



Regional Strategy 2022-2027

nirw
NORTHERN INLAND REGIONAL WASTE
waste matters in our region

We acknowledge the traditional custodians of the land on which we live and work and pay our respects to Elders past, present and future.

We recognise the connection to their land, waters, and surrounding communities and acknowledge their history here on this land.

Through thoughtful and collaborative approaches, we are committed to caring for Country, in the past, now and into the future. We recognise the knowledge embedded forever in Aboriginal and Torres Strait Islander Peoples' custodianship of Country and culture.



Acknowledgements

The 12 NIRW member Councils are acknowledged for their valuable time, input and contributions to waste management education and resource recovery projects across our region



This report has been prepared by ASK Waste Management. The information in this document is current as of June 2022.

While all professional care has been undertaken in preparing the document, ASK Waste Management accepts no liability for loss or damages incurred due to reliance on its content.



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Strategy Outline

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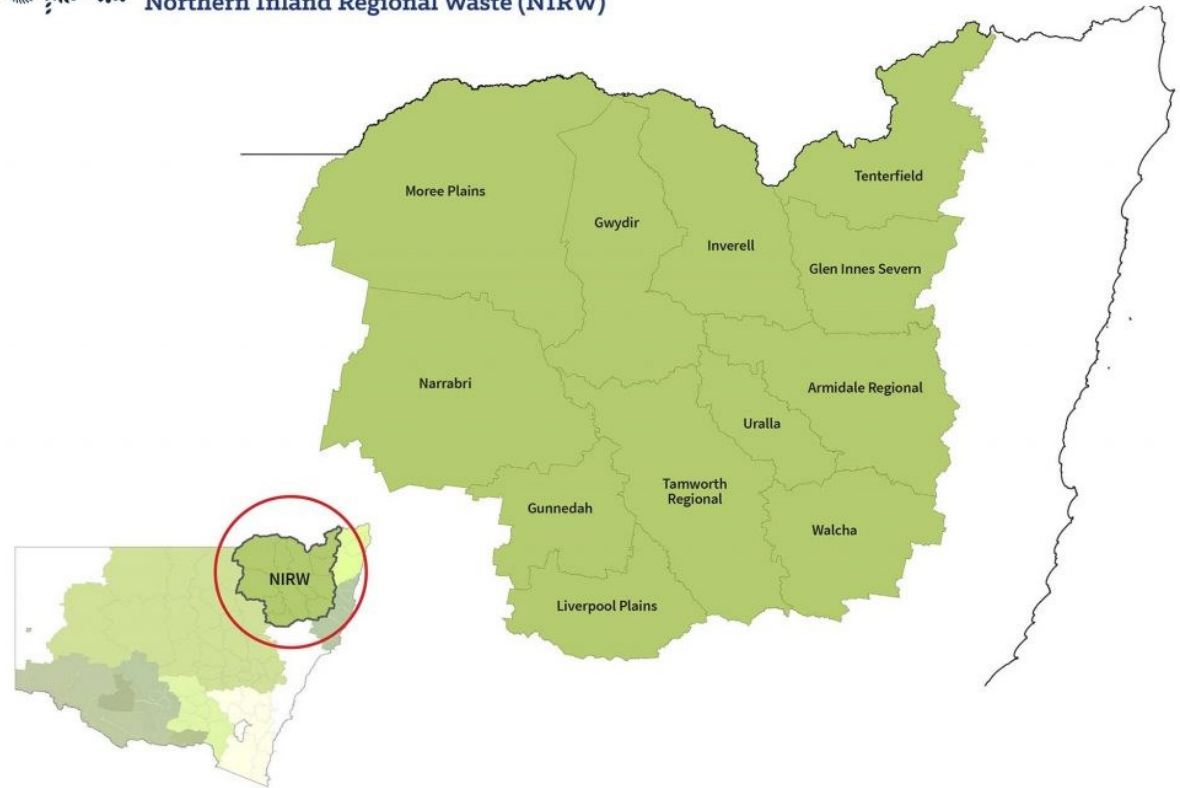
Introduction

Our region

NIRW is a voluntary regional waste management group representing Councils in the New England and North Western region of New South Wales. The geographical region of 99,754km² is located halfway between Sydney and Brisbane.

NIRW has 12 member Councils involved in the group;

- Armidale Regional Council
- Glen Innes Severn Council
- Gunnedah Shire Council
- Gwydir Shire Council
- Inverell Shire Council
- Liverpool Plains Shire Council
- Moree Plains Shire Council
- Narrabri Shire Council
- Tamworth Regional Council
- Tenterfield Shire Council
- Uralla Shire Council
- Walcha Council



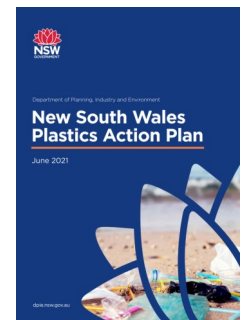
NIRW is a voluntary group, allowing members to maintain flexibility concerning their involvement in the group. Together NIRW works towards better regional outcomes, leading projects and programs with a strategic regional approach.

Drivers and Influencers

Various policy and legislative requirements, from the national level through to the local level, drive the NIRW regional strategy.

This strategy aligns with the; *NSW Waste and Sustainable Material Strategy 2014, Stage 1 2021-2027 (WaSM)*, *NSW EPA Waste Delivery Plan* and the *NSW Plastics Action Plan*.

Overseas & Federal	National Waste Policy 2018		National Product Stewardship Schemes	China National Sword Policy
	National Waste Policy Action Plan 2019	Action Plan targets	National Food Waste Strategy	COAG Export Ban
State	POEO Act 1997	WARR Act 2001	POEO Waste Regulation 2014	Container Deposit Scheme 2017
	NSW Waste and Environment Levy	WaSM 2041	NSW Plastics Action Plan	NSW EPA Waste Delivery Plan
Regional & Local	NIRW Waste Strategy		Local Council Waste Management Plans	Local Council Strategic Plans
	NIRW objectives and targets			



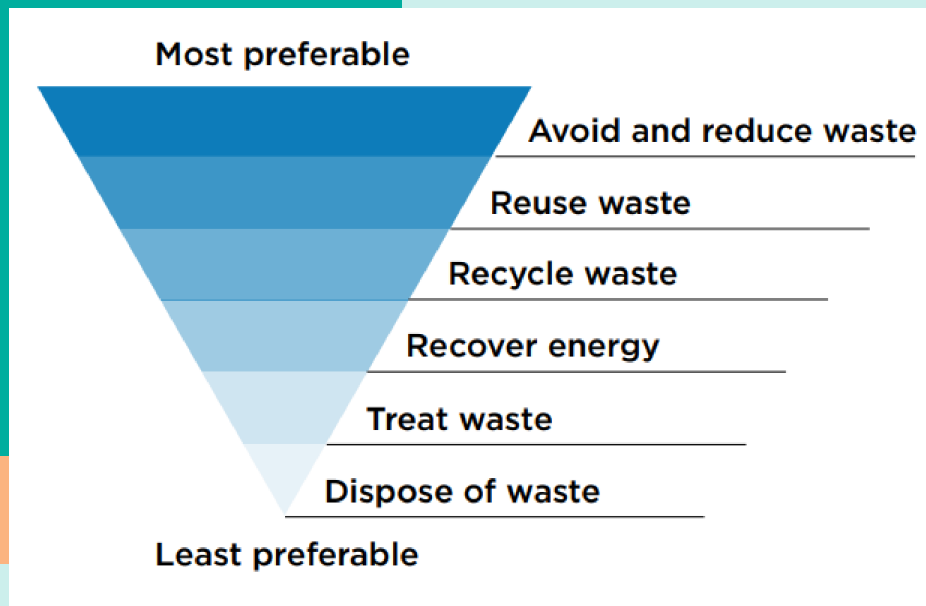
Guiding principles

The Waste Hierarchy

The Waste Hierarchy provides the preferential order of approaches to achieve efficient resource use.

The Waste Hierarchy provides a framework for decision-making, highlighting the need to work towards approaches higher up the pyramid, moving up from a focus on recycling to avoidance and reuse.

The goal is to avoid unnecessary consumption and emphasise approaches where resources are most efficiently used.



NSW EPA, 2019 (Circ.
Econ. Policy

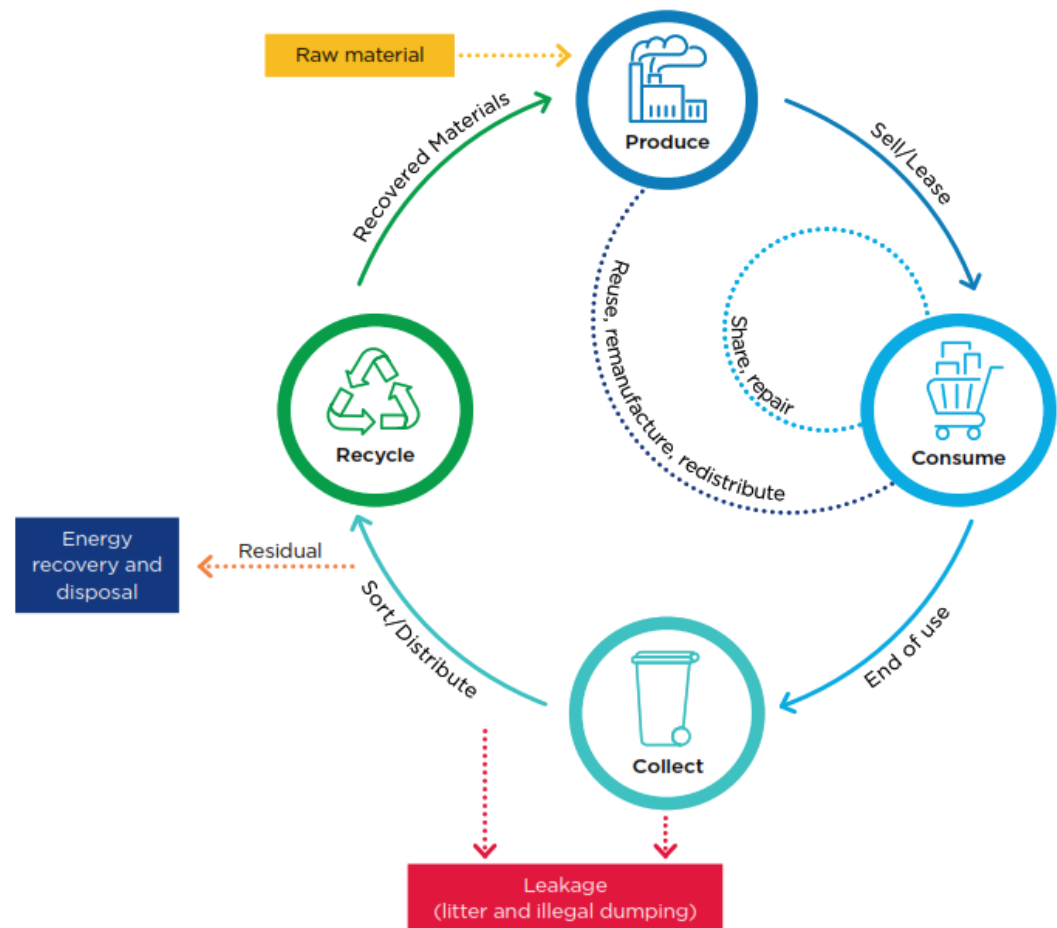
The Circular Economy

A circular economy refers to the flow of materials and energy – it moves away from the linear 'take, make, use and dispose' model to one that keeps materials and energy circulating in the economy for as long as possible.

Three key principles of a circular economy:

1. Design out waste and pollution
2. Keep products and materials in use
3. regenerate natural systems.

The circular economy encourages minimising waste and promoting the reuse of resources to keep them in use for longer, improving their productivity.



Where are we today?



Our waste services

All Councils in the NIRW group provide kerbside residual and recycling services. Some Councils have introduced an organics collection, 4 with only a garden organics collection and another 4 with a food and garden organics collection.

These services are provided in urban areas. Some households in rural or remote locations are not beneficiaries of these services. These community members must deliver their waste and recycling to a facility in their region.

	Residual Waste	Packaging Recyclables	Garden Organics (GO)	Food Organics (FOGO)
Council	Container & Frequency			
Armidale Regional	1 40L Weekly	50L* Weekly	240L Fortnightly	
Glenn Innes Severn	1 40L Weekly	240L Fortnightly	No service	
Gunnedah Shire	1 40L Weekly	240L Fortnightly	240L Fortnightly	No service
Gwydir Shire	1 40L Weekly	360L Fortnightly	240L Fortnightly	
Inverell Shire	1 40L Weekly	240L Fortnightly	No service	
Liverpool Plains Shire	1 40L Weekly	240L Fortnightly	No service	
Moree Plains Shire	1 40L Weekly	240L Fortnightly	240L Fortnightly	
Narrabri Shire	1 40L Weekly	240L Fortnightly	240L Fortnightly	
Tamworth Regional	240L Weekly	240L Fortnightly	240L Fortnightly	Trial only
Tenterfield Shire	1 40L Weekly	240L Fortnightly	No service	
Uralla Shire	1 40L Weekly	240L Weekly	240L Fortnightly	No service
Walcha	1 40L Weekly	240L Fortnightly	240L Fortnightly	No service

* Crate

Key infrastructure

The NIRW member councils operate a range of waste management facilities, these include landfills, transfer stations, material recovery facilities (MRF), Community Recycling Centres (CRC), and organics processing facilities.

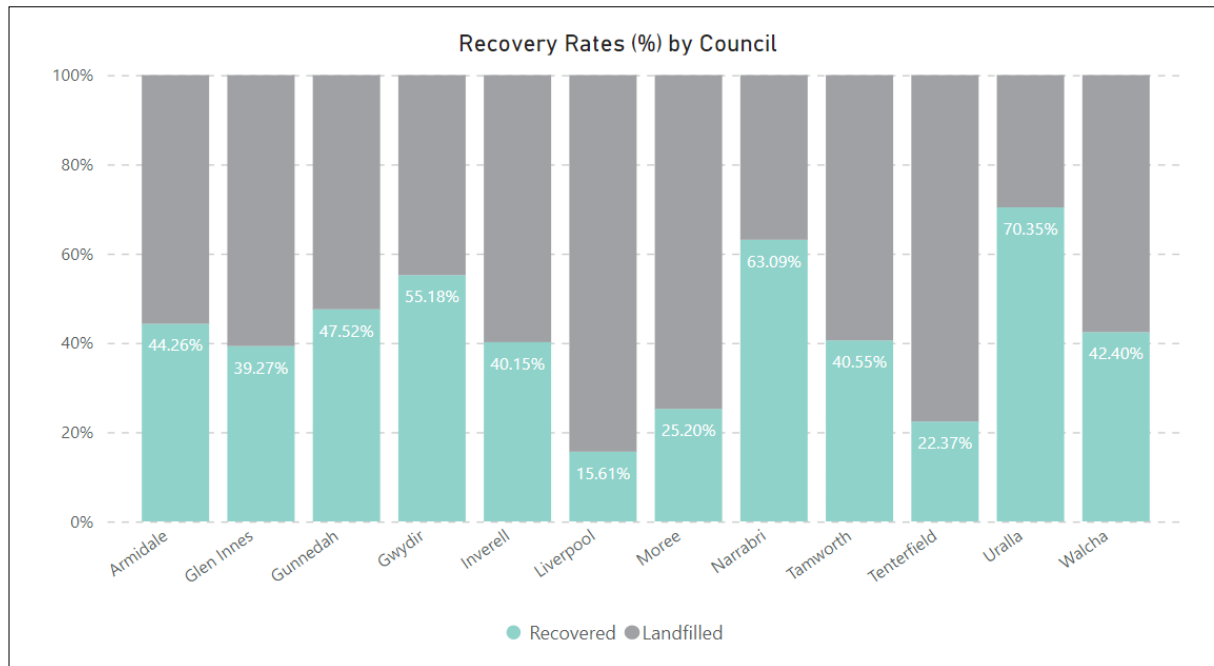
Council	Primary Landfill	MRF	CRC	Facilities
Armidale Regional	Armidale Waste Management Facility	✓	✓	1 landfill and 4 transfer stations
Glen Innes Severn	Glen Innes Landfill	✓	✓	4 landfills
Gunnedah Shire	Gunnedah Waste Management Depot	✓	✓	1 landfill, 2 waste depots, 2 transfer stations and 3 mobile services
Gwydir Shire	Warialda Landfill (& Bingara Landfill)	✗	✗	5 landfills, 1 garbage depot and 1 transfer station
Inverell Shire	Inverell Landfill	✓	✓	1 landfill and 4 transfer stations
Liverpool Plains Shire	Quirindi Waste Management Facility	✓	✗	2 landfills and 5 transfer stations
Moree Plains Shire	Moree Waste Management Facility	✗	✓	1 landfill, 8 waste facilities and 1 transfer station
Narrabri Shire	Narrabri Waste Management Facility	✓	✓	1 landfill and 8 rural transfer stations
Tamworth Regional	Tamworth Landfill	✗	✓	3 landfills and 7 transfer stations
Tenterfield Shire	Tenterfield Transfer Station	✗	✓	1 landfill and 5 transfer stations
Uralla Shire	Uralla Landfill	✓	✓	1 landfill, 1 transfer station and 1 recycling drop-off
Walcha	Walcha Waste Depot	✗	✓	1 landfill, 2 transfer stations and 2 recycling hubs

FOGO in the region

Council	GO Processing	FOGO Processing
Armidale Regional	✓	✓
Glenn Innes Severn	Mulched/Used On-Site	×
Gunnedah Shire	Mulched/Used On-Site	×
Gwydir Shire	Mulched/Used On-Site	Composted at Moree
Inverell Shire	Mulched/Used On-Site	×
Liverpool Plains Shire	×	×
Moree Plains	Mulched/Used On-Site	✓
Narrabri Shire	Mulched at Moree	Composted at Moree
Tamworth Regional	✓	×
Tenterfield Shire	×	×
Uralla Shire	✓	×
Walcha	Mulched/Used On-Site	×



Waste Generation and Resource Recovery



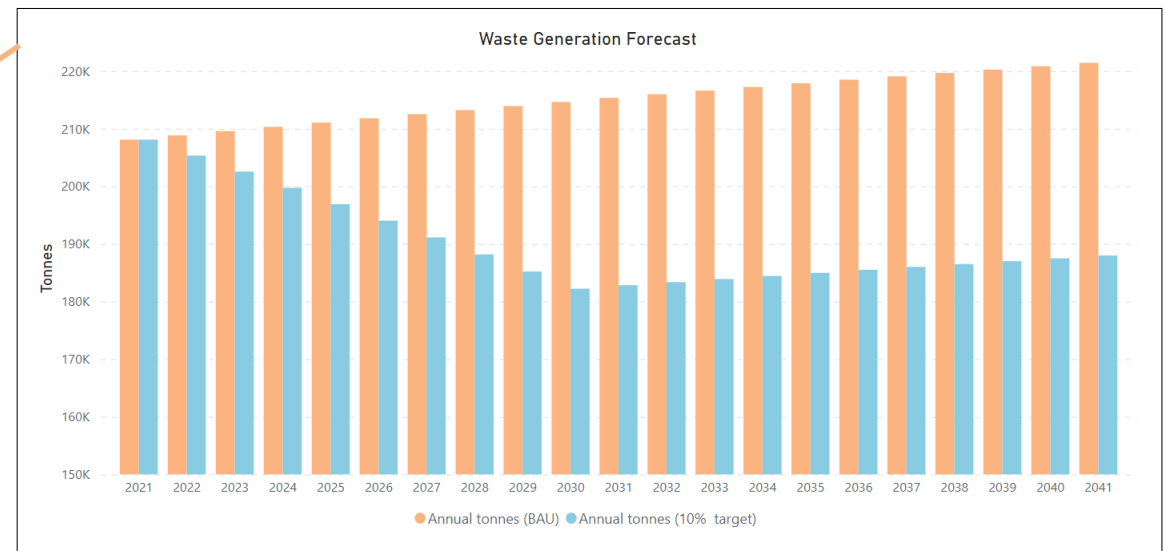
Recovery Rates

A break down by each NIRW member council of their recovery rates—shown as a percentage of waste recovered versus waste landfilled.

NIRW Material Flow Report, 2022

Waste Projections

Showing the possible forecast for waste generation in NIRW's region. Using forecasted population figures and per capita tonnage as both business as usual (BAU) and if the target of a 10% reduction in waste generated per person by 2030 is achieved.



Key achievements from the NIRW Regional Waste Strategy 2017-2021

Community Recycling Centres -

Communication and Education Plan

The NIRW region is home to 11 Community Recycling Centres (CRCs). NIRW developed a regional communication and education plan involving advertising campaigns to encourage community use of CRCs.

The CRCs collected over 131 tonnes of materials, and this program generated community feedback to assist in future educational campaigns and resources.



CRC Problem Waste Storage Box

DIY at Home Kit

Following the success of the education campaign, NIRW designed CRC Problem Waste storage kits for community members to store these waste items like light bulbs and household batteries until they can be taken to a CRC.

NIRW distributed over 5,000 CRC DIY Kits to their member councils alongside a social media campaign.



Recycle Right

This education program used a range of media platforms to promote community awareness of:

- Materials Recovery Facilities
- National Recycling Week
- Recycling at home and office



Recycling Behaviour Change Program

NIRW analysed recycling contamination data with a focus on plastic bag contamination. The analysis informed the education programs in the region. Outcomes of the program included a decrease in recycling contamination rates and improved recycling habits in the community.

Regional Contracts

NIRW sourced regional contracts for various items to be collected, recovered, processed, and kept out of landfills. The contracts include:

- DrumMuster container collection
- Scrap ferrous metal, non-ferrous metal, lead acid batteries and e-waste
- Tyre collection and processing
- Used motor oil, containers, filters and rags collection and processing
- Mattress collection and processing
- Crushing and screening of concrete, brick and tile
- Greenwaste processing



Where do we want to get to?

Vision

“Collaborative leadership of a distinctive regional approach to sustainable waste management and resource recovery”

Targets

01

Reduce total waste generated by 10% per person by 2030

02

Have an 80% average recovery rate from all waste streams by 2030

03

Significantly increase the use of recycled content by governments and industry

04

Phase out problematic and unnecessary plastics by 2025

05

Halve the amount of organic waste sent to landfill

06

Reduce litter by 60% by 2030 and plastics litter by 30% by 2025

07

Triple the plastics recycling rate by 2030

Strategic Objectives

No.	Objectives	WaSM Priority Areas			NIRW Themes
		Infrastructure and Service Needs	Reduce carbon emissions	Protect human health and the environment	
1	Contribute to the reduction of total waste generated by 10% per person by 2030		✓	✓	- Avoid or Reduce - Recover Resources
2	Contribute to average recovery rate of 80% for all streams by 2030	✓	✓	✓	- Recover Resources
3	Continue to reduce organic waste sent to landfill	✓	✓		- Avoid or Reduce - Recover Resources
4	Support the NSW Government to meet their target of net Zero emissions by 2050 through better waste and materials management		✓	✓	- Protect the Environment
5	Investigate and support innovative circular solutions to regional waste management	✓	✓		- Avoid or Reduce - Recover Resources
6	Engage the community to correctly dispose of problem and hazardous waste			✓	- Protect the Environment
7	Support the implementation of the NSW Plastics Plan		✓	✓	- Recover Resources - Protect the Environment
8	Reduce the impact of litter and/or Illegal dumping on the environment			✓	- Protect the Environment
9	Actively encourage equity in waste and resource recovery programs within vulnerable communities	✓		✓	- Strategic Collaboration
10	Encourage Councils to achieve sustainable procurement outcomes		✓		- Avoid or Reduce - Recover Resources
11	Support future waste and resource recovery infrastructure needs	✓			- Recover Resources - Strategic Collaboration
12	Facilitate regional collaboration to improve disaster resilience	✓		✓	- Strategic Collaboration
13	Facilitate regional collaboration for improved waste management planning	✓	✓		- Strategic Collaboration
14	Continue to foster effective communication and collaboration with all stakeholders	✓			- Strategic Collaboration
15	Continue to advocate and contribute to policy decisions on behalf RWG members	✓			- Strategic Collaboration

How are we going to get there?

Theme 1: Avoid or Reduce

While it's important to recover and recycle materials, it is best to avoid generating waste altogether.

The quantity of waste a business, home or community produces is simply a reflection of inefficiency. Avoiding or reusing waste saves time, money and resources.



Action	Issue	Aim
Textiles		
National scheme leading to a regional campaign	Clothing and textile industry is linear while its products are slow to breakdown. Rise of fast fashion culture.	Stay informed and be ready to develop a regional textiles campaign.
Single-use plastics		
Support the NSW program	Single-use plastics are harmful to the environment and result in litter and poor practices in the community.	Reduce plastic waste generation.

Theme 2: Recover Resources

Strategies to embrace the circular economy and divert waste from landfill will assist in extending the operational life of facilities, maximising the recycling of resources, and minimising the risk of environmental impact.

However, each potential measure must be comprehensively assessed to ensure it can be resourced, is financially viable and is sustainable in the long term.



Action	Issue	Aim
Key regional infrastructure feasibility		
Feasibility study for FOGO processing facilities	Economies of scale often result in significant cost savings for waste processing. Establishing key regional infrastructure to be used by multiple Councils could result in lower unit costs and increased efficiency.	Collate information to explore circular economic opportunities collaborating with local industry
Feasibility study for Material Recover Facilities		
Feasibility study for Landfills		
Recycled content product suppliers		
'The Green Pages'	Without increased use and demand for recycled content products and materials, the circular economy will not be supported, and the linear economic model will continue to dominate	Identify and promote recycled content product suppliers in the region
Circular economy		
Regional collaboration with industry	With no central information about key waste types generated, demand for raw materials, and the industry's existing and planned activities to support the circular economy, Council are likely to be missing opportunities for collaboration.	Collate information to explore circular economic opportunities collaborating with local industry
FOGO		
Feasibility and planning—regional assessment	The majority of the Councils have no FOGO collection, processing infrastructure or established market demand for compost in their area. Smaller Councils face the challenge of a lack of economies of scale, leading to higher costs per tonne to provide a FOGO service. Without a market demand for the product (compost) or the production of poor quality compost, the supply chain will fail .	To introduce an optimal and successful FOGO service throughout the NIRW region
Feasibility for rural councils—individual assessment including risk assessment		
Market development		
Education and awareness		

Action	Issue	Aim
Problem Wastes		
Chemical CleanOut	Low-volume—highly-toxic waste streams present a high risk to the environment, and if disposed of via the kerbside bin, these materials can increase the concentration of leachate or increase the risk of impact to groundwater via poorer quality liners.	To maximise diversion of household problem wastes from local landfills
CRC Communication and Education Plan	Community understanding of the CRC services and why to use them is important to divert these materials from local landfills. The accumulation of these materials at residential and rural properties results in a risk to the environment from spillage due to an accident, flood, fire or incorrect disposal.	
Minimise Illegal Dumping		
Prevention program	Illegal dumping causes harm to the environment, wildlife and human health. It is unsightly and costly to clear up. A poor and uncared-for environment leads to more dumping, other illegal activities and antisocial behaviour.	To prevent illegal dumping and restrict the falsifying of records by illegal dumpers
Electronic waste dockets at rural facilities	The lack of power at some rural sites restricts the effectiveness of the facility operations, particularly with the inability to issue electronic waste dockets, as this enables illegal dumpers to falsify records.	
Minimise Littering in the Region		
Establish targets and objectives	Littering causes harm to the environment, wildlife and human health. It is unsightly and costly to clear up. A poor and uncared-for environment leads to more littering and antisocial behaviour.	To reduce littering with a regional approach
Implement best practice litter prevention measures		
Education		
Asbestos Management		
Education	Incorrect handling of asbestos waste results in significant health risks for residents, tradespeople and waste facility staff.	To minimize the public and staff health risk from asbestos
Asbestos awareness and management campaign		

Theme 3: Protect the Environment

To protect the environment, waste infrastructure and operations need to be managed to meet best practice standards and regulations. This will assist in minimising the risk of environmental damage or pollution, extending the life of facilities and reducing costs. The following actions primarily focus on protecting the environment and minimising the negative impacts of waste.



Theme 4: Strategic Collaboration

Strategies and actions to strengthen regional collaboration and cooperation in the delivery and improvement of waste management services and adoption of circular economy practices across the region. NIRW facilitates the development of regional-based projects, funding applications and coordinating implementation. The following actions primarily focus on strategic regional collaboration by NIRW with the member Councils to increase efficiency and effectiveness in achieving the Strategy's objectives.

Action	Issue	Aim
Regional Contracts		
Continuation and renewal of regional contracts	The increased mobilisation cost and smaller size of contracts can result in no bids when contract RFQs are released or poor value-for-money quotations.	Providing cost-effective panel of contractors for recovery services
Establish new regional contracts for beneficial services		
Strategy Documentation		
Develop templates and guidelines for: Illegal Dumping Strategy, Waste and Resource Recovery Education Strategy, FOGO Strategy, and Kerbside Services Strategy	Without clear key strategies relating to waste and the Circular Economy, there is a risk of minimal progress, inefficiencies and ad hoc decision-making.	Efficient development of waste-related strategies by Councils
Disaster Waste Management		
Produce Disaster Waste Management Plans	Disasters can generate significant quantities of waste, resulting in significant environmental and public health impacts. Before communities can rebuild after emergencies, they must first safely remove and dispose of waste generated from the incidents.	Increased level of regional preparedness for management of waste following a disaster
Agree upon MOUs for sharing infrastructure	Clean-up and disposal of this waste can overwhelm the operational capabilities of Councils . Lack of planning can be costly .	
Landfills—Whole of Life Costing		
Calculate the WoL cost for waste disposal	Incorrect handling of asbestos waste results in significant health risks for residents, tradespeople and waste facility staff.	To minimize the public and staff health risk from asbestos exposure
Ensure all landfills have up-to-date Landfill Closure Management Plans		
Establish a waste reserve to ensure adequate funds for future infrastructure and site closure.		
Training		
Operational training	Lack of knowledge can lead to ad-hoc operational practices leading to inefficiency, increased environmental risk and non-compliance.	Improving regional knowledge
Topical and technical training		
Councillor Awareness		
Develop an education package for Councillors in the region	Councillors need a thorough understanding of the waste management industry, government policy, targets and long-term financial plans in order to make good, informed decisions for their community's waste services.	Councillors to be aware of their obligations and have a thorough understanding of the sector to enable good decision making

Theme 5: NIRW Governance

As a regional waste group, NIRW works collaboratively with member Councils to promote circular economy principles and better outcomes in waste management and resource recovery in the region. Ensuring the efficient operation of NIRW requires planning, governance and reporting. The following actions primarily focus on mechanisms and measures to ensure NIRW operates efficiently, meets its funding requirements and communicates with the wider sector.

Action	Issue	Aim
Meetings, Coordination, and Collaboration		
Continue to meet funding and administrative obligations	The administrative and operational obligations required under the EPA funding must be met for the NIRW to exist.	Ensuring the smooth running of NIRW
Coordinate regional activities		
Facilitate collaboration		
Consultation and lobbying of the NSW and Federal Government		
Collate and prepare documentation	With limited resources, not all consultation papers would be responded to by individual Councils, resulting in reduced feedback or lobbying from the region.	Ensuring the regions voice is heard
Consult and lobby government stakeholders		
Participation in RENEW NSW		
Attend and proactively engage with RENEW NSW	RENEW provides the mechanism to collaborate with and learn from other regional waste groups in NSW.	Statewide understanding and collaboration



Implementation and review



Implementation

The implementation plan will be regularly reviewed and updated. This will occur at least annually to align with the EPA's yearly action plan submission.

Regular review is imperative as the waste industry is constantly evolving to meet changes in regulations and community priorities.

Funding

Funding for the actions of NIRW will be sourced from EPA funding streams or council co-contributions. NIRW internal costs will cover some actions.

How will we measure success

NIRW's monitoring and evaluation plan provides a framework for measuring the group's performance against its strategic objectives and targets.

In addition to fulfilling the NSW EPA reporting requirements, NIRW will review its projects and programs to assess their relevance, efficiency and effectiveness.

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