. Council also rewards residents who actively reduce their general waste to landfill by providing the 140-litre waste bin at a lower annual cost than the standard 240-litre bin.

To support households to recycle well and maintain a cost effective recycling service, Council offers a larger 340-litre recycling bin and additional recycling bins. Providing larger bins enables households and businesses to recycle more of their recyclable material without increasing recycling collection costs.

The green waste bin for mainland residents provides for removal of tree prunings, grass clippings, leaves and other garden organic material. Residents and businesses can opt to have multiple green waste bins at their properties.

A bulky item collection service is available, by appointment, to an eligible section of the community across the city who are unable to visit a Recycling and Waste Centre.







Examples of different size bins available to Redlands Coast mainland residents.

#### **Recycling and Waste Centres**

The Recycling and Waste Centres (RaWCs) on the mainland and at North Stradbroke, Russell and Macleay Islands operate seven days a week, 363 days a year. Opening hours for the smaller island RaWCs are set according to community needs.

The RecycleWorld resale shop operates out of the Redland Bay RaWC and is open at reduced hours each week.

All RaWCs receive residential waste and limited volumes of commercial waste are accepted at just two mainland and four island sites.

Council does not operate any landfills. Landfill waste collected by Council through the kerbside bin service is transported to a South east Queensland disposal facility.

REDLANDS COAST RESIDENTS HAVE ACCESS TO EIGHT RECYCLING AND WASTE CENTRES LOCATED AT BIRKDALE AND REDLAND BAY AND ON EACH OF THE SIX ISLANDS.

#### Items accepted\* Current at March 2022



\*Not all items are accepted at all sites. Check the Council website for what you can drop off at each RaWC.

#### **Indigiscapes Recycling Station**

IndigiScapes offers a unique way to recycle items that can't be recycled through the kerbside yellow bin, at Council's RaWCs or through other community drop-off points.





### KEY STATISTICS

In the 2020/21 financial year, Council handled 114,048 tonnes of household waste and recyclables.



706 KG

of domestic waste and recyclables was generated per capita



was diverted from landfill (recyclables & green waste) million kg of recyclables

31.4 million kg of green waste





54%

**COLLECTED** through kerbside bins

A Coy

**DROPPED OFF** at Recycling and Waste Centres

48.3%

was sent to landfill



million kg of waste to landfill



43,606 Tonnes

of kerbside waste sent to landfill



9704 Tonnes

of kerbside mixed recyclables recycled though yellow bins



31,355 Tonnes

of green waste recycled through green bins and RaWCs



11,485 Tonnes

of waste sent to landfill through RaWCs

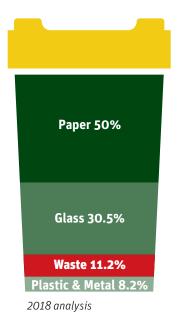


17,898 Tonnes

tonnes of bespoke recyclables recycled through RaWCs

### WHAT'S GOING IN THE BINS?

Bin composition audits are undertaken to understand what residents have been placing in their kerbside bins.



#### **Kerbside Recycling**

More than one tenth of what's in our kerbside recycling bins doesn't belong there. These items lead to recycling contamination which impacts the quality and value of recycled materials that can be produced.

Councils across South east Queensland are working hard to deliver clear and consistent education to reduce recycling confusion and costs to residents.



#### Kerbside Waste

Redlands Coast residents are keen recyclers yet there is still around 63 per cent of material in our red-lid bins that could be kept out of landfill.

A key priority for Redlands Coast and Councils across South east Queensland is reducing the amount of organics and recyclables placed in the red bin.

THE PLAN FOCUSSES ON ACTIONS TO IMPROVE THE WAY
RECYCLABLES AND ORGANICS ARE MANAGED BY RESIDENTS TO
ENSURE THAT ONLY 'TRUE RESIDUALS' END UP IN THE RED BIN.

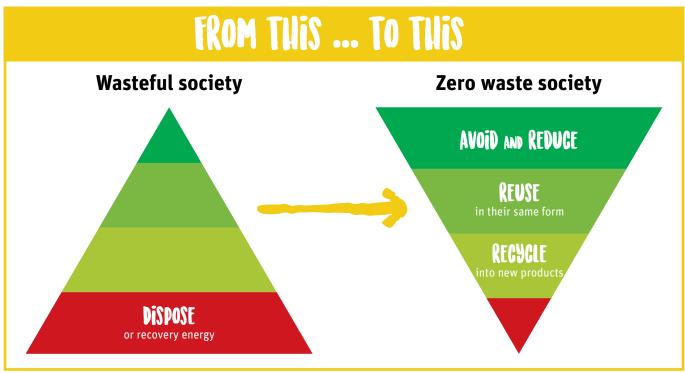
## WHERE TO FROM HERE?

Achieving a zero waste society is in its infancy and will continue to evolve over the decades ahead. Agility within our approach will be important and this 10 year Plan lays the strategic foundation for a zero waste future.

### **OUR VISION**

Redlands Coast will become a zero waste community by 2050 where resources are valued and waste is avoided.





### **OUR TARGETS**

#### **Reduced Generation**

Waste avoidance is the highest priority on the waste hierarchy. Our waste reduction target seeks to reduce the amount of waste that each Redlands Coast resident generates. It will be calculated as total kilograms per capita in line with State Government reporting methods.

Annual waste generation (per person)	Baseline (2017/18)	2025	2030
State targets	540kg	10% reduction	15% reduction
Redlands Coast targets	682kg	614kg	580kg

Table 1: Waste reduction targets for households

Redlands Coast residents have been generating more waste per capita than the state average. This is largely due to our climate and the nature and size of residential properties, resulting in high volumes of household green waste.

Waste and recycling generation is an indicator of economic activity and consumer spending and there are other influences external to Council and the community. However, there is still improvement that can be made.

#### **Increased Recycling Rates**

The annual recycling rate is calculated as the amount of material recycled as a percentage of all material collected and received. Council's household recycling rate target includes materials collected through kerbside bins and received at RaWCs.

Annual recycling rate	2030
State target	60%
Redlands Coast target	60%

Table 2: Household recycling rate target

Our household recycling rate through RaWCs is high. 76% of material received at RaWCs is recycled. Our household kerbside recycling rate is low. Only 27% of the material put kerbside bins is correctly placed in the yellow and green recycling bins.

Residents can increase kerbside recycling performance from 27% (and reduce waste to landfill) simply by placing recyclables in the yellow bin and all green waste correctly in a green bin.

#### Council's role

Council provides an efficient and environmentally sustainable waste and recycling service that protects and supports our naturally wonderful lifestyle.

It is our responsibility to manage the waste generated by our households in an environmentally responsible way. We do this through our kerbside bin services, Recycling and Waste Centres and RecycleWorld.

We seek to minimise waste generation and loss of resources in alignment with the waste hierarchy.

It is essential that we ensure that our waste and recycling services are cost effective to protect ratepayers from unnecessary costs while we move towards a zero-waste future.

#### Why 2030?

The Queensland waste and resource recovery policy space is rapidly evolving with new strategic drivers coming into effect regularly. The Plan has been developed taking into thorough consideration all known relevant drivers, policy and strategic direction. Targets have been set to 2030 to align with regional, State and Federal priorities. Actions will be detailed in an annual implementation plan.

With a number of key industry announcements on the horizon (that will affect local governments directly) and ever growing expectations from our community, the Plan is designed to be flexible to allow Council to refine the delivery approach as more information becomes available.

Council may review the Plan where updates are needed to address external changes and change management will be needed.

This approach enables Council to adapt to the dynamic landscape of waste and resource recovery in South east Queensland and deliver effective waste services to Redlands Coast.

### TRACKING PROGRESS

Suc	cess measure	Redlands Coast baseline	2030 target	Services measured	Measurement method
1	Waste generation (average annual kg per person)	<b>682 kg</b> 2017/18 <sup>(1)</sup>	580 kg	RaWCs	Operational reporting
2	Kerbside recycling rate (annual average percentage recycled of total material collected)	<b>27%</b> 2020/21	50%	2 2 2	Operational reporting
3	RaWC recycling rate (annual average percentage recycled of total material received)	<b>76%</b> 2020/21	maintain	RaWCs	Operational reporting
4	Recyclables lost (% of recyclables in the red bin)	<b>16%</b> 2017 <sup>(2)</sup>	reduce	2	Bin audit (3)
5	Recycling contamination (% of non-recyclables in the yellow bin)	<b>12%</b> 2020/21	halve	2	Operational reporting
6	Green waste lost (% of green waste in the red bin)	<b>30%</b> 2017 <sup>(2)</sup>	reduce	2	Bin audit (3)
7	Food waste lost (% of food waste in the red bin)	<b>18%</b> 2017 <sup>(2)</sup>	reduce	<u> </u>	Bin audit (3)
8	Implementation of a food waste collection service (4)	20,000 green bins Nov 2021	Citywide FOGO (4)	2	Operational reporting

Table 3: Success measures

#### Notes:

- (1) Aligns with State target baseline year. (3) Subject to budget funding.
- (2) Most recent bin audits.
- (4) Subject to cost and approval.

Success measures will be reviewed in three years.



### THEMES FOR ACTION

#### Theme 1

#### **Lift the Right Lid**

#### **Objective**

To ensure that residents use their yellow, green and red kerbside bins correctly. This means only recyclables are placed in the yellow bin, only green waste is placed in the green bin and only residual materials that couldn't be recycled (or reused) are placed in the red bin.

#### Success measures

- Kerbside recycling rate [SM2]
- Recyclables lost to red bin [SM4]
- Recycling contamination of yellow bin [SM5]
- Green waste lost [SM6].

#### Theme 2

#### **Transforming Organics**

#### Objective

To reduce the loss of organic materials to landfill. Priorities include increasing recovery of food and green waste and reducing the generation of food waste.

#### Success measures

- Green waste lost to red bin [SM6]
- Food waste lost to red bin [SM7]
- Implementation of food waste collection service at some point [SM8].

Lift the Right Lid (Theme 1) and Transforming Organics (Theme 2) will be the key focus areas for Council over the coming years. Reducing organics to landfill is identified as a priority at Federal, State and regional levels and implementing a Council food waste collection services is a key recommendation of the CoMSEQ Waste Plan. It is important that residents use the recycling services available to them more effectively. Themes 1 & 2 are a priority of Council and the following pages provide a deeper dive into each of these. Themes 3 & 4 are relevant for long term planning.

#### Theme 3

#### **Creating a Zero Waste Society**

#### **Objective**

To reduce per capita waste generation. Council will continue to encourage waste avoidance, reduction and reuse and support the development of markets for recycled materials and products. All stakeholders including households, community groups, business partners and government agencies have a role to play.

#### Success measures

• Reduced waste generation [SM1].

#### Theme 4

#### **Providing Effective Services**

#### **Objective**

To ensure that the waste and recycling services provided by Council continue to be cost effective, fit-for-purpose and provide a great user experience. Council will develop our services and infrastructure appropriately by planning for the future, engaging in collaborations and responding to the rapidly evolving waste and recycling industry and community needs.

#### Success measures

- Kerbside recycling rate [SM2]
- Recycling and Waste Centres recycling rate [SM3].

SM = Success measure

#### Theme 1

### LIFT THE RIGHT LID

### What's the problem with lifting the red <a href="lid for recyclables">lid for recyclables</a> and organic waste?

Redlands Coast residents are keen recyclers, yet over half of what is in the red bin could be kept out of landfill.

With this much recyclable material going to landfill each year, we are unnecessarily putting pressure on landfill capacity, generating methane (a powerful greenhouse gas), increasing Council's disposal costs and losing valuable resources that could have been given another life.

These materials could be recycled through Council's yellow and green bin, at RaWCs or composted at home. Food and garden organic materials can be converted into rich, organic soil material while recyclables can be transformed into new raw materials and products.



#### What's the problem with lifting the yellow lid for non-recyclables?

More than one tenth of what's in our recycling yellow bin does not belong there. These items are referred to as recycling 'contamination'. Common examples are soft plastic wrapping, plastic bags, nappies, ceramic cups, food scraps and garden organics.

Materials in the yellow bins are transported to a local Materials Recovery Facility where they are sorted both manually and by machines into different material types. The materials are cleaned, processed and made into new products by industry and manufacturers both locally and overseas.

If there is too much contamination, the mechanical sorting processes may not be able to separate the recyclable materials from the waste materials, resulting in valuable recycling materials going to waste.

Lifting the yellow lid for mixed recyclables correctly can improve the quality of the recycled materials and increase value of the new products.



#### How can you help reduce our rubbish problems with a green bin?

Almost one third of the material placed in the red bin is green waste from our gardens and backyards. This is a lot of valuable material being lost to landfill. Organic material in landfill presents a set of unique issues that are discussed on pages 28 and 29 of the Plan.

Council's green bin service enables residents on the mainland to keep their garden waste out of the red bin. By downsizing their red bin at the same time as getting a green bin, residents can reduce their annual waste fees by nearly \$10 per year based on the 2021/22 fees for mainland residents. Council's register of fees is reviewed annually.

Green waste collected in the green bins is transported to a South east Queensland organics composting facility where it is put through a shredder and turned into a fine mulch. In some cases, the green waste goes through a three month pasteurisation process where the material is kept at 55 degrees to naturally break down and kill weeds, seeds and other nasties. The mulch, compost and other nutrient-rich products produced are then available to buy at landscaping suppliers, for use in homes, developments and parks and gardens across the community.





### LIFT THE RIGHT LID CONSIDERATIONS

#### **Action for Households**

A shift in community behaviours is required to meet our waste challenge. Council can provide effective recycling services, however, without Redlands Coast residents taking the actions needed, our waste problem will continue to grow.

#### Households have important roles to play, including:

- avoid, reduce and reuse wherever possible
- lift the yellow lid for recyclables
- lift the green lid for green waste (get a green bin where required)
- compost food waste (at home or locally)
- place only residuals in the red bin.

#### TÚT Professi

#### Lost Recyclables

Lots of valuable material is being lost to landfill in our red bins. Council needs Redlands Coast residents to stop placing their recyclables, green waste and food waste in the red bin. Only what can't be recycled ('residuals') should be placed in the red bin. Reducing their red bin contents is the most important action that Redlands Coast residents can take to reduce the impact of their waste.



#### **Yellow Bin Contamination**

Non-recyclables placed in the recycling bin impact Council's ability to recycle recyclables.

Redlands Coast recycling contamination has been increasing over the past five years from 7% to 12%. This increase could be due to several factors:

- residents placing more non-recyclable items in the yellow bin,
- lighter recyclable packaging design, and
- recyclable 10¢ eligible containers returned through Containers for Change.

The solution remains the same: behaviour change to get residents consistently lifting the right lid.



#### **Green Bin Contamination**

There is evidence that some residents have been placing waste other than green waste in their voluntary green bin. Similar to the yellow bin, this contaminating material impacts Council's ability to recycle these organic materials to produce quality mulch and compost products.

#### Supporting Residents to Lift The Right Lid

Since the introduction of the yellow and green bins, Council has been providing education to the community on how to recycle well. In the consultation feedback, Redlands Coast residents asked for more guidance on what can be placed in each bin and what happens to their recyclables.

#### **Recycling Is Confusing**

How materials are recycled and which bin they go in has changed over time and will continue to evolve as recycling systems become more advanced. Additionally, recycling systems vary from place to place. As a result, knowing what and how to recycle can be confusing. Harmonising bin systems and messaging for recycling and waste across Queensland will reduce confusion and support Redlands Coast residents to lift the right lid.

Consistent messaging is an industry priority across Australia. The Australian Packaging Covenant Organisation, Queensland State Government, Queensland Container Exchange and SEQ Council of Mayors have each indicated an intent to develop clear messaging and resources for Councils and consumers.

#### **Community Partnerships**

Council isn't the only organisation interested in seeing waste kept out of landfill. By partnering with local organisations Council can better inspire the shifts needed in Redlands Coast households. For example, Council currently works with Tangalooma Eco Marines to deliver environment and waste education in schools.

#### RecycleMate

The new RecycleMate® app is a powerful National recycling education tool delivered by Adaptation Environmental Support. It is an initiative of the Australian Council of Recycling with funding support from the Australian Government's Environment Restoration Fund program. Council has encouraged residents to utilise RecycleMate for detailed relevant recycling guidance. The app utilises machine learning so the accuracy and information quality will improve with use over time.

#### Australasian Recycling Label (ARL)

The ARL is a helpful tool that supports consumers identify which bin to place their packaging item in. This can be used by Redlands Coast residents to answer their 'which bin?' questions.

#### **Compostable Items**

Compostable materials – like PLA plastic cups, wooden cutlery, paper straws, compostable plastic bags, coffee cups and bamboo or palm leaf plates – cannot be placed in the yellow bin (unless it's clean and dry paper or cardboard). The increasing use of compostable packaging and confusion about recyclability means that Council may need to address this as a specific issue in future.

#### **Direct Feedback**

Redland City Council and other local government authorities have trialled targeted bin tagging where a tag is placed on any bin presented with contamination.

The tag provides useful feedback directly to the household on the specific incorrect items. This approach has been found to be very effective at reducing yellow bin contamination while also reducing recyclables lost to landfill in the red bin. Whilst this is currently underway on an adhoc basis, a dedicated program is resource intensive but can significantly improve behaviours across the board and deliver clear, useful education direct to householders.

Contamination at the household bin level can be identified by standard collection truck cameras or through visual inspection by an auditor. For a bin with obvious contamination, the collection truck driver can leave the bin, leaving a bin tag advising the reason it was not collected and flagging it in (digitally) as contaminated. The household can contact Council once the issue has been corrected or to seek clarity and request for the bin to be collected.

#### **Good Bin Use Policy**

Residents are expected to use their bins correctly however some residents have been continuously and consistently using their green and yellow bins for general (landfill) waste. A Good Bin Use Policy would enable Council to manage contamination better and assist recycling efforts.

#### **Waste Composition Auditing**

Waste composition auditing (commonly known as bin auditing) is the process where a sample of waste is analysed. This assessment tells Council what proportion of materials in the bin doesn't belong there. Bin auditing is an intensive process and each colour bin requires its own audit.

#### **Community Recycling Services**

There are many free recycling services run by other organisations. Examples include RedCycle's soft-plastics recycling, Containers for Change, Karragara community composting, Ocean Crusader's Caps Crusade, B-Cycle for battery recycling and many more. Residents can use these to reduce their waste to landfill.

#### **Support The Recycling Industry**

Ensuring that there are uses for recycled materials is an important part of the recycling system. Council will support the recycling industry by aiming to use recycled materials.



### LIFT THE RIGHT LID INITIATIVES

Possible tools that can be used to support Redland Coast residents to lift the right lid.









#### **Keeping Organics Out of Landfill Matters**

Organic material in landfill presents a significant issue and lost opportunity. In landfill, organic material breaks down and generates methane and carbon dioxide, both major greenhouse gases. The release of greenhouse gases from landfill is a significant contributing factor in climate change.

By mulching and composting green and food waste, these materials can contribute to regenerative agricultural practices by not only maintaining the circulation of resources but also improving on them.

Applying nutrient-rich recycled organic material increases soil health, builds soil carbon, increases water retention and supports soil biology and ecosystem diversity. Soil health is intrinsically linked to the health of our food system which supports our wellbeing and lifestyle.

#### **Community Consultation**

Feedback from the draft *Waste Reduction and Recycling Plan* consultation indicated that Redlands Coast residents want to see food and green waste kept out of landfill. The responses demonstrated a desire for a Council kerbside food waste collection service and strong growth in the green bin service. Key barriers to people taking up a green bin were reported as cost and also non availability on the islands of this service. There was also strong support for composting at home and in the community. Suggestions included a compost rebate scheme, a food waste collection service, expansion of the green bin service to islands and resources like a meal planner available to help residents avoid creating food waste.



**Almost half** of what Redlands Coast residents have been putting in their **red bin** is **organic material**.

This equates to approximately, **13,000** tonnes of green waste and **7800** tonnes of food waste lost to landfill in 2020/21.



"I WOULD BE MORE LIKELY TO RECYCLE IF THERE WERE MORE COMPOSTABLE AVENUES (WHETHER THIS IS THROUGH KERBSIDE BINS OR REWARDING HOUSEHOLDS WHO IMPLEMENT THEM IN THEIR OWN HOMES)."

Capalaba resident

### FOGUS ON FOOD WASTE

Food waste is a unique challenge with approximately 1 in every 5 bags of groceries ending up in the bin. The National Food Waste Strategy sets a target to halve food waste by 2030. This requires actions from households to prioritise food waste avoidance and reduction and compost what can't be eaten. A kerbside food waste collection service will make composting even easier for residents.

Key Council levers for reducing food waste to landfill include:

- promoting a Love Food Hate Waste approach to empower residents to practice food waste avoidance behaviours
- · supporting home composting
- encouraging community composting initiatives where possible
- implementing a food waste collection service when affordable.

#### **Food Waste Collection**

A food waste collection service (often described as a FOGO service) would allow residents to place their food waste in their green bin. A number of Queensland Councils are undertaking State Government funded FOGO trials to support the wider introduction of food waste collection services by Councils across Queensland. Case studies on learnings are expected to be published in early 2023.

The costs to implement and run a food waste collection service are significant. These will become better understood as the FOGO trials progress and markets for processing these materials develop in the region. As the cost to landfill household waste increases, collecting food waste in the green bin is likely to become increasingly cost effective. Council will need to undertake more assessment of these variables and determine when FOGO will become affordable.

#### **Home Composting**

Composting at home is a great way to manage food waste and grass clippings. Consultation feedback demonstrated that residents would like support to compost at home.

Changing the amount of food waste generated by households must be addressed in line with the waste hierarchy. The State Government has committed to providing Love Food Hate Waste materials to Queensland Councils. Education materials are expected to be available on their website by 30 March 2022.

#### Strategic Drivers for a Food Waste Collection Service

Three key documents were published in late 2021 and early 2022 which set the direction for Council to take action to reduce household organics lost to landfill.

The Queensland Organics Strategy 2022-2030 identified households as the second largest generator of food waste in Queensland with 602,000 tonnes of food waste generated in 2019. The corresponding Organics Action Plan will be used to inform and guide Council's Organics Transformation Plan (Action 2.1 on page 37) which will be developed in year one.

The SEQ Waste Plan identified getting household food waste out of the red bin as the "single biggest opportunity" to reduce waste to landfill. The SEQ Waste Plan emphasises the importance of getting households to separate their organic waste. It defines a FOGO 2O3O target state where Councils provide a weekly FOGO collection service which includes all plant and food waste.









### FOOD WASTE COLLECTION CONSIDERATIONS

#### **Planning**

Establishing a food waste collection service will require good planning and considerable resources. Council is committed to establishing appropriate food waste management systems and protecting Redlands Coast residents from unnecessary costs. Council will assess the business case for FOGO (and GO+) options to ensure the approach makes financial sense.

Council will review the Queensland FOGO case studies as they become available and will identify funding streams and align with any State Government funding opportunities. Council may look to undertake a Redlands Coast trial if there are benefits to be gained or performance outcomes to be better understood.

#### **Community Engagement**

Community support for a food waste collection service is important. Redlands Coast residents need to use their green bin correctly for the service to deliver its full potential benefits. Bringing the community along on the decision making journey and providing a consultation opportunity for residents to have their say about Council's proposed approach will be helpful to the overall success of the service implementation.

#### **Low Hanging Fruit**

Council will start with low cost, easily implementable actions while planning for bigger shifts in the future to reduce organics in the red bin. Initial focus areas include:

- growing green bin take up (which provides a solid foundation for a future food waste collection service)
- · encouraging more composting at home
- shifting household food waste behaviours (e.g. a Love Food Hate Waste campaign).

#### **Current Green Bin Service**

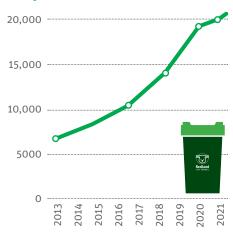
Garden organics are the largest proportion of material in the red bin so getting residents to use the existing green bin service can go a long way to keeping organics out of the red bin.

Residents can still also drop off their clean segregated green waste at our RaWCs, however we understand that a kerbside green bin is more convenient for many residents. A household green bin targets the green waste being placed in the red bin.

Council's voluntary green bin service uptake has consistently grown. Having more properties with a green bin will support the introduction of a future food waste collection service.



#### **Properties with a Green Bin**



#### Options for Food Waste in the Green Bin

A full FOGO service would accept all food waste (including meat and dairy) in the green bin. This would need to be collected by Council every week and the materials would require more thorough processing.

An alternative food waste collection service is known as GO+. A 'GO+' service would allow residents to place their non-protein food waste in the green bin (this means no dairy, cheese or meat).

GO+ material requires less intensive processing (compared to FOGO) and no changes to bin collection frequency.



#### **Processing**

Council will need to ensure that any change in what goes in the green bin is supported by appropriate processing capacity and technology within our region at a reasonable cost. More intensive processing of organic materials may not be possible with our existing systems. A material change is likely to incur additional costs. Council will assess options to determine the best way forward.

#### Education

There is confusion in the community about compostable items such as wooden cutlery, compostable plastics and a suite of other bio-based products. These items will be increasingly generated in our region so ensuring that residents know what can go in their green bin will be imperative and should form a key part of a food waste collection service launch.

#### **Bin Collection**

A FOGO service will require weekly green bin collection and fortnightly red bin collection. Alternatively a GO+ service can have no impact on bin collection frequency.

Council kerbside bin collection services are long-term contractual arrangements which, in the case of the Redland Coast, runs until 2030. New trucks will be required for a FOGO service.

Council will need to work with the existing contractor around the date of a potential food waste collection service implementation considering the existing contract inclusions and remaining life of the contract.



#### **Multi Unit Dwellings**

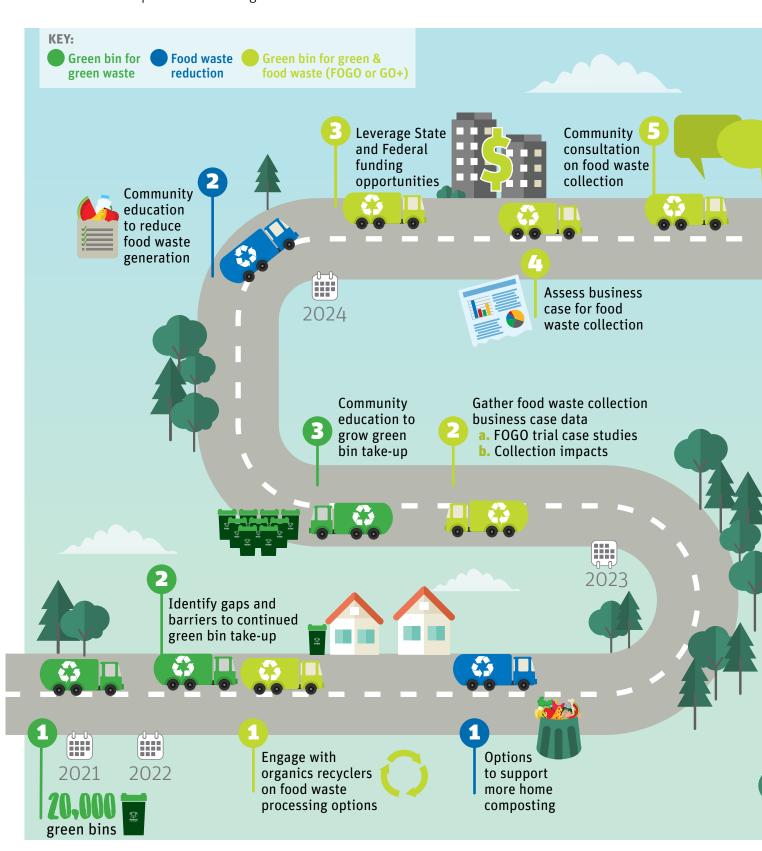
Multi Unit Dwellings (MUDs) operate differently to other properties. At MUDs waste from a number of households is collected in larger bins usually on a different schedule to other properties. The logistical and behavioural challenges of delivering a successful food waste collection service to MUDs are unique and will require specific consideration and potentially a tailored approach.

#### **Kitchen Caddies**

Whether to provide caddies and/or compostable liners for collecting food waste in the kitchen will be an important consideration. Community feedback will be helpful to clarify whether this is a worthwhile investment to support great green bin use by residents.

### TRANSFORMING ORGANICS ROADMAP

Indicative roadmap to transform organic waste in the Redlands Coast.\*



FOGO 2030 target state in South east Queensland:

# 'FOGO COLLECTION WEEKLY, WASTE WEEKLY OR FORTNIGHTLY, AND INCLUSION OF ALL PLANT AND FOOD WASTE'

- CoMSEQ Wate Plan





\*Subject to finalisation of the Organics Transformation Plan (Action 2.1).





### IMPLEMENTION PLAN

The implementation plan sets out key actions under Council's four themes:

**Lift the Right Lid** 

**Transforming Organics** 

**Creating a Zero Waste Society** 

**Providing Effective Services** 

A range of actions are detailed for Council and the community to work on together to meet our targets.

Implementation will be delivered through a consistent program of planning, reviewing, decision-making and delivery and will drive the desired outcomes.

Actions will be defined annually for the coming years. This will provide agility and in acknowledgement that this plan will be reviewed and updated.



Council's Role	Description
Deliver	Plan, deliver and fund services and projects
Facilitate	Assist others to undertake activities by bringing interested parties together
Partner	Work with other stakeholders to achieve shared goals
Enable	Let the community lead by example, with Council listening and learning
Educate	Share learning to support broader understanding and action
Advocate	Promote the interest of the community to influence decision makers
Regulate	Regulate activities through laws and regulation



### LIFT THE RIGHT LID ACTIONS

#### Year 1

#### 1.1 Education Communication Plan

Develop a three-year Waste Education Communication Plan that focusses on a shared responsibility between Council and the community to avoid and reduce waste and increase recycling rates.

Council's Role: Deliver.

#### 1.2 Education Program

Educate and engage all sectors of the community on: a) the importance of using the right bin and issues arising when not using the right bin; b) removing recyclables from general waste bins; c) why contamination in recycling bins is an important issue; and d) the importance of getting a green waste bin. This will be achieved through engagement programs and campaigns, events and media channels, including mobile application.

Council's Role: Educate.

#### 1.3 Community Updates

Provide regular information to the community on progress against recycling targets by using kerbside bin audit and other data captured in Council's waste and recycling operations. Council will trial and review the format of community updates.

Council's Role: Educate.

#### 1.4 Household Bin Feedback

Continue active monitoring and enforcement of correct bin use to reduce contamination and maintain high-quality recycling by using collection vehicle technology and direct communications with householders.

Council's Role: Educate/Facilitate.

#### **Future**

#### Good Bin Use Action Plan

Investigate options to address bin contamination challenges. This could include approaches to inform, give feedback and persuade the community as well as enforce good bin use. A Good Bin Use Action Plan would prioritise actions to improve use of kerbside bin service across the community.

#### **Good Bin Use Policy**

Review opportunities to utilise the Waste Management Local Law to support correct kerbside bin use and disposal at RaWCs.

#### **Detailed Bin Feedback**

Assess approaches for providing personalised feedback to residents on how to recycle and use their bins well so that they can lift the right lid every time.

#### **Bin Audit**

A bin audit (waste composition survey) will be helpful to guide future decision making and investment.

#### **Behavioural Insights**

Market research of household bin behaviours will assist Council to gauge the effectiveness of waste education and behaviour change programs.

#### Collaboration

Support regional, State and Federal initiatives.



### TRANSFORMING ORGANICS ACTIONS

#### Year 1

#### 2.1 Organics Transformation Plan

Develop a staged Organics Transformation Plan for Redlands Coast that aligns with the Queensland Governments Organic Action Plan.

Council's Role: Deliver.

#### 2.2 Green Bin Uptake

Continue to grow the voluntary green waste bin take up across the mainland.

Council's Role: Deliver/Educate.

#### **Future**

#### **Compost Bin Rebate**

Evaluate the value of a rebate scheme to support households to purchase a compost bin, worm farm or bokashi system.

#### **Food Waste Behaviour Change**

Monitor opportunities to connect Redlands Coast residents with local food waste reduction education, tools and initiatives.

#### **Food Waste Collection Plan**

Assess the business case for the introduction of a city wide kerbside food waste collection service. Review:

- · Redlands Coast bin audit results
- · QLD FOGO trial case studies
- · Collection service options
- · Processing options
- Food waste collection community consultation findings.



## CREATING A ZERO WASTE REDLANDS COAST ACTIONS

#### Year 1

#### 3.1 Council Waste Reduction

Council staff are part of, and leaders in, our Redlands Coast community. Council will support our staff to reduce waste and 'lift the right lid' by providing education and encouragement to avoid and reduce waste and recycle well. The increased recycling confidence and knowledge can have a ripple effect to improve recycling behaviours across the Redlands Coast.

Council's Role: Educate.

#### 3.2 Council Sustainable Procurement

Practise improved sustainable procurement at Council by including criteria to support engaging service providers and suppliers who demonstrate increased recycling and resource recovery outcomes and progression towards the circular economy.

Council's Role: Deliver.

#### 3.3 Island Reuse

Improve the diversion of waste at island Recycling and Waste Centres by enabling the separation of resaleable materials for existing island community groups and community support networks.

Council's Role: Deliver.

#### **Future**

#### **Zero Waste Program**

Evaluate the value of providing of waste avoidance and minimisation programs as they become available through partner organisations and budgets.



## PROVIDING EFFECTIVE SERVICES ACTIONS

#### Year 1

#### **4.1 Recycling and Waste Centres**

Ensure recycling infrastructure and service levels at RaWCs are sufficient to maximise the diversion of recyclable materials from the residual waste bins.

Council's Role: Deliver.

#### **4.2 Future Developments**

Review planning scheme conditions for developments to ensure future developments align with evolving waste requirements.

Council's Role: Deliver.

#### **4.3 ASMP Regular Review**

Annual review of Waste Asset and Service Management Plan and capital works program for demand management, future renewal and upgrade of waste assets such as RaWCs.

Council's Role: Deliver.

#### **4.4 SEQ Collaboration**

Collaborate with other South east Queensland local governments to assess opportunities for shared resource recovery infrastructure and programs.

Council's Role: Partner.

#### **Future**

#### **Community Recycling Points**

Monitor opportunities to expand community touch points for recovery of difficult waste types and the emerging product stewardship schemes.

### **BROAD STRATEGIC CONTEXT**

International, Federal and State policies guide better resource recovery management. Some of the key policy drivers are listed below.

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#### **United Nations Sustainable Development Goals**

The United Nations 2030 Sustainable Development Goal 12 focuses on responsible consumption and production patterns.



#### **Recycling and Waste Reduction Act 2020**

Establishes a national framework to manage waste and recycling. It includes export bans on recyclable products and aims to stimulate economic activity and job creation while setting targets for waste reduction and increased recycling.

#### **National Waste Policy 2018**

Adopts five principles that support the vision of a circular economy where we maintain the value of resources for as long as possible. These include:

- · avoid waste
- improve resource recovery
- increase use of recycled material and build demand and markets for recycled products
- better manage material flows to benefit human health, the environment and the economy
- improve information to support innovation, guide investment and enable informed consumer decisions.

#### National Waste Policy Action Plan 2019

Established targets and actions to implement the 2018 National Waste Policy to guide investment and national efforts to 2030 and beyond. Targets and actions focus on:

- · export of waste plastic, paper, glass and tyres
- · waste generation and resource recovery rates from all waste streams
- use of recycled content by governments and industry
- problematic and unnecessary plastics
- · organic waste sent to landfill
- · data for industry and community decision making.

#### National Food Waste Strategy 2017

Provides a framework to support collective action towards halving Australia's food waste by 2030.

#### **2025 National Packaging Targets**

These targets apply to all packaging that is made, used and sold in Australia and APCO is the organisation responsible for facilitating their delivery. Supported by Australian industry and government to deliver a new and sustainable approach to packaging, the 2025 Targets are:

- 100% reusable, recyclable or compostable packaging
- 70% of plastic packaging being recycled or composted
- 50% of average recycled content included in packaging (revised from 30% in 2020)
- The phase out of problematic and unnecessary single-use plastics packaging.

#### **Australasian Recycling Label**

An evidence-based on-pack labelling system developed by APCO and Planet Ark provides easy to understand recycling information to improve recycling rates and reduce yellow bin contamination.



#### National Plastics Plan 2021

A plan to address plastic waste at the source through prevention, take responsibility for our plastics through better recycling and address challenges of plastics in our homes and in our oceans and waterways. The RecycleMate App encourages people to find out what they can and can't recycle more easily.

#### Recycling Modernisation Fund (RMF)

The RMF will generate over \$600 million of recycling investment in new infrastructure to sort, process and remanufacture materials such as mixed plastic, paper, tyres and glass.

#### Waste Reduction and Recycling Act 2011

All local governments are required to adopt a Waste Reduction and Recycling Plan that sets out clear guidelines and targets to meet the objectives under the Waste Reduction and Recycling Act. Information required by includes:

- population growth forecast
- residential and commercial development
- · waste types and quantities handled
- services and facilities in place to manage the various types of waste according to the waste and resource management hierarchy
- an action plan to chart a course towards meeting the State's waste and resource management strategy goals and targets.

#### Waste Management and Resource Recovery Strategy 2019

A strategic plan for a better way of managing waste in Queensland by harnessing the potential value of resources that have traditionally been discarded. Key targets are:

- 25 per cent reduction in household waste by 2050
- 90 per cent of waste is recovered and does not go to landfill by 2050
- 75 per cent recycling rates across all waste types by 2050.

#### Waste Disposal Levy 2019

The State Government introduced a waste levy in July 2019 to disincentivise disposal of waste to landfill. To protect ratepayers from rising disposal costs, the State has been reimbursing local governments for the levy fees incurred on household waste, however, this payment is set to reduce significantly over the coming years.

#### Plastic Pollution Reduction Plan 2019

Identifies and prioritises actions, to help reduce plastic waste and reduce the amount of plastic in and entering the environment with a focus on economic opportunities to create a plastic circular economy through investment in plastic reprocessing, remanufacturing, market development and new products as alternatives to plastic.

#### **Single-Use Plastics Bans**

The State Government banned single-use plastic bags in July 2018 and passed laws in December 2020 to ban other single-use plastic products, including straws, from 1 September 2021. Other single use plastic items are continually being reviewed for inclusion in the ban.

#### **Recycling Modernisation Fund**

A joint initiative of the Queensland and Australian governments providing \$40 million in funding support for industry infrastructure expansions or upgrades to address gaps in the State's waste reprocessing capacity.

#### Organics Strategy 2022-2032

Provides the overarching framework and actions for improved management of organic materials along the organics supply chain and consumption chain.

#### Organics Action Plan 2022-2032

Provides a clear roadmap for how Queensland plans to avoid generating organic waste, reduce the impacts of organic waste on the environment and communities, transition to a circular economy and build economic and market opportunity for the organics recycling industry.

WE DON'T NEED
A HANDFUL OF
PEOPLE DOING
RECYCLING
PERFECTLY.

WE NEED MILLIONS OF PEOPLE DOING IT IMPERFECTLY.











