WASTE AVOIDANCE AND RESOURCE RECOVERY STRATEGY

2019-2023







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Executive Summary

The City of Parramatta has developed this strategy to set the direction for sustainable waste management and to support the transition to a circular economy where resources are kept in use for as long as possible.

As a society, we are generating more waste than ever before. We are purchasing and disposing of products and materials daily, and the types of waste we are producing have increased and diversified. This linear process of consume and dispose is not sustainable, and is having increasingly negative impacts on our environment and our everyday lives.

The City of Parramatta collected 69,790 tonnes of waste through our residential waste service in 2017/18. Around 72% of this waste was recycled, but more than 19,000 tonnes ended up in landfill with no further opportunity for re-use, recycling or recovery for energy.

This Waste Avoidance and Resource Recovery (WARR) Strategy has been developed with consideration of the goals and directives of the NSW WARR Strategy, the Western Sydney Regional WARR Strategy, the City of Parramatta Environmental Sustainability Strategy, and the greater Sydney Commission Central City District Plan, whilst also addressing more recent challenges faced locally and globally.

The City of Parramatta is at a pivotal point. The past 12 months have seen significant changes in waste and resource management, with changes to recycling markets and legislation. Looking forward, we are also facing unprecedented growth and development across our City.

This growth will present a range of challenges in terms of how we reduce, collect, transport and treat waste. Importantly though, we are at a unique point in time where we have the opportunity to ensure that systems for the collection, treatment and processing of waste are integrated into these new developments and broader scale planning.

This Strategy outlines our key directions and priorities, whilst also allowing flexibility to respond to change. It follows the principles of the waste hierarchy with the goal of firstly avoiding and reducing waste, whilst moving towards a more circular economy which values resources by keeping products and materials in use for as long as possible.



1. Introduction

1.1 ABOUT THIS STRATEGY

Waste is an essential service that impacts communities in their day to day activities at home, work, and leisure. Managing waste and resources from residences, parks, public spaces, and our own operations is one of Councils core services. Waste is also a valuable resource, which can be reprocessed and reused, reducing the need for new resources.

Like many areas across NSW, the City of Parramatta has been working towards the NSW Government targets to reduce waste generation and divert waste from landfill through reuse and recycling. In our 2017 Environmental Sustainability Strategy, Council set a number of waste related targets;

- Reduce resource consumption from 8.2kg to 6.1kg per person by 2038
- Increase diversion from landfill to 85% by 2038
- Reduce the volume of litter by 40% by 2020
- Divert 90% of our corporate waste from landfill by 2038
- Sustainability criteria are considered in all Council procurement activities

Council has achieved significant success in the diversion of waste from landfill, offering a number of recycling services to our residents, and engaging with innovative waste technologies to extract resources from our waste streams for reuse and recycling. Despite this, recent drops in the recycling commodity markets and changes to legislation around the use of compost derived from waste have presented new challenges for Council in meeting our targets.

These recent changes, along with the growth of our local government area will require increased efforts to reduce waste in the first instance, improve recycling practices, and find new and innovative ways to treat and process residual waste.

Based on detailed research, this strategy will outline our approach to;

- Avoid and reduce waste
- · Improve reuse and recycling
- Manage problem waste better
- Reduce litter
- · Reduce illegal dumping

While as a Council we have limited control over avoidance and reduction of waste in terms of what residents buy, use and throw away; we will try and influence these actions through education, awareness and behaviour change programs.



1.3 WHAT THIS STRATEGY MEANS

What this Strategy means for Council

As a key player in the delivery of waste and resource management services in the local area, and a business with significant operations, Council has a unique opportunity to demonstrate leadership in the management of our own waste and the delivery of quality waste services.

To work towards achieving our targets and objectives we will:

- Continue to engage with our community to help them avoid, reduce, reuse and recycle
- Seek out waste and recycling solutions that assist us in meeting our targets
- Improve the way we manage wastes from our own operations
- Improve our procurement activities to assist in the achievement of our waste targets
- Work with industry partners to find solutions for common issues
- Introduce smart city initiatives to improve data collection, analysis and decision making to meet waste targets

What this Strategy means for our Community

Our community has shown that they are highly concerned about waste and litter issues¹, and place a high level of importance on waste and recycling services, and a clean and sustainable environment that they can use and enjoy but also protect for future generations.

In implementing this strategy we will work to encourage and assist our residents to:

- Reduce waste where they can, particularly food wastes, single use plastics, and packaging
- Re-use or re-home items rather than disposing of them
- 'Recycle right' by understanding what can and can't go in the yellow lidded bin
- Make use of the different recycling services available
- Not leave waste on the street without booking in a bulky waste collection
- Keep our city clean

^{1 95%} of respondents in Council's 2018 Environmental Behaviours and Attitudes survey were concerned or very concerned about reducing waste to landfill and litter

2. About our City

City of Parramatta is transforming. Population growth, new housing, jobs and infrastructure are changing the area from a suburban centre into Sydney's Central City and the centre of services, infrastructure and employment for Western Sydney.

As one of Greater Sydney's fastest growing local government areas, the pace and scope of change being experienced in Parramatta is unprecedented. Close to \$15 billion is being invested into infrastructure projects such as the light rail, hospitals, schools, universities, the museum of arts and applied sciences, a new aquatic leisure centre, roads and public spaces.

In twenty years, an additional 152,000 people will live in our City, increasing the population from 243,276 to over 390,000 by 2036. This growth will change the local area and will present new challenges in how we plan for and

manage our resource use and waste.

Increases in high-density housing and high-profile commercial areas will mean more people, and more waste, within the same land area. This will increase the demand on our public spaces and influence the way we maintain our shared spaces and deliver waste services.

2.1 OUR CITY IN NUMBERS

Population	 In 2017 the population of Parramatta was 243,276 The forecast population for 2036 is 390,000 (4,650 people per km2) Median age = 34 years (NSW = 38 years) 9 in 10 residents are proud to be part of the Parramatta area 38% of our population are couples with young families
Dwellings	 85,600 dwellings in 2016 157,000 dwellings forecast for 2036 55% of residents live in medium or high density dwellings
Diversity	 50% of residents were born overseas 52% speak a language other than English at home 11% Mandarin 7% Cantonese 5% Korean 0.7% of residents identify as Aboriginal or Torres Strait Islander



2.2 WHAT OUR COMMUNITY HAVE TOLD US

Ongoing discussions with our community have shown that they have a high level of concern about the environment, with issues around reducing waste to landfill and litter consistently ranking as key issues of importance. In Councils 2018 Environmental Attitudes and Behaviour survey;

 96% of respondents were concerned or very concerned about the health of local waterways

- 95% of respondents were concerned or very concerned about litter
- 95% of respondents were concerned or very concerned about reducing waste to landfill
- 86% of respondents were concerned or very concerned about the environmental impacts of products and services

While many of our community members are already taking action to reduce waste and report a high level of satisfaction with the waste services offered by Council, recent community consultations have told us that the following areas are the most important for our community

in terms of how we can help them to manage their wastes;

- Increased education around recycling and the proper use of the yellow bin
- More opportunities for the disposal and recycling of hazardous household items
- Improved communications around the different waste services available
- Additional assistance to reduce food waste through education and services
- More opportunities to repair household items

3. Where we are Today

3.1. DOMESTIC WASTE

The City of Parramatta offers residents a threebin collection service and four booked bulky waste collections per year. In addition to this, Council provides a range of collection services or drop-off events for problem or hazardous waste materials such as paints, oils, batteries, electronics, chemicals, sharps, and asbestos.

In 2017-2018 Council collected 69,790 tonnes of waste through these services. Approximately 72% of this was diverted from landfill as a result of Council's processing contracts which extract resources from these waste streams.

2017/18	Tonnes
Kerbside Garbage	40,208
Kerbside Recycling	12,419
Kerbside Organics	11,521
Bulky Waste Collections	5,528
Problem Wastes	114

It is important to note that these figures do not include the amalgamated areas from the former Hills, Hornsby, Holroyd or Auburn Council areas for the period prior to November 2017, as these areas were not serviced by the City of Parramatta until the commencement of the current collection contract with SUEZ. Waste data from 2018/19 onwards will therefore provide a more accurate reflection of waste generation across the city, and will be considered as part of the annual review of this Strategy.





RESIDENTIAL GARBAGE SERVICE

The City of Parramatta provides a 140L weekly garbage service, with the option for residents to downsize to an 80L service for reduced cost or increase to a 240L service at additional cost. Together all households produced 40,208 tonnes of waste from the red bin in 2017/18. The largest portion of this (44%) is food waste, while a further 14% is recyclables. Despite alternative collection and drop off facilities available, hazardous wastes such as batteries, e-wastes, and paints are still being disposed incorrectly via the red bin.

The waste from the red lid bin is sent to Global Renewables' UR-3R facility at Eastern Creek. This facility employs specialist sorting and treatment processes to extract recyclables and organics from the waste received and process the organic content into a soil product for use in agriculture, forestry, and mine rehabilitation. Until recently, this process enabled the diversion of approximately 60% of the waste from landfill. Recent changes to legislation in October 2018 have placed a hold on the application of this material to land, and if this hold remains, Council will need to work with UR3R and other industry partners to seek out an alternative solution to divert this material from landfill.



RESIDENTIAL RECYCLING SERVICE

Council provides residents with a fortnightly 240L recycling services which collected 12,419 tonnes in 2017/18. Paper, cardboard and glass containers are the main items placed in the recycle bin, however 17% of the content of these bins is not recyclable.

Recyclables from the yellow lid bin are sent to Visy at Smithfield. The Visy Materials Recycling Facility (MRF) sorts and separates the bottles, papers, glass, aluminium and steel out ready for further reprocessing. The recent introduction of the Container Deposit Scheme (CDS) has seen a drop in the quantities of containers that Council sends to the MRF due to residents retuning the bottles and cans for a 10c refund. Any CDS eligible containers from household recycling bins are redeemed by Visy through a refund sharing agreement with Council.



RESIDENTIAL GREEN WASTE SERVICE

Council also provides a fortnightly 240L green waste (organics) service, which collected 11,521 tonnes in 2017/18. There is very low contamination of this bin, with only 3% of the contents of this stream being contamination.

Council currently sends the garden organics from the green lid bin to SUEZ Resource Recovery Eastern Creek facility. This material is processed into a high-quality organic compost and soil improver ready for gardens, sporting fields and pastures.



KERBSIDE CLEAN-UP AND REHOMING SERVICES

As part of their domestic waste service, Council offers residents up to four kerbside clean-up collections per year, of up 2m3 per collection event. In 2017/18 this service collected 5,528 tonnes of bulky waste.

The material collected through this service is sent to the Dial-a-Dump Genesis site at Eastern Creek. Once at the facility, the material is sorted and approximately 52% of the materials are recycled and the remainder going to landfill. This contract is due to expire in late 2019 Council also partners with the Bower Parramatta, to help residents rehome unwanted household goods and repair broken items to keep them out of landfill. The service collects reusable furniture items from households and offers a referral service for items they are unable to take. Over the past two years this service has diverted over 10 tonnes of items from landfill.



PROBLEM WASTE SERVICES

Council offers a number of services to deal with problem wastes, with both collection and drop off options available.

Our mobile community recycling service collects hazardous household waste, such as paints, fuel, gas bottles and e-waste. Delivered in conjunction with Cumberland Council, the service utilises a specially designed truck operated by Resource Recovery Australia (RRA) to collect these items from households for recycling by ToxFree as part of their contract with the EPA for community recycling centres. In 2017/18, this service collected 34 tonnes of materials from 1,067 household collections within Parramatta.

Council also offers two free E-waste events and a Chemical Clean-Out event in partnership with the EPA each year. In 2017/18 these events saw Council collect 62 tonnes of e-waste and 11 tonnes of chemicals which were sent to specialist recycling companies. Drop off facilities for batteries, CDs, and mobile phones are also available at Council's branch libraries and main administration building. In 2017/18 these facilities collected 1 tonne of materials, which were sent to MRI e-cycle solutions, who have a 95% diversion rate.

Council also offers a free household asbestos collection service, for quantities of less than 10 square meters of bonded asbestos. This service operates on an as-needs basis, with collections occurring roughly every two months. A total of 6 tonnes was collected in 2017/18 and disposed of at EPA licensed facilities.

Safe needle collection services are also available from over 19 pharmacies across the local government area and three bulk drop off points to assist in keeping these items out of domestic waste bins.



WASTE AND RESOURCE EDUCATION SERVICES

Council provides a range of educational activities to engage residents and visitors to our city and assist them in reducing their waste and looking after the local environment. In 2017/18, this included more than 100 sessions at local schools, 40 community workshops, an online tutorial on composting used by over 1,100 residents, an anti-contamination program that reached 2,500 residents, as well as information stalls and activities at events and festivals, and a range of promotions and information flyers.

Our education and engagement activities are a critical part of Councils services. Through these programs, we are able to connect with residents and visitors to our city so that we work together to reduce waste, maximise reuse and recycling, and improve the look and feel of our City.

3.2 COMMERCIAL WASTES

Council offers a commercial waste service for local businesses. There are currently 1,400 businesses using the Council service, with over 350 of these utilising both the general waste and recycling services. Of the 2,565 tonnes of general waste collected through this service in 2017/18, over 61% was diverted from landfill via Council's disposal contract.

Material collected from this service is sent to Global Renewables' UR-3R facility at Eastern Creek. Sorting and treatment processes on site extract recyclables and organics from the waste received and process the organic content into a soil product for use in agriculture, forestry, and mine rehabilitation however changes to legislation in October 2018 have placed a hold on the application of this material to land.

3.3 CORPORATE WASTE

Council delivers a wide range of services across the local government area and as such, generates a diverse range of waste types ranging from general waste from administration buildings and community facilities, through to construction and demolition (C&D) materials from civil works, and green waste from parks. While a complete data set of all waste streams is not currently available, 2017/18 saw Council generate 6,008 tonnes of C&D waste from its civil works, 62 tonnes of green waste from its parks services, and collect 2,343 tonnes of waste through its cleansing operations. Waste audits conducted at individual facilities have also indicated generation rates of close to 7 tonnes per year in our main administration centres, 6 tonnes per year in our childcare centres, 2 tonnes per year in our branch libraries, and between 1 and 13 tonnes per year in our community centres.

Council employs a range of contractors for the recycling and disposal of the different wastes that we generate. General waste from our facilities is sent to UR-3R at Eastern Creek where recyclables and organics are extracted for recycling and reprocessing, while our mixed recyclables from our administration buildings are sent to Visy at Smithfield.

Council also recycles and reuses more than 90% of the materials from our civil works activities, and recycles roughly 86% of the green waste from the management of our parks and reserves. Recycling programs are also in place for materials such as tyres, chemical containers, oil, toner cartridges, paper and cardboard, and light globes.

3.4 LITTER

The City of Parramatta undertakes a range of programs and services to help keep our city clean and free from litter. Our public place cleansing service extends across the LGA, providing routine street sweeping, litter collection and the provision and maintenance of public place bins. These activities are supported by education and engagement programs for the prevention of littering, and the maintenance of a network of gross pollutant devices to collect and trap litter before entering our waterways.

3.5 ILLEGAL DUMPING

Council's Regulatory and Cleansing teams work together to monitor, investigate, and remove illegally dumped materials in an effort to keep our city clean, and take enforcement action where sufficient evidence exists. In 2017/18 a total of 948 tonnes of material was dumped illegally across our City, with the majority of this originating from households (650 tonnes). Much of this material could have been collected through the free bulky waste service provided as part of the domestic waste service.

4. Our Challenges

4.1 REDUCING OUR WASTE

Based on the current volumes of waste being generated and the planned growth within the local government area, it is estimated that the City of Parramatta will be producing over 116,000 tonnes of waste per year by 2036.

Increasing demand for products and changes to packaging are occurring at a pace not currently matched by the industry's ability to separate and recycle these materials. As a result, the number and type of discarded materials without a readily available recycling solution is increasing and adding to waste disposal.

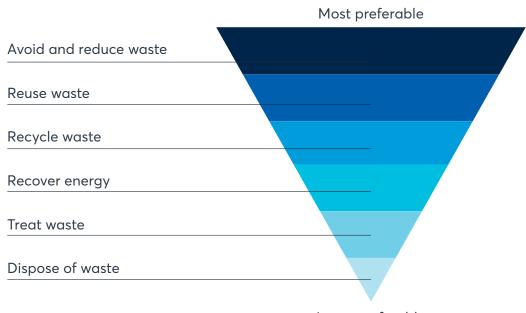
Avoiding and reducing waste is the highest priority of the waste hierarchy as it saves natural resources and avoids the use of additional resources to manage the waste generated.

Our Environmental Sustainability Strategy outlines Council's target to reduce resource consumption within the community from 8.2kg to 6.1kg per person per week by 2038.

Our biggest challenges in reducing waste and reaching this target include;

- The reduced life span of goods and goods not being repairable or reusable
- Increased amount and complexity of packaging and single use materials
- The increasing volume of food waste being generated
- The relationship between increased economic growth and the consumption of goods and materials

WASTE HEIRARCHY



Least preferable



4.2 RECYCLING RIGHT

While our community are strong users of the yellow and green lid bins, audits of these bins show that roughly 17% of the materials placed in recycling bins should not be there, and 14% of the materials in the red bin should be in the recycling bin.

Our recycling industry has faced major changes in commodity markets as a result of China and others restricting the import of recyclable materials. This change in international markets has highlighted the need for the Australian recycling market to develop and expand including obtaining clean, source-separated materials throughout our kerbside recycling systems.

This is something everyone can play a part in, from ensuring their recycling bin is sorted correctly to buying products made from recycled content. Council, along with the state government, are in a position to make a difference with their purchasing power and this strategy will consider ways we can do that with helping to create a circular economy and meet our adopted target to increase diversion from landfill to 85% by 2038.

Our biggest challenges in improving recycling are:

- Insufficient source separation of recyclables for optimal market recovery
- Varied levels of understanding within the community of what can and can't be recycled, and correct recycling practices

 Limited markets for recycled materials

4.3 HAVING SOMEWHERE TO TAKE OUR WASTE

Just as reducing waste and recycling properly is important, so is ensuring that we have somewhere to take our waste. The greater Sydney region is running out of landfill (and processing) capacity to manage the quantities and types of wastes being generated and competing land priorities often result in waste infrastructure being built further away from where the waste is produced.

This challenge has been recognised in planning strategies such as the Greater Sydney Commission's Central District Plan, which recognises the need to preserve industrial land for waste management infrastructure and includes specific directives for Council to protect existing and identify new locations for waste recycling and management, and support innovative solutions to reduce waste volumes and waste transport requirements.

Our biggest challenges in this area are:

- A lack of local waste infrastructure to receive and /or process waste
- Reduced availability of landfill space
- Changes to legislation for the application of waste treatment outputs
- Increases in waste disposal costs

4.4 GROWTH IN OUR CITY

Over the next 20 years the City of Parramatta will experience unprecedented growth across several main suburbs including the CBD. This growth will be across all areas of population, dwellings, commercial areas and public domain areas and will involve a large portion of high-rise buildings.

Increases in housing density can create a number of challenges for waste management.

Contamination of recycling streams is more prevalent in higher density housing than in detached homes, while competing demands for space can lead to inadequate waste storage and can contribute to lower rates of recycling, increases in illegal dumping, and issues where bins crowd footpaths.

Our biggest challenges in managing the impacts of this growth this are:

- Being able to sufficiently amend planning instruments to ensure new developments incorporate best practice waste management
- Balancing waste requirements with competing issues and traditional approaches to development
- Ensuring compliance with the requirements of planning controls and approvals
- Ensuring sufficient resourcing for the cleaning of public spaces in line with increased usage and demand



5. Our Plan for Tomorrow

5.1 AVOIDING AND REDUCING WASTE

Avoiding and reducing waste is at the top of the waste hierarchy. This first and most important step in sustainable waste management reminds us that we need to reduce the amount of materials extracted for use in consumables and avoid generating waste in the first place. It is important that we review our consumption patterns for ways to avoid and reduce our resource use and waste.

OBJECTIVE:

To reduce the generation of wastes across the Parramatta LGA

To create a community that makes well informed decisions based on the understanding of waste avoidance and reduction practices

TARGETS:

Reduce resource consumption from 8.2kg to 6.1kg per person by 2038

ACTIONS:

A1. Deliver programs to reduce food waste from local households and businesses, and increase diversion from landfill via more efficient shopping, use of left overs,

composting, worm-farming, or alternative processing

A2. Trial a program to incentivise the use of reusable nappies

A3. Phase out the use of single use plastics from Council operations and events

A4. Continue to deliver programs to reduce single use plastics amongst the community and local businesses

A5. Investigate the use of incentives to increase the uptake of smaller bins as part of the domestic waste service

5.2 IMPROVING REUSE AND RECYCLING

The contamination of recycling bins is a significant issue for not only Parramatta, but for all areas across Central and Western Sydney. Recent market instability has highlighted the importance of source separation and low contamination rates to maximise the reuse of recyclable materials.

There are a range of barriers

to recycling right, ranging from habit, ease and accessibility, high-rise apartment living, language differences, and lack of understanding of how the broader recycling system works.

Council and the community can also support recycling and the growth of the recycling industry through supporting a circular economy by the purchasing of products containing recycled materials.

OBJECTIVES:

To shift towards a circular economy where materials are kept in use for as long as possible

To support our community in increasing the rate of recycling and reduce contamination

TARGETS:

Increase the diversion of wastes from landfill to 85% by 2038

Reduce contamination of kerbside recycling bins from 17% in 2017 to 5% by 2038

Increase the diversion of Council's operational wastes from landfill to 90% by 2038

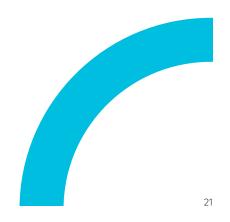
Sustainability criteria are considered in all Council procurement activities

ACTIONS:

- R1. Continue to implement education and behaviour change programs in a range of formats and languages to improve recycling practices and reduce contamination of recycling streams
- **R2.** Support the development and promotion of source separation and recycling services for items not currently accepted in kerbside recycling bins
- **R3.** Investigate options to improve reuse and recycling outcomes from bulky waste collections for items such as mattresses, garden waste, and furniture
- **R4.** Deliver targeted programs to reduce waste to landfill via repair, reuse, re-homing, or on selling of unwanted items and second hand purchasing
- **R5.** Conduct a review of multiunit dwellings to ensure adequate facilities and signage to encourage proper waste and recycling behaviours

- **R6.** Work to increase the uptake of Councils domestic waste service by larger multi-unit developments not currently serviced by Council to improve the consistency of waste services across the City.
- R7. Investigate the feasibility of establishing a site that encompasses a Community Recycling Centre, bulky waste reuse centre, and holding area for the reuse of Council construction and demolition wastes
- **R8.** Work collaboratively with industry and other partners to identify and develop opportunities for regional re-use and recycling initiatives
- **R9.** Work with food businesses, supermarkets and high-volume organic waste generators and precincts to separate and recover organics
- **R10.** Investigate waste-to-energy, bio digestion, and alternative systems to divert waste from landfill
- **R11.** Review the waste and recycling arrangements in place across all Council facilities and work to align

- collection, disposal, and recycling contracts to ensure consistency across all facilities
- **R12.** Continue to work with staff and contractors to facilitate best practice waste and recycling in Council buildings, facilities and operations
- **R13.** Implement sustainable procurement principles to support the purchase of recycled content products
- **R14.** Advocate for improved industry standards to enable the use of recycled content in civil and construction works





5.3 MANAGING PROBLEM WASTE BETTER

Problem wastes such as gas bottles, paints, light globes, oil, batteries, chemicals and electronic (e-waste) can cause harm to human health and the environment if not managed properly. These items cannot be put into the kerbside bins and should be disposed of via specialised services and facilities.

Recognising this issue, the NSW Government has set a target to establish or upgrade 86 drop-off facilities or services for managing household problem wastes statewide by 2021–22.

E-waste, including televisions, computers and other electronic appliances are one of the fastest growing waste streams, along with mobile phones and batteries.

While we currently offer a number of services for the collection, disposal and/or reuse of these materials, there are still large quantities ending up in landfill and causing environmental problems.

OBJECTIVES:

To minimise the environmental and health impacts from the incorrect disposal of harmful household wastes

To increase residents understanding of environmental issues with problem household wastes and increase correct disposal

TARGET:

Reduce the incidence of problem wastes in kerbside waste bin from 3.11% to 1% by 2038

Increase number of households using problem waste services by 30% by 2038 from 2017/18 numbers

ACTIONS:

- **P1.** Continue to provide and promote drop-off locations for small problem waste items such as batteries, unwanted disks and light globes
- **P2.** Deliver education activities to increase awareness of problem wastes and their correct disposal
- **P3.** Investigate options to expand services for the collection and disposal of problem wastes
- **P4.** Continue household asbestos education and collection programs
- **P5.** Advocate for the Federal Government to expand national product stewardship schemes for priority problem wastes
- **P6.** Explore opportunities to support local resource recovery activities for problem wastes

5.4 REDUCING LITTER

Litter is an issue that can impact the health of local environments, local amenity, and community health. It has also been identified as a key community concern across the local government area.

As the population grows and more people visit our city, the pressure from litter on our public domain will increase. Poor attitudes and behaviours across the community contribute towards littering, and so targeted education programs and supporting infrastructure can help reduce the incidence of littering.

OBJECTIVE:

To create a clean environment, improve visual amenity, and reduce litter in public areas, waterways and parks across our city

Increase community engagement programs to increase awareness and uptake of correct actions to reduce litter

TARGET:

To reduce the incidence of litter by 40% by 2020

ACTIONS:

- **L1.** Conduct a study of litter across the City to establish a baseline from which we can monitor progress over time and identify possible interventions
- **L2.** Continue community engagement and public place litter programs to encourage a change in behaviour

- L3. Partner with schools, community organisations, and sporting clubs to support anti-litter campaigns and deliver litter-free events
- **L4.** Continue to install fit for purpose litter bins across the City, targeting high use areas as a priority
- L5. Ensure Council's street sweeping and public place cleaning programs have the capacity to maintain service levels based on the principle that people are less likely to litter in areas that are clean
- **L6.** Continue to maintain existing stormwater litter traps and identify priority locations for the installation of new infrastructure
- **L7.** Deliver campaigns to ensure bins are presented with lids closed and not overflowing to prevent windblown litter

5.5 REDUCING ILLEGAL DUMPING

Illegal dumping is an issue that affects the whole community. As well as being unsightly, it can create risks to human health and safety, degrade local environments, and is costly to clean up. There are many factors that can influence a person's decision to dump, including a general lack of awareness of what constitutes dumping, a lack of concern or time, and a lack of awareness of the options and services available for reuse or disposal.

OBJECTIVE:

To create a clean and safe city

To deliver initiatives that increase the community's awareness and understanding of illegal dumping issues and their alternative disposal options

TARGET:

To reduce the incidence of illegal dumping by 30% by 2020

ACTIONS:

- **D1.** Deliver campaigns to reduce illegal dumping and improve reporting and monitoring
- **D2.** Continue the use of rapid deployment CCTV cameras to known illegal dumping hotspots
- **D3.** Increase the promotion of existing Council free services including: the collection and rehoming of unwanted household items; and problem waste collection/drop-off services, to prevent illegal dumping at the source
- **D4.** Work with strata managers to develop and implement programs to increase resident awareness and to reduce the incidence of illegal dumping occurring outside of multi-unit dwellings
- **D5.** Incorporate best practice waste management systems into all unit block developments for the storage and collection of bulky items
- **D6.** Work with retailers and key stakeholders to reduce the incidence of abandoned trolleys and improve collection times

5.6 PLANNING FOR THE FUTURE

With significant increases in population and housing density, we will need to look at how we store, transport and treat our wastes in order to ensure that we create a liveable and clean City, whilst also maximising diversion from landfill. Recent legislative changes have meant that we are no longer on track to meet our current waste targets and so the need to investigate options to improve the diversion of materials from landfill is critical.

OBJECTIVE:

To improve waste planning, design, and service provision to ensure waste management is seamlessly integrated across the city

To support local and regional waste infrastructure that is innovative and utilises current best practice

TARGET:

Increase diversion from landfill to 85% by 2038

Community satisfaction for waste services remains above 85%

ACTIONS:

T1. Ensure best practice waste management is included into all Council planning documents for new developments

- **T2.** Ensure masterplans for new precinct developments include best practice design for waste storage, access and servicing
- **T3.** Investigate zonings to protect existing industrial lands and identify new locations for waste facilities and infrastructure
- **T4.** Investigate options to improve the delivery of waste services, such as through the use of RFID technology, bin rationalisation in laneways and high density areas, or improvements to waste infrastructure
- **T5.** Continue to explore partnerships with other Councils and industry to improve waste management outcomes
- **T6.** Seek out opportunities to support research and development, innovation, and collaborative learning in order to facilitate continuous improvement in Council waste services, and the industry more broadly

5.7 MONITORING AND REPORTING

This strategy seeks to set the strategic direction, goals and actions for ongoing sustainable waste management and resource recovery. The timelines for the Strategy align with and extend beyond our current Community Strategic Plan and Environmental Sustainability Strategy.

As a starting point, the Strategy identifies priority actions for the next four years to set us on the path towards meeting our goals. The success of these actions and the strategy overall will be measured against agreed indicators and targets, with progress reported in Council's Annual Report and Sustainability Progress Report.

To ensure that the Strategy remains current, Council will assess the relative priority of actions each year based on the outcomes achieved and any new information that may arise from legislative change, community needs, or changes in technology.





Action Table 2019-2023

Theme: Avoiding and Reducing Waste							
Target	Action	Measure	Timeframe				
			Yr 1	Yr 2	Yr 3	Yr 4	
	A1. Deliver programs to reduce food waste from local households and businesses, and increase diversion from landfill via more efficient shopping, use of left overs, composting, worm-farming, or alternative processing	Number of programs Wastes avoided	X	х	х	х	
Reduce resource	A2. Trial a program to incentivise the use of reusable nappies	Participant numbers		Х			
8.2kg to 6.1kg per person by 2038	A3. Phase out the use of single use plastics from council operations and events	Wastes avoided	Х	х			
	A4. Continue to deliver programs to reduce single use plastics amongst the community and local businesses	Number of programs Wastes avoided	х	Х	Х	Х	
	A5. Investigate the use of incentives to increase the uptake of smaller bins as part of the domestic waste service	Uptake of smaller bins		х	х	х	
Theme: Improving R	Reuse and Recycling						
			Timeframe				
Target	Action	Measure	Yr 1	Yr 2	Yr 3	Yr 4	
Increase diversion from	R1. Continue to implement education and behaviour change programs in a range of formats and languages to improve recycling practices and reduce contamination of recycling streams	Number of programs	x	x	Х	х	
landfill to 85% by 2038		Recycling and contamination rates					
	R2. Support the development and promotion of	Uptake of programs	x	x	Х	х	
	source separation and recycling services for items not currently accepted in kerbside recycling bins	Number of programs					
Reduce contamination of kerbside recycling bins to 5% by 2038	R3. Investigate options to improve reuse and recycling outcomes from bulky waste collections for items such as mattresses, garden waste, and furniture	Number of programs Waste volumes	X	X			

	R4. Deliver targeted programs to reduce waste to landfill via repair, reuse, re-homing, or on selling of unwanted items and second hand purchasing	Number of programs Wastes avoided	Х	Х	Х	Х
	R5. Conduct a review of multi-unit dwellings to ensure adequate facilities and signage to encourage proper waste and recycling behaviours	Number of reviews Contamination rates	х			
	R6. Work to increase the uptake of Councils domestic waste service by larger multi-unit developments not currently serviced by Council to improve the consistency of waste services across the City	Number of services		×	×	Х
	R7. Investigate the feasibility of establishing a site that encompasses a Community Recycling Centre, bulky waste reuse centre, and holding area for the reuse of Council construction and demolition wastes	Investigation completed	x	x		
90% diversion rate for Council waste by 2038	R8. Work collaboratively with industry and other partners to identify and develop opportunities for regional re-use and recycling initiatives	Number of initiatives	×	×	х	х
Sustainability criteria	R9. Work with food businesses, supermarkets and high volume organic waste generators and precincts to separate and recover organics	Number of initiatives Wastes diverted			x	Х
are considered in all Council procurement activities	R10. Investigate options to divert waste from landfill through technologies such as waste to energy, bio digestion and other alternative systems	Investigation completed	Х	×		
	R11. Review the waste and recycling arrangements in place across all Council facilities and work to align collection, disposal, and recycling contracts to ensure consistency across all facilities	Reviews completed Services consolidated	х	х	х	
	R12. Continue to work with staff and contractors to facilitate best practice waste and recycling in Council buildings, facilities and operations	Number of activities Recycling and contamination rates	х	х	х	Х
	R13. Implement sustainable procurement principles that support the purchase of recycled content products	Purchases with recycled content	х	х	х	Х
	R14. Advocate for improved industry standards to enable the use of recycled content in civil and construction works	Number of activities	Х	x	×	Х
Theme: Managing P	roblem Waste					
Target	Action	Measure	Timeframe			
rurget			Yr 1	Yr 2	Yr 3	Yr 4
Reduce the incidence of problem wastes in kerbside waste bin from 3.11% to 1% by 2038	P1. Continue to provide and promote drop-off locations for small problem waste items such as batteries, unwanted disks and light globes	Number of events Service utilisation Tonnes collected	x	X	X	х
	P2. Deliver education activities to increase awareness of problem wastes and their correct disposal	Number of activities Number of participants	х	х	х	Х
	P3. Investigate options to expand services for the collection and disposal of problem wastes	Investigations completed		х	х	Х

	5. 6	Number of collections				
Reduce the incidence of problem wastes in kerbside waste bin from 3.11% to 1% by 2038	P4. Continue household asbestos education and collection programs	Tonnes collected	Х	Х	Х	Х
	P5. Advocate for the Federal Government to expand national product stewardship schemes for priority problem wastes	Number of activities	Х	х	х	Х
	P6. Explore opportunities to support local resource recovery activities	Number of activities	х	Х	х	х
Theme: Reducing Li	tter					
				Time	frame	
Target	Action	Measure	Yr 1	Yr 2	Yr 3	Yr 4
	L1. Conduct a study of litter across the City to establish a baseline from which we can monitor progress over time and identify possible interventions	Study completed	x			X
	L2. Continue community engagement and public place litter programs to encourage a change in behaviour	Number of programs Incidence of litter	x	×	х	X
	L3. Partner with schools, community organisations, and sporting clubs to support anti-litter campaigns and deliver litter-free events	Number of activities	x	X	Х	х
Reduce the incidence of litter by 40% by 2020	L4. Continue to install fit for purpose litter bins across the City, targeting high use areas as a priority	Number of bins Incidence of litter	х	х	х	х
	L5. Ensure Council's street sweeping and public place cleaning programs have the capacity to maintain service levels based on the principle that people are less likely to litter in areas that are clean	Customer satisfaction	x	х	х	х
	L6. Continue to maintain existing stormwater litter traps and identify priority locations for the installation of new infrastructure	Number of activities	х	Х	х	х
	L7. Deliver campaigns to ensure bins are presented with lids closed and not overflowing to prevent windblown litter	Number of activities	х	х	х	х
Theme: Reducing III	egal Dumping					
Townsh	A. di	Measure	Timeframe			
Target	Action	Measure	Yr 1	Yr 2	Yr 3	Yr 4
	D1. Deliver campaigns to reduce illegal dumping and improve reporting and monitoring	Number of activities	Х	Х	Х	Х
Reduce the incidence of illegal dumping by 30% by 2020	D2. Continue the use of rapid deployment CCTV cameras at known illegal dumping hotspots	Incidence of dumps Number of deployments	X	X	X	Х
	D3. Increase the promotion of collection, rehoming, and drop-off services to prevent illegal dumping at the source	Service utilisation Tonnes dumped	х	х	х	х
	D4. Work with strata managers to develop and implement programs to reduce the incidence of illegal dumping occurring outside of multi-unit dwellings	Number of activities Incidence of dumps		Х	Х	
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	D5. Incorporate best practice waste management systems into all unit block developments for the storage and collection of bulky items	Number of plans assessed	×	x	X	X	
	D6. Work with retailers and key stakeholders to reduce the incidence of abandoned trolleys and improve collection times	Number of activities Number of reports	Х	х	Х		
Theme: Planning for	r Tomorrow						
			Timeframe				
Target	Action	Measure	Yr 1	Yr 2	Yr 3	Yr 4	
Increase diversion from landfill to 85% by 2038 Community satisfaction for waste services remains at 80% of residents	T1. Ensure best practice waste management is included into all Council planning documents for new developments	LEP and DCP incorporate best practice waste planning	Х	X			
	T2. Ensure masterplans for new precinct developments include best practice design for waste storage, access and servicing.	Number of plans assessed	Х	×	х	х	
	T3. Investigate zonings to protect existing industrial lands and identify new locations for waste facilities and infrastructure	Investigations completed	Х	Х			
	T4. Investigate options to improve the delivery of waste services, such as through the use of RFID technology, bin rationalisation in laneways and high density areas, or improvements in waste infrastructure	Investigations completed Customer satisfaction	х	х	х	x	
	T5. Continue to explore partnerships with other Councils and industry to improve waste management outcomes	Number of partnerships	Х	х	х		
	T6. Seek out opportunities to support research and development, innovation, and collaborative learning in order to facilitate continuous improvement in Council waste services and the industry more broadly	Number of activities	x	x	х	x	







