

ITEM 15

LATE REPORT: PUBLIC EXHIBITION - DRAFT WASTE AND RESOURCE RECOVERY STRATEGY 2024-2034

The draft Wollongong Waste + Resource Recovery Strategy 2034 has been prepared to build on the previous Strategy 2014 - 2022 and to guide the management of Council's waste related services for the next 10 years.

Council provides multiple resource recovery and waste services across our Local Government Area, including collection services to more than 88,000 residences, and more than 1,300 public space bins, street cleaning, community recycling centre and stations, and operates a landfill facility for domestic and commercial waste and other specialised services (chemical clean out, cardboard and garden organics drop off).

Community consultation and surveys show that most residents are satisfied with the current resource recovery and waste services offered by Council and would like to see further improvement in waste management across the City, by decreasing the material going to landfill, transitioning to a circular economy and reducing waste related greenhouse gas emissions.

This report seeks Council's endorsement for the public exhibition of the draft Wollongong Waste + Resource Recovery Strategy 2034.

RECOMMENDATION

- 1 The draft Wollongong Waste + Resource Recovery Strategy 2034 be endorsed for public exhibition for a minimum period of 28 days.
- 2 Following public exhibition, a report on submissions and recommendations be presented to Council for consideration and finalisation of the Wollongong Waste + Resource Recovery Strategy 2034.

REPORT AUTHORISATIONS

Report of: Paul Tracey, Manager Open Space + Environmental Services
Authorised by: Joanne Page, Director Infrastructure + Works

ATTACHMENTS

- 1 Draft Wollongong Waste and Resource Recovery Strategy 2034

BACKGROUND

The provision of waste services for the community is a significant function and responsibility for Wollongong City Council with more than 88,000 domestic waste services receiving a weekly Food Organics and Garden Organics (FOGO) and garbage service, fortnightly recycling service, and enhanced services including on-call kerbside collections, garden organics, and cardboard drop offs at selected times of the year. Council's Public Place waste collection services more than 1,300 public place bins, street cleaning and city presentation. In addition, Council operates Wollongong Waste + Resource Recovery Park – Whytes Gully, which provides a landfill facility for domestic and commercial waste, public drop-off transfer station, and a community recycling centre.

Our waste + resource recovery services are important to the community and the 2023 Wollongong City Council Community Satisfaction Survey indicates a high level of satisfaction with 88% of our community satisfied with the Domestic Waste Service, 84% satisfied with recycling and FOGO services, whilst there are opportunities to improve our public bin collection, street cleaning and waste disposal depot services.

The draft Wollongong Waste and Resource Recovery Strategy 2034 sets a clear direction towards sustainable waste and resource management for the City of Wollongong into the future, and builds on the achievements of the former Strategy which include:

- The commencement of a fully functional FOGO collection service and weekly green bin collection
- A sustainable waste policy for public and special events
- Community recycling stations installed in Council Libraries

- Improved on-call kerbside collection services
- Improved waste education and access to waste information
- Construction and opening of a Community Recycling Centre at Whytes Gully
- Landfill gas capture and reduction of greenhouse gas emissions at Whytes Gully
- Improved environmental performance at Whytes Gully particularly air, water, and odour.

There were several unfinished actions from the previous strategy, and these have been included within the current draft to ensure Council can continue to build on our work to date.

Key actions that have been incorporated into the new strategy include:

- Update of the waste chapter of our Development Control Plan (DCP)
- The rehabilitation of the former Helensburgh waste facility
- A plan for emergency waste management
- Investigating and implementing pricing incentives for separated materials
- Continued improvements into illegal dumping
- Implementation of Public place recycling that work.

PROPOSAL

The Draft Wollongong Waste + Resource Recovery Strategy 2034 has been drafted to guide Council's Waste service through to 2034 in a way that provides direction yet allows Council to be responsive and agile in a rapidly changing waste industry to best meet the current and future waste needs of our community.

The strategy will guide Council's Domestic Waste Service, The Wollongong Waste + Resource Recovery Park (Whytes Gully), public place waste collection, waste recycling and diversion initiatives, emergency waste management, waste education and links to specific waste actions to meet net zero targets identified within Council's Net Zero Wollongong Climate Change Mitigation Plan 2023-30.

Changes expected in the waste industry through the life of the draft strategy include:

- New technologies and markets, which will be able to assist with waste sorting, recycling, landfill diversion and energy.
- Maximising the community value and use of Council Assets in a period of high cost of living.
- Moving towards Net Zero emissions and what actions need to happen to achieve this.

To target this, we have created four new goals:

- 1 Reduce Waste to Landfill – *'Landfill is a last resort for waste'*
- 2 Transition to a Circular Economy – *'A circular economy provides the best use of resources'*
- 3 Reduce our Waste Related Emissions – *'When it comes to emissions less is best'*
- 4 Improve our Waste Management – *'Getting waste management right is key'*

The role of Waste education and engagement underpins all four goals and will continue to evolve to ensure broad reach and engagement within the community.

CONSULTATION AND COMMUNICATION

The draft Waste + Resource Recovery Strategy 2034 has been prepared based on the 'Talking Waste 2024-34' Engagement Plan which highlights the following community engagement and communication undertaken throughout April and May of 2024:

- Promotion of an online survey and frequently asked questions prepared for the community via Council's website, social media platform, media release, newsletters and e-mail distribution lists.

- Engagement activities included the online survey, online live Q&A session, and workshops including internal Council Staff, targeted community groups, and a community workshop held on 2 May 2024.

The engagement participation summary used to help inform the draft included:

- 555 web page views
- 450 views on the project webpage
- 88 Community surveys and Q&A's received
- 16 Community Workshop participants

Broad community consultation on the draft Wollongong Waste + Resource Recovery Strategy 2034 is proposed to occur over a minimum period of 28 days. All stakeholders previously involved in the workshops will be contacted during exhibition period.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2032 Goal 1 – We value and protect our environment. It specifically delivers on the following:

Community Strategic Plan 2032		Delivery Program 2022-2026
Strategy		Service
1.4	Work together to achieve a net zero carbon emissions and reduce waste going to landfill	Waste Management

RISK MANAGEMENT

Waste + Resource Recovery services generally carry a higher level of risk with complex and significant environmental, economic, social, operational, and reputational risks.

The strategy aims to provide a clear and transparent direction for the way Council provides its waste services, to ensure risk are mitigated into the future.

FINANCIAL IMPLICATIONS

Actions within the draft strategy will be delivered as part of Council's core waste business, and through Council's annual review of its Fees and Charges including the Domestic Waste Charge.

Council will continue to seek grant funding opportunities for specific waste improvement actions within the Strategy that may accelerate proposed timing for completion.

CONCLUSION

The draft Wollongong Waste + Resource Recovery Strategy 2034 provides the community with clear direction on Council's waste service overall.

The report proposes a public exhibition of the draft strategy to allow for further community and stakeholder input to shape the way Wollongong manages its waste into the future.



Wollongong City Council

Wollongong Waste and Resource Recovery Strategy 2024-2034



Acknowledgement of Country

We acknowledge the Traditional Custodians of the land in which our city is built, the Aboriginal people of Dharawal Country. We recognise and appreciate their deep connection to this land, waters and our greater community.

We pay our respects to Elders past, present and those emerging and extend our acknowledgement and respect to all Aboriginal and Torres Strait Islander peoples who call our city home.

We recognise Aboriginal and Torres Strait Islander people as the first people to live in the area. We respect their living cultures and recognise the positive contribution their voices, traditions and histories make to our city.

In celebration of unity and cultures, both traditional and contemporary, we acknowledge the rich histories of local Aboriginal and Torres Strait Islander heritage.

Contents

Section 1	Introduction	4
Section 2	A Review of the 2014-22 Waste and Resource Recovery Strategy	6
Section 3	Waste in Wollongong in 2024	8
3.1	Our City	8
3.2	Current Services	8
3.3	Waste Data	10
3.4	Waste Education	13
3.5	Waste Fee Components	14
Section 4	Developing the Wollongong Waste and Resource Recovery Strategy 2024-2034	16
4.1	Strategic Alignment	16
4.2	Strategy Development	18
4.3	Community Engagement	19
4.4	Circular Economy	20
4.5	Waste Hierarchy	21
Section 5	Our Four Goals	22
Goal 1	Reduce Waste to Landfill	22
Goal 2	Transition to a Circular Economy	22
Goal 3	Reduce our Waste Related Emissions	23
Goal 4	Improve our Waste Management	23
Section 6	Implementing the Strategy	24
6.1	Planning	24
6.2	Priorities and Actions	25
6.3	Measures	32

Section 1 Introduction

The provision of waste services for the community is a significant function and responsibility for Local Governments, and Wollongong City Council is no different. As part of our role, some of the core services we provide include a domestic waste collection service to more than 88,000 residences across our Local Government Area, a Council-operated landfill facility, public place bin collection and Community Recycling Centre.

Sustainable waste management is a shared responsibility for Wollongong City Council and the community. Our current global rate of consumption of non-renewable resources is not sustainable and it's crucial that as we look at alternatives to non-renewable resources, we're also more efficient at managing and recovering existing resources. We need to do this in a way that minimises environmental impacts and

maximises the value of recovered materials to ensure we are caring for country and protecting our environment.

We know the community cares about waste. Our biannual Community Satisfaction Surveys consistently show that the domestic waste service, including red bin collection, recycling and now Food Organics and Garden Organics (FOGO) are important to the community and consistently score high in terms of the community's satisfaction with this service.

The Waste and Resource Recovery Strategy 2034 sets a clear direction towards sustainable

waste and resource management for the City of Wollongong moving into the future.

This Strategy is based on four key goals which will drive waste management actions by Council on behalf of the community. It builds on the work already completed in our previous Strategy and has been developed to ensure we can be agile and respond to an ever-changing and evolving waste industry. This forward-focusing document also allows us to continue to prioritise a sustainable and cost-effective service delivery for our community.





Section 2 A Review of the 2014-22 Waste and Resource Recovery Strategy

We're proud of the goals met in the 2014-2022 Strategy. There were many successes throughout its implementation including the city-wide roll-out of FOGO collections and a weekly green bin service, sustainable waste management for Council events, the addition of community recycling stations at libraries, improvements to our on-call household cleanup service, and continued waste education.

Away from the public eye, the Strategy also delivered site and operational improvements at the Wollongong Waste and Resource Recovery Park (known locally as Whyte's Gully). These improvements included increasing our landfill gas capture and reducing our Greenhouse Gas emissions and the construction and opening of the Community Recycling Centre (CRC) which provides our community the opportunity to drop approved recyclable waste for free.

The previous waste and resource recovery strategy was in place from 2014 and it had four focus areas with indicators. Following a review, it has been determined that we met or exceeded the majority of these indicators, although issues such as illegal dumping were considered more difficult to assess success. We have taken the learnings from this review, through this updated Strategy, looked to refocus and address the current needs of the community and priorities for waste management in Wollongong.

There were some unfinished actions from the previous Strategy's action plan, and these have been considered within the new document to ensure we continue to build on the work and positive achievements of the past decade. These unfinished actions include an update of the waste chapter of our Development Control Plan (DCP), the rehabilitation of the former Helensburgh waste facility, a plan for emergency waste management, pricing incentives for separated materials, and continued improvements into illegal dumping and public place recycling.

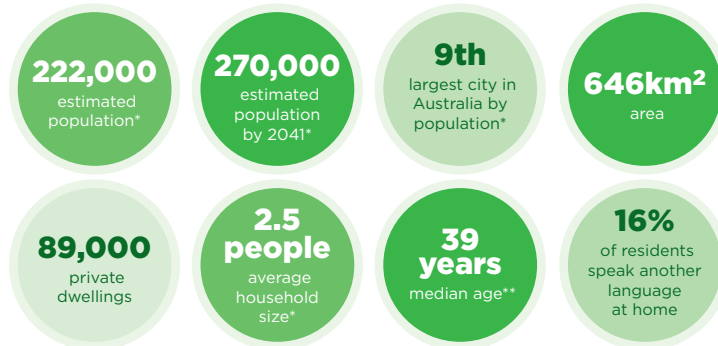
Section 3 Waste in Wollongong in 2024

3.1 Our City

The Wollongong Local Government Area (LGA) is located 80km south of Sydney on Dharawal Country.

Wollongong is a city with diverse natural environments and is home to many unique ecosystems, endangered species and communities, as well as more than 222,000 residents.

As our population grows, so does our need for a more sustainable approach to our management of waste.



*Data sourced from Informed Decision 2023. ** Data sourced from ABS 2021 Census

3.2 Our Current Services

Domestic Waste Collection Services

There are approximately 88,974 properties within the LGA that receive a domestic waste collection. 83% of properties are single unit dwellings (SUDS). 17% of properties are multi-unit dwellings (MUDS).

We currently provide:

- A weekly FOGO and waste to landfill collection
- A fortnightly recycling collection
- Two on-call household cleanup services per year
- Cardboard and green waste drop off events

Each year, we empty each household's combination of red, yellow, and green lid bins a total of
130 times



Public Place Waste Collection

Council provides and services more than 1200 public place waste and recycling bins. These are located across the Local Government Area in our streets, parks, reserves and sporting facilities, as well as within the CBD.

There are also numerous Return and Earn return points in the LGA for the public to recycle eligible bottles, cans and containers.

Supporting Services

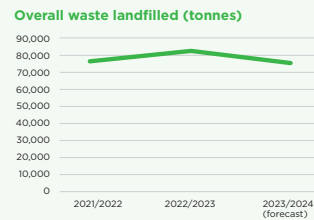
- **Household Chemical CleanOut**
(In partnership with the NSW Environment Protection Authority)
- Household Chemical CleanOut's provide a free, safe and convenient drop off for household chemicals.
- **Community Recycling Centre (CRC)**
(In partnership with the NSW EPA)
- The CRC offers a free and easy solution for Wollongong residents to recycle a broad range of household problem items.

- **Community Recycling Stations (CRS)**
- CRS at five locations across the city to provide convenient drop off points for select problem items.
- **Waste Education**
- Dedicated waste education staff that provide a wide range of services, information, and engagement to the community.
- **Wollongong Waste and Council websites**
- Detailed waste information, education, updates, announcements, opening hours, videos, resources and more.
- **Waste App**
- The Wollongong Waste app offers residents a range of waste related information, including a calendar of events, news and alerts, bin day information and access to various bookings and services.

3.3 Waste Data

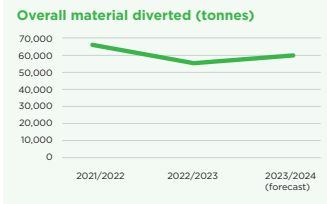
When we look at the waste that goes into our landfill site, there is a mix of both domestic and commercial materials. Approximately 40 percent of the waste received at the Wollongong Waste and Resource Recovery Park (WWARRP) is commercial waste. This does not include construction and demolition waste which is collected at other privately-run waste facilities.

The following graph illustrates the tonnes of overall waste landfilled in the 2021/22 and 2022/23 financial years and the forecasted amount for the 2023/24 financial year.



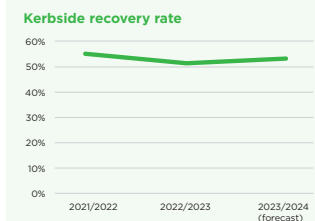
One of Council's key focusses continues to be waste diversion and the use of landfill as a place of last resort. As an ongoing measure of success, we want to see the amount of material being diverted from landfill to increase over the next 10 years.

The Overall Material Diverted graph below shows the tonnes of material that has been kept out of landfill. It shows the totals for the 2021/22 and 2022/23 financial years, as well as the forecasted totals for the 2023/24 financial year.



The volume of material within domestic waste collections in each of the red, yellow and green lid bins is tracked weekly and Council's goal is to increase the rate of kerbside recovery.

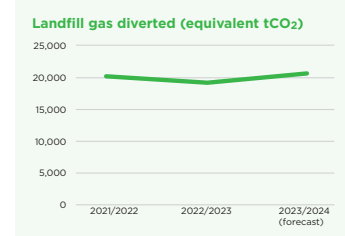
The graph below shows the percentage of waste that has been diverted from landfill through effective use of kerbside collections including FOGO, recycling and On-call household collections. The graph captures data for the 2021/22 and 2022/23 financial years as well as the forecasted rate for the 2023/24 financial year.



Landfill sites generate methane as organic waste decomposes. Methane has a negative impact on the environment and effective management of the gas is a key to reducing our waste-related emissions.

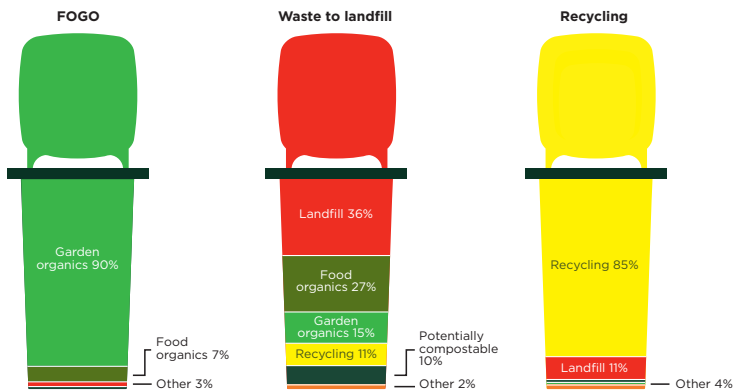
Council renewed its landfill gas program at the Wollongong Waste and Resource Recovery Park in 2019 and improved its capture and management of methane to reduce equivalent CO₂ that is released to the atmosphere. The graph below shows the equivalent tonnes of CO₂ that have been diverted for the 2021/22 and 2022/23 financial years, as well as the forecasted totals for the 2023/24 financial year.

We're focussed on increasing the amount of landfill gas that is effectively diverted through this program, as well as reducing the volume of organic waste entering the site through the ongoing implementation and support of FOGO in the city.



Material composition by bin type

Data sourced from the Household Kerbside Bin Audit 2023



3.4 Waste Education

Waste education is a crucial component of waste management. Our waste education teams provide learning opportunities for the community that encourage reducing plastic use, participating in FOGO and recycling, utilising the Community Recycling Centre and Community Recycling Stations, promoting services and events, and providing a range of engagement on waste related activities.

The team works closely with Council's Communications & Marketing team on content that can be shared through targeted channels to build community awareness and understanding of waste management, and foster community support and participation.

Moving forward, Council's waste education focus for community will continue to be encouraging behaviour change through learning, highlighting opportunities to reduce waste and be more sustainable, and to support our community to work alongside Council as we seek to align with the four goals of this Strategy.

The ongoing delivery of waste education will include a wide range of methods including:

- Online resources on Council's website such as video workshops and an online tour of the Wollongong Waste and Resource Recovery Park
- Social media and targeted e-newsletters
- Pop-up engagement stalls
- Workshops and educational talks
- Bin audits and development of case studies
- Direct mail outs, printed resources and signage
- Talks and workshops at schools, multilingual communities and other community groups
- Targeted media advertisements and campaigns
- Promotion of the Wollongong Waste app
- Collaboration with regional councils through the Illawarra Shoalhaven Joint Organisation (ISJO).

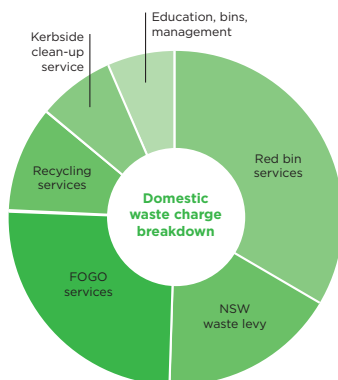
3.5 Waste Fee Components

Providing waste management services comes at a significant cost to the community, with the NSW EPA Waste Levy applied to each tonne of waste sent to landfill.

The two types of fees associated with waste for the community of Wollongong are the Domestic Waste Management fee (DWM), and the waste disposal fee at the Wollongong Waste and Resource Recovery Park. These fees are used to fund multiple waste services and functions.

The Domestic Waste Management fee is broken down into approximately 6 different areas of funding, as can be seen in the following pie chart.

- 35% towards the red bin service, which includes collection and disposal to landfill.
- 17% towards the NSW EPA Waste Levy which is a mandatory fee for materials going to landfill.
- 25% towards the collection and processing of FOGO.
- 11% towards providing the collection and processing of recycling.
- 7% towards the collection and processing of the kerbside cleanup service.
- 5% towards education, bins and caddy liners and management.



The waste disposal fee at the Wollongong Waste and Resource Recovery Park is broken down into three major components, these include:

- The mandatory NSW EPA Waste Levy.
- Operational costs, which include equipment, materials and labour.
- Capital costs, which are associated with the management of the site, including cell construction and the future rehabilitation of the site once landfilling has ceased.

Given the rising costs of construction and materials, Council monitors and adjusts charges annually to ensure the sustainability of these critical services. By doing so, Council can continue to provide services for our community that balance effective waste management and sustainable practices.

While all residents support Council's provision of waste services through their rates, there are some steps people can take to help keep waste costs down.

- Downsizing the red bin to a smaller size.
- Embrace FOGO, processing FOGO is more cost effective than sending food waste to landfill.
- Keep recycling materials out of the red lid bin and use the community recycling facility and centres.







Section 4 Developing the Wollongong Waste and Resource Recovery Strategy 2024-2034

4.1 Strategic Alignment

Council's integrated strategic framework is led by the Our Wollongong Our Future Community Strategic Plan. The table below shows the key aligning documents and the actions related to our Waste and Resource Recovery Strategy.

The key actions from the aligning documents will be addressed within this Strategy and will be situated under each of the relevant key goals within our priorities and actions in section 6.

Aligning Document	Key Actions
Community Strategic Plan (CSP) 	Goal 1 - We value and protect our environment 1.4 Work together to achieve net zero carbon emissions and reduce waste going to landfill
Delivery Program and Operational Plan 	Goal 1 - We value and protect our environment Environmental Programs Waste services
Climate Change Mitigation Plan (CCMP) 	Empowering Community Actions 12. Support development of circular economy opportunities within the region 13. Increase diversion rates and reduce waste to landfill Priority Actions 1. Integrate emissions reduction priorities into strategic planning framework for waste 2. Develop new waste diversion streams, practices and infrastructure as opportunities become available 3. Expand gas capture infrastructure at Whyte's Gully towards electricity generation 4. Review waste contracts to include emissions reduction priorities
Sustainable Wollongong 2030 	Priority Area 3: A low emissions city • Reduced emissions from Whyte's Gully Landfill Priority Area 5: A low waste city • Reduced amount of waste sent to landfill • Reduced use of single use plastics in the city • Decreased litter and illegal dumping • Increased amount of material recovered for re-use and recycling • Reduced waste produced from events across the city

Aligning Document	Key Actions
NSW Waste and Sustainable Materials Strategy 2041 	5 Year Targets • Phase out problematic and unnecessary plastics by 2025 • Plastic litter reduction target of 30% by 2025 10 Year Targets • Reduce total waste generated by 10% per person by 2030 • Have an 80% average recovery rate from all waste streams by 2030 • Introduce a new overall litter reduction target of 60% by 2030 Relevant Sub Targets • Triple the plastics recycling rate by 2030 • Halve the amount of organic waste sent to landfill by 2030 • Net zero emissions from organic waste by 2030
Illawarra Shoalhaven Regional Waste and Sustainable Materials Strategy 2022 - 2027 	Theme 1: Avoid, reuse and recovery of resources Theme 2: Protect the environment Theme 3: Strategic leadership and collaboration for sustainable material management

There are also other relevant aligning documents including The National Waste Policy and Action Plan, and the NSW Circular Economy Policy Statement, which focusses on waste avoidance,

improved resource recovery, increased use of recycled material and the importance of the circular economy.

Council's Integrated Planning Framework



4.2 Strategy Development

This Strategy has been developed as a high order document to plan for the future of waste management in Wollongong. It has been informed by advice and feedback from a wide range of stakeholders, both internally and externally. As it is a 10-year document, it has been written with flexibility in mind, allowing Council to respond to this changing environment and redirect focusses as the industry and technology evolves.

To deliver this Strategy in a transparent, productive and meaningful way, an adaptable implementation plan will be developed. It will sit beneath this Strategy, and be reported on annually to the community. More information about the development of the implementation plan can be found in section 6 of this Strategy.



4.3 Community Engagement

We value the passion, knowledge and perspectives of our community, and we have engaged with them in a range of ways throughout the development of this document.

We gathered feedback and correspondence through conversations, workshops and surveys with the Aboriginal community, Neighbourhood Forums, Resident Action Groups, waste and

circular economy leaders, and other community members who represented Wollongong's diverse population.

We workshoped with more than 130 people, and the feedback we heard has been incorporated into our priorities and actions in Section 6 of this Strategy. Throughout our engagement process there were several themes that arose from the feedback we gathered.

Some key things the community told us

Soft plastic recycling	FOGO	Education	Caring for Country	Red bin collection frequency	Advocacy	Recycling
"Introduce soft plastic recycling"	"Not enough people using FOGO"	"Education for households to sort waste into FOGO and recycling"	"Always consider the impact to the environment when making decisions in waste"	"Less frequent residual waste collection"	"Advocate against fast fashion"	"More recycling bins in public areas"
"Recycling soft plastics will greatly reduce landfill"	"Continuation of the FOGO program"	"Educating the community and giving them more feedback"	"Make sustainable decisions to care for country"	"Reduce red bin collection to fortnightly"	"Persuade politicians to make bans mandatory rather than voluntary"	"Less contamination in yellow bins"
"Introduce kerbside recycling of soft plastics"	"Reduce organic waste going to landfill"	"To educate people to know what belongs in the right bin"	"We don't want another tip in the area"	"Making red bin fortnightly pick up"	"Push for legislation to eliminate plastic packaging"	"Provide more recycling facilities"

4.4 Circular Economy

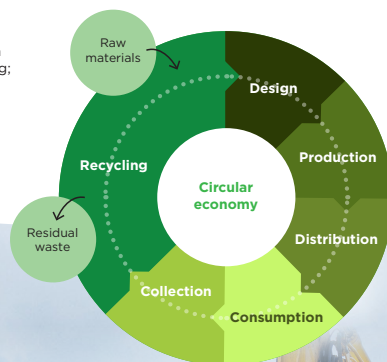
The Circular Economy is a more sustainable and conscious alternative to the standard linear economy, which is based on the model of taking resources, making products, and discarding these products as waste.

In a circular economy, products are kept within an ongoing system where they have been designed to be reused over and over for as long as possible to reduce the reliance on raw materials.

Council acknowledges the importance of this model, and will assist the community transition to a circular economy through actions including; education, future procurement, partnerships, benchmarking and improved resource management.

Maximising the use and value of resources brings major economic, social and environmental benefits. It also contributes to innovation, growth, job creation and prosperity, while reducing our impact on the environment.

The image below shows the stages and considerations that are crucial for a circular economy.



4.5 Waste Hierarchy

The waste hierarchy draws on the principle of causing less harm by avoiding and reducing waste, followed by reuse, recycling and recovery before treatment and finally disposal.

The waste hierarchy is recognised as providing important guidance on environmental impacts of different management options. It is not intended as a stand-alone tool, but rather can be considered alongside other tools and systems such as the circular economy.

Waste hierarchy pyramid



Section 5 Our Four Goals

Our four key goals were developed through stakeholder consultation, with the aim of defining our waste-related requirements and aspirations, and aligning goals that will guide us for the next 10 years.

Our goals are far reaching, but they are also connected. This combination allows this Strategy to build upon its actions, and remain adaptive over a long period.

Goal 1 Reduce Waste to Landfill

Landfill is a last resort for waste

The most effective way of managing waste, is to avoid creating it in the first place. This, in turn, reduces the impacts associated with production, consumption, transportation, processing and disposal. Council and the community need to ensure landfill is a last resort for resources.

It is essential that the life of our landfill is preserved for as long as possible. Like our raw materials, landfills are finite, and we are unlikely to see another landfill in the Illawarra.

Goal 2 Transition to a Circular Economy

A circular economy provides the best use of resources

A transition to a circular economy is a crucial step for the City of Wollongong to ensure resources are not going to waste. This is a transition we cannot do alone, and one that requires the involvement and input of Council, the community and the State and Federal Governments.

Legislation and design improvements are important factors in a successful transition to a circular economy, but they aren't the only factors. There are things that we can do now including reusing items when avoiding or reducing waste is not possible.

Council and the community must work together to see the value in our resources and ensure they are reused, repaired, or recycled before they are considered waste. Our current contracts for both FOGO and mattress recycling utilise local processing, with materials collected then entering the circular economy.

As technology, products and suppliers continue to emerge, we will look to incorporate circular economy practices into future Council operations and contracts to ensure potentially recyclable items are diverted from landfill.

Goal 3 Reduce our Waste Related Emissions

When it comes to emissions, less is best

Landfill waste, particularly organic content, emits greenhouse gas as it decomposes. As we're a Local Government that owns and operates a waste facility, landfilling operations make up a significant proportion of our operational emissions.

We have a responsibility to lead the way when it comes to reducing waste, managing our city's waste and building a circular economy. As new technologies evolve, particularly with the transition to clean energy we will see new waste challenges and opportunities emerge. Council will seek to explore innovative solutions to partner with industry to reduce waste across the community.

As the Wollongong Waste and Resource Recovery Park takes in waste from the wider community, Council does not have full control over the volume that enters the site each year. This makes it difficult to mitigate the variation in landfill emissions each year. However, we can have a positive impact by encouraging and supporting waste minimisation, the circular economy and recycling in the community, as well as increasing the site's landfill gas capture infrastructure.

In 2023 we saw the introduction of Australia's first zero emission waste collection vehicle in Wollongong. The Hydrogen Truck, which is now in service in our city is a great example of innovation through partnership and is a model that can be built upon to help reduce collection related emissions.

Goal 4 Improve our Waste Management

Getting waste management right is key

Effective waste management is essential to minimise our impact on the environment.

While a lot was achieved during the implementation of our last Strategy, it is time to build upon these successes and continue toward better practice improvements.

The Wollongong Waste and Resource Recovery Park (WWARRP) is the city's hub of waste management and improvements can be made to see this facility operate and function more efficiently and effectively into the future.

It is important in the lifetime of this Strategy we investigate and understand the city's broader waste profile, including waste that doesn't come into Council's facility. That way, as we review the master plan for the Park, we're able to maximise its use and potential into the future.

It is critical that we meet our legislative and licencing requirements while also operating in a sustainable and cost-effective way, so that the landfill is available to the community for as long as possible.

This goal includes all our waste-related activities, including public place waste and recycling, illegal dumping, regional partnerships and investment in waste technologies.



Section 6 Implementing the Strategy

6.1 Planning

Following the adoption of the Waste and Resource Recovery Strategy 2034, an implementation plan will be developed which will outline timeframes and budgets for the completion of the actions outlined below.

These actions have been created to address our four goals, the key actions of aligning documents as well as the needs and concerns of the community. There are some actions that can be achieved now, but there are also some actions that will be implemented in the future.

The actions will be tracked for progress and reviewed regularly. Actions from this Waste Strategy will be prioritised against other community needs for the allocation of resources as part of Council's annual Delivery Program and Operational Plan process. Funding and resourcing the implementation of individual actions will need to be embedded in Council's Resourcing Strategy.



6.2 Priorities and actions

Goal 1 - Reduce Waste to Landfill

Priorities	Actions
1.1 Continue pricing incentives to encourage source separation at the Wollongong Waste and Resource Recovery Park (WWARRP)	1.1.1 Review of WWARRP fees and charges relating to the pre separation of materials, e.g., materials that can be effectively diverted from landfill
1.2 Investigate technologies and partnerships for increased diversion of waste	1.2.1 Continue to seek partnerships and explore the market for emerging technology to increase waste diversion
1.3 Increase the FOGO service	1.3.1 Increase the participation rate of FOGO in multi-unit dwellings 1.3.2 Continue to focus our education approach on domestic waste organic contamination in the red bin stream 1.3.3 Continue to encourage and incentivise a smaller red bin service
1.4 Recover a greater number of recyclable materials through domestic waste collection	1.4.1 Research nationally and benchmark regionally to find sustainable and cost-effective end markets for a greater number of recyclable materials, including soft plastics. 1.4.2 Investigate options to implement soft plastic collection through the domestic recycling collection service
1.5 Identify and deliver greater opportunities to increase resource recovery at the WWARRP	1.5.1 Design and construct a new transfer station area that allows for greater source separation and diversion 1.5.2 Explore an alternate transfer station in the northern part of the city to assist with source separation
1.6 Minimise Council's and the community's waste generation through waste education	1.6.1 Develop a Council Waste Minimisation Plan which aligns with Council's sustainability goals 1.6.2 Undertake bin audits to guide education and develop programs to encourage the appropriate use of the 3-bin system and the importance of the waste hierarchy 1.6.3 Review our waste education methods to align with our four goals
1.7 Take advantage of grant opportunities as they arise	1.7.1 Apply for suitable grant projects that will support the reduction of waste to landfill

Goal 2 - Transition to a Circular Economy

Priorities	Actions
2.1 Support the Circular Economy through WCC procurement and WCC operations	2.1.1 All waste-related procurement to consider the Circular Economy through Council's Sustainable Procurement Policy
	2.1.2 Continue the phase out of single use plastic through Council's Single Use Plastics Policy
	2.1.3 Educate the community on the importance of the circular economy
2.2 Improve the functionality and appeal of the Community Recycling Centre (CRC)	2.2.1 Increase the number of accepted materials at the CRC, including polystyrene and textiles
	2.2.2 Investigate the introduction of a circular economy repair/repurposing hub within the CRC
	2.2.3 Invest in key infrastructure and partnerships within the CRC to improve functionality and appeal to the community
2.3 Strengthen regional council alliances to encourage greater investment of circular economy initiatives into the region	2.3.1 Work with regional councils to utilise the total combined resources to attract circular economy investment into the region
	2.3.2 Partner with businesses e.g., manufacturing companies, tertiary education and social enterprises to develop and support circular economy initiatives
	2.3.3 Advocate to the State and Federal Government for circular economy solutions and legislation
2.4 Investigate and determine a cost effective and sustainable solution for problematic waste in the region	2.4.1 Partner with regional councils, Illawarra Shoalhaven Joint Organisation (ISJO), and local community action groups to determine a sustainable solution for soft plastic recycling
	2.4.2 Continue to pursue recycling solutions for problem waste, e.g. textiles, vapes, solar panels and polystyrene





Goal 3 - Reduce Waste Related Emissions

Priorities	Actions
3.1 Integrate emissions reductions priorities into strategic planning framework for waste	3.1.1 Review the master plan for the WWARRP to maximise the utilisation of Council's waste assets
	3.1.2 Update WWARRP Greenhouse Gas Management Plan
	3.1.3 Investigate the footprint of the Wollongong waste profile, including waste that doesn't come to the WWARRP
3.2 Develop new waste diversion streams, practices and infrastructure as opportunities and technology become available	3.2.1 Consider increased screening options and future recycling opportunities to increase diversion at the WWARRP
	3.2.2 Consider options to increase waste diversion and reduction from commercial businesses (DCP Chapter)
	3.2.3 Trial available emerging technologies to reduce waste to landfill
3.3 Expand gas capture infrastructure at the Wollongong Waste and Resource Recovery Park (WWARRP) towards electricity generation	3.3.1 Continue to expand infrastructure as practically possible
	3.3.2 Develop future cell design with consideration for maximum gas capture efficiency
3.4 Review waste contracts to include emissions reduction priorities	3.4.1 Include sustainability and efficiency principles in future waste contract tenders to reduce Scope 3 emissions and encourage circular economy
	3.4.2 Investigate options for increasing efficiency of waste service (e.g. pilot opt in fortnightly landfill collection)

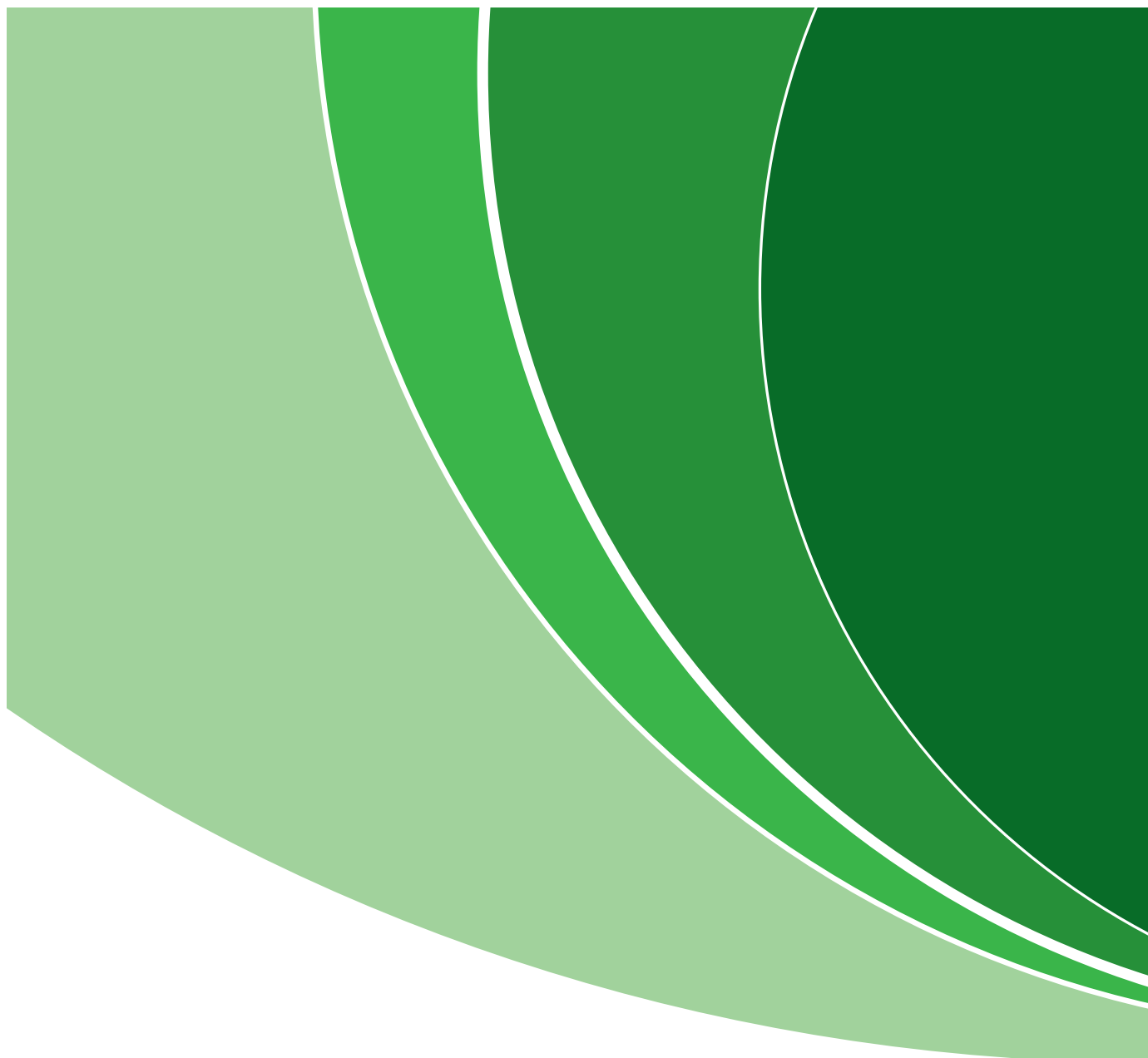
Goal 4 - Improve our Waste Management

Priorities	Actions
4.1 Update the Waste Management Chapter of Council's Development Control Plan (DCP)	4.1.1 Update the waste management chapter of the DCP to include FOGO
	4.1.2 Update the waste management chapter of the DCP to include the best practice construction and demolition waste management
4.2 Rehabilitate the former Helensburgh Waste Disposal Depot site	4.2.1 Effectively rehabilitate the former Helensburgh Waste Disposal site
4.3 Review of public place recycling and waste bins to increase resource recovery and reduce litter	4.3.1 Continue innovations for public place recycling e.g. baskets for container deposit collection
	4.3.2 Investigate emerging technologies for separation in public place bins
4.4 Measure and reduce illegal dumping within the Local Government Area (LGA)	4.4.1 Review the state of play of illegal dumping in the LGA across all areas of Council to determine the most effective way to measure it
	4.4.2 Develop a plan to reduce illegal dumping within the LGA
	4.4.3 Educate the community on the effects and costs of illegal dumping
4.5 Identify potential Alternate Waste Technology (AWT) opportunities	4.5.1 Explore innovative waste processing technologies, e.g., alternative waste treatment systems and waste to energy
	4.5.2 Seek out funding opportunities and partnerships for innovative technologies and processes
4.6 Improvements to the Wollongong Waste & Resource Recovery Park (WWARRP)	4.6.1 Continued improvement of our leachate management
	4.6.2 Continued improvement of our stormwater management
	4.6.3 Continued improvement of capping of landfill areas
	4.6.4 Upgrade Council's waste management facilities to be user friendly to the community and promote diversion
4.7 Develop an emergency waste management plan	4.7.1 Support the community with an emergency waste management plan



6.3 Measures





From the mountains to the sea, we value and protect our natural environment and will be leaders in building an educated, creative, sustainable and connected community.

We value and protect our environment

We have an innovative and sustainable economy

Wollongong is a creative, vibrant city

We are a connected and engaged community

We have a healthy community in a liveable city

We have affordable and accessible transport