



# rethinking waste

A summary of NetWaste's  
Strategic Waste Plan.  
2012 - 2015



# NetWaste and strategic waste management

**NetWaste is a voluntary regional waste group formed in 1995. We are focused on collaborative approaches to waste and resource management. Covering over 39% of the state, benefits are delivered to 28 council member councils in regional NSW.**

## **We've come a long way...**

In the beginning, our focus was around service efficiencies through regional contracts and ensuring the essential waste service requirements were met. This focus has evolved significantly, with NetWaste delivering outcomes through not only regional service arrangements, but through targeted education and community engagement programs and member Council enablement and skills enhancement.

## **Our region, our challenges**

NetWaste member council local government areas display a diverse mix of urban centres, rural enterprise and agricultural influences, commercial businesses, industrial complexes, tourist facilities and infrastructure utilities, all of which require some form of waste management. When comparing metropolitan areas and the isolation experienced in the NetWaste region, travel distances between premises can be significant and the synergies that can be gained through large populations cannot be matched. It is therefore reasonable to expect that waste management costs per unit would be greater for rural and regional residents than for their metropolitan counterparts, especially considering the limited range of waste services available.

The NetWaste alliance helps to overcome some of the issues facing regional organisations and the regional contracts have been a very successful example of this collaboration. Some NetWaste councils have already started their journey through the joint waste and recycling collection contract that binds the councils of Orange, Blayney, Parkes, Forbes and Cabonne. There may be opportunities for future alliances and partnerships in waste management, including infrastructure sharing.

The benefits of a collaborative approach are further highlighted by partnerships that have been established between individual Councils outside of formal regional contracts such as those between Gilgandra and Bogan and Cowra & Weddin Shire Councils to process kerbside recycling. Without such partnerships, these services would not be offered in regional areas.

NetWaste also recognises the importance of education as a critical support component for our region and promotes community engagement and the need for Council enablement to deliver specific outcomes.

## **Our strategy**

NetWaste's vision is to set the benchmark for regional waste management through meeting strategic objectives, including:

- reducing the amount of waste being generated
- increasing resource recovery
- reducing greenhouse gas emissions
- delivering environmentally responsible waste management systems
- improving awareness of waste minimisation and resource recovery principles and influencing behavioural change
- improving recycling and composting
- reducing litter and illegal dumping
- managing problem wastes
- facilitating information exchange and skills development.

The development of the strategic waste plan's objectives was shaped by a number of current and emerging influences that have their basis in State and Federal Government waste policies. The most influential policy is the NSW Government's Waste Avoidance and Resource Recovery strategy and the 'Reducing Waste Implementation Strategy: 2011–15'. In 2001, the NSW Government introduced the Waste Avoidance and Resource Recovery Act. In a reassessment ten years later, a revision known as the Richmond Review was released. Insights from the Review have been central to NetWaste's Strategic Waste Action Plan.



# What NetWaste provides its members and our communities



## Guiding principles

There are a number of guiding principles that support actions within the works programs of the strategic waste plan. We will:

- find local solutions to address local waste problems
- balance our ambitions with our capacity and ensure realism prevails over idealism
- match effort with reward
- maximise net benefit to the whole community and consider social, economic and environmental factors
- consider state and national government goals and policies together with technological advances and trends within the waste industry
- recognise that rural and regional NSW have different influences from those affecting the Sydney Metropolitan Area and the Extended Regulated Area
- consider opportunities offered by shared responsibility through partnerships with industry and alliances with other government agencies and councils
- work cooperatively to achieve the common purpose where the advanced councils support those who are in the developing phases.
- focus on source separation as a first option through cultural change and aiding source separation initiatives.
- employ cost/benefit decision making
- recognise and manage risk.
- make decisions today that ensure the health, diversity and the preservation of the environment are maintained or enhanced for the benefit of future generations.

## Climate change

Landfill operations generate significant quantities of greenhouse gases in carbon dioxide and methane, and these will need to be offset under any emissions trading scheme. Given that one tonne of waste landfilled generates about one tonne of carbon dioxide equivalent; the cost of purchasing carbon offsets for the larger impacted NetWaste member councils will be significant.

## Issues and legislation

The development of NetWaste's strategic waste plan has taken various government policies, legislation and guidelines into account. This ensures the strategy can be effectively implemented at local, state and national levels while considering the global context with its focus on climate change.

In summary, key waste and resource management matters include the Waste and Environment Levy, Waste Avoidance and Resource Recovery Act 2001 (and the 2011 Richmond Review), National Waste Policy, and the National Packaging Covenant. For detailed information, refer to the full strategy.

*A summary of NetWaste's strategic waste plan*



# What we're focused on

The recommendations of the 2011 Richmond Review of the Waste Avoidance and Resource Recovery Act have influenced six key focus areas of this strategic waste plan. They are outlined below.



## Enablement

Where skills and capability of those tasked with delivering the strategic waste plan will be expanded and enhanced.



## Financial Systems

Where systems are set in place to effectively manage funding of projects and administration.



## Infrastructure

Where facilities are developed to collect, process or aggregate recovered resources.



## Engagement

Where emphasis is placed on promotion and education to mobilise householders and business to recycle and avoid waste generation.



## Resource Recovery

Where improvement in the efficiency and performance of existing infrastructure and services are the focus.



## Problem Wastes

Where these are managed through special collection services, by providing drop off centres or targeted education.

## Enablement

> Our goal is to empower member councils to better address the waste management challenges within their communities.

**Skills enhancement** > Waste management improvement opportunities have been recognised within the strategic waste plan, however skills enhancement is needed to support Councils' implementation of the strategic waste plan through regional training opportunities.

What we are going to do:

- develop and maintain a training plan in consultation with NetWaste staff and members and implement the recommended actions.

**Learning resources** > NetWaste has a range of resources available to member council representatives and to the general public to facilitate the development of knowledge in waste minimisation and resource recovery. These resources require further development, updating and maintaining.

What we are going to do:

- establish a library that contains a variety of learning resources
- further develop and maintain the NetWaste resources available to Council members and the general public
- actively encourage member participation in the use of the library resources.

**Communications strategy** > The NetWaste communications strategy is in need of review to ensure relevance and effectiveness particularly in recognition of the growth of social media.

What we are going to do:

- review the NetWaste communications strategy and implement recommendations.
- continue to update and maintain the NetWaste website.

**Member attendance at forums** > NetWaste forums, steering committee meetings and workshops are most effective when they are rotated throughout the NetWaste region

## Financial Systems

What we are going to do:

- organise and host regular NetWaste forums and steering committee meetings in conjunction with learning workshops
- conduct annual reviews of NetWaste meeting structures and content
- include learning workshops in the enablement training plan.

**Review meeting attendance** > Few NetWaste member council representatives are afforded the opportunity to attend the quarterly Renew meetings hosted by the NSW Environment Protection Authority (EPA).

What we are going to do:

- reports will be provided to NetWaste members on quarterly Renew NSW forum outcomes
- gauge interest and encourage NetWaste members to attend Renew forums whenever these are conducted by EPS in the NetWaste region or Renew meetings held in conjunction with the Coffs Harbour Waste conference or similar co-ordinated events.

**> Our goal is to provide financial management systems to enable successful delivery of the strategy objectives in the defined time frames.**

**Lack of budget certainty** > Sponsorship funding from the NSW Environment Protection Authority (EPA) is in three-year cycles, with no guarantee of ongoing support.

What we are going to do:

- prepare a quality control plan that will ensure NetWaste's obligations to EPS are being met.

**Funding of activities** > The funding of works programs and administration support constitutes the majority of expenditure of the NetWaste budget. Ensuring responsible management of expenditure and the maintenance of balanced budgets is a critical success factor.

What we are going to do:

- undertake quarterly reviews of the NetWaste budget by the Steering committee
- prepare annual reconciliation statements of financial performance.

**Securing grant funding** > Opportunities exist for the funding of additional programs through government grants. Taking advantage of these opportunities can be time-consuming and labour-intensive.

What we are going to do:

- pursue grant opportunities as they become available.

**Financial modelling** > Not all NetWaste member councils have medium-term financial models in place to manage their waste activities.

What we are going to do:

- include workshops on preparing medium term financial models into the training plan.

< Sue Clarke setting up a worm farm in Millthorpe for one of the local businesses (a partnership project with CENTROC)



## Engagement

> **Our goal is to develop meaningful connectivity with all stakeholders within the community in the delivery of waste education and awareness in the achievement of strategic goals by creating a sense of community ownership.**

**Waste education plan** > Although NetWaste has historically recognised community education and awareness-raising key objectives and has achieved significant positive outcomes in this area, a formal waste education plan has not been developed.

What we are going to do:

- prepare a process map to guide development of the Waste Education Plan (WEP)
- undertake stakeholder waste surveys and incorporate findings into the annual revision of strategy programs and future planning.

**Lost recycling opportunities** > Significant quantities of paper, plastics, glass and organics continue to be placed in the household residual waste receptacle.

What we are going to do:

- prepare and implement a waste education plan that includes sub-programs to improve resource recovery from the domestic waste stream.

**Low resource recovery rates** > Council and industry sector resource recovery levels are significantly below the WARR strategy goal of 63%.

What we are going to do:

- prepare and implement a waste education plan
- provide assisted waste audits to the C&I sector.

### Hugh Browning – a man of action.

He is only small, but Hugh has a BIG job. One of his teachers introduced him to the world of worms and since then he has built his own worm farm at home and helped friends to do the same. He has always been interested in gardening but since learning about worm farms and what they can do for his veggie patch at home, his garden has been thriving. He explained that veggies grown at home are yummiier than the ones that you buy at the shop and his favourite ones are strawberries and snow peas.



Top: Menindee's No.1 Recycler – Marie Coombe has donated well over \$70,000 to the Royal Flying Doctor Service thanks to her recycling enterprise in Menindee.

Above: Building a no-dig garden with students at Blayney Public School.

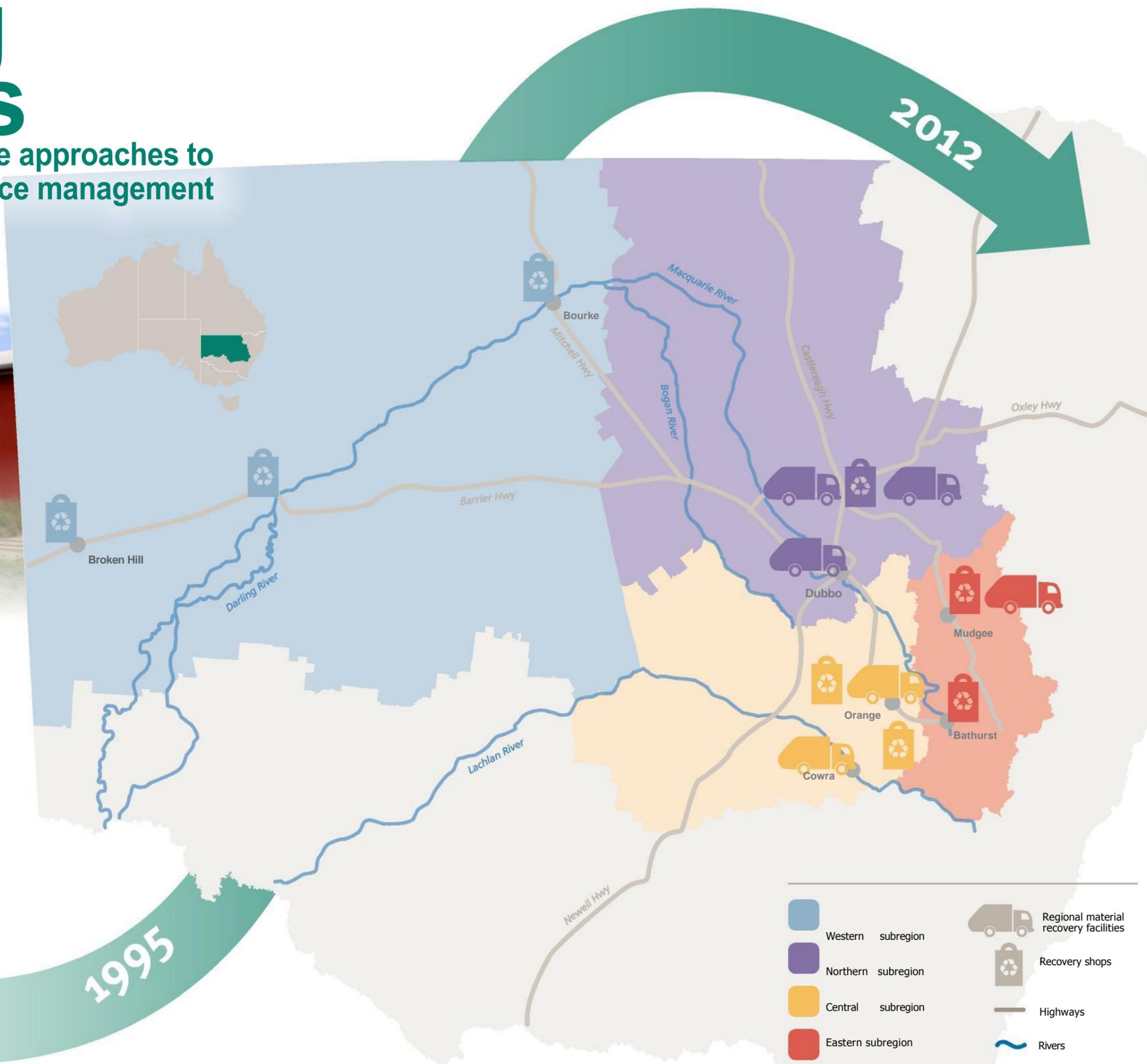


# Celebrating 17 years

of collaborative approaches to regional resource management



NetWaste is a voluntary regional waste group formed in 1995. We are focused on collaborative approaches to waste and resource management. Benefits are delivered to all 28 councils in central and western NSW.



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- Western subregion
- Northern subregion
- Central subregion
- Eastern subregion
- Regional material recovery facilities
- Recovery shops
- Highways
- Rivers

1995

### Contract NetWaste

Contract NetWaste was the name given to the joint tendering and activities of the group of Councils, with the first contract being for the collection of scrap metal. Other than the larger Councils, this contract marked the first time the medium and smaller Councils received an income for this material. The processing of Garden Organics contract then followed, again offering significant benefit in financial savings and certainty of service.



'04, '07, '11

### Waste to Art



The NetWaste Waste to Art competition isn't a new initiative, but the communities in the region have certainly embraced the concept. At least 20 Councils participate each year and the artworks exhibited as part of the regional exhibition provide a great tool to challenge people's perceptions about waste and increase awareness of the ever-growing mountain of waste that ends up in landfill or as litter.

'04

### Engaging the community



Education is central to raising awareness and changing behaviour. Significant examples in the NetWaste region include the plastic Bag Reduction Program (2004) with over 600,000 plastic bags collected from across the region and recycled; the @ Your Library project (2007) with 165 libraries in NSW targeted promoting the Reduce Reuse Recycle message and Sustainable Supermarket Shopping Challenge (2011) which aimed to raise awareness and encourage the community to think about what they can do in order to live more sustainably.

'06

### Used oil collection facilities

In 2006, NetWaste facilitated purchase and establishment of 24 used oil collection units across 16 Council areas which resulted in significant financial savings to the member Councils. Establishment of this collection network also provided for a regional service contract to be initiated for an otherwise uncaptured waste stream, with over 206,000 litres collected and recycled since 2008.



'05

### Construction of ELF



NetWaste has been a major partner in development and long term support of the Environmental Learning Facility (ELF), with the building opened in November 2005. The primary NetWaste office is based at the ELF, with the building being a working demonstration of sustainable technologies including passive solar design, photovoltaic panels, recycled timber framing and a composting toilet.

'05

### Joint Domestic Waste & Recycling Contract



Five member Councils commenced a regional domestic waste and recycling collection service under a joint contract arrangement with JR Richards and Sons. The recyclables are processed at the central Materials Recovery Facility (MRF) in Orange, with over 50,000 tonnes diverted from landfill since the contract commenced and significant financial savings recognised by the participating Councils.

'07

### E-waste collection trial

In 2007, with the support of Sims Metal Management, 7 NetWaste Councils collected e-waste from their communities and delivered the material to Sydney for recycling which marked the first time such an opportunity was offered to local residents. Six years on and the campaign has become an annual event, with 17 member Councils participating in recognition of the growing issue of e-waste becoming obsolete and there being limited recycling opportunities.



'11

### Mobile glass crusher pilot program



In 2011, NetWaste in partnership with 5 member Councils secured funding through the Australian Packaging Covenant and the Australian Food & Beverage Council to purchase a mobile glass crusher and use the product in specific civil applications. This marks a very different approach for NetWaste and is a significant trial project for not only an alternate use of glass material locally, but also the sharing of mobile infrastructure between Councils.

### Strategic Waste Plan in action 2012-2015



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# Problem Wastes

> **Our goal is to remove problem waste from the waste stream through identification, separation and collection for appropriate recycling or responsible disposal.**

**Large quantities of problem wastes >** Although the NSW Government provides some collection services for hazardous wastes such as the ChemClear and drumMuster programs, large quantities of problem wastes continue to enter the waste stream.

What we are going to do:

- establish a schedule of problem wastes to be addressed over the term of the strategic plan and set priorities at the commencement of each financial year and develop suitable management plans
- effective management of problem wastes is included in the development and implementation of the waste education plan
- coordinate annual Household Chemical Cleanout throughout NetWaste region on an annual basis.

**Littering needs attention >** Although littering does not sit neatly under the definition of 'problem wastes', it is nonetheless a social concern and we need to help need reduce littering.

What we are going to do:

- Include anti-littering into the waste education plan.
- Identify possible partnerships within communities to develop local initiatives in response to local issues (e.g. indigenous communities, working with community groups).

## **Tyre stockpile at Gilgandra**

Tyres are a significant problem waste for the NetWaste Councils, with there being limited recycling or processing opportunities currently available. Stockpiles of tyres are not uncommon across the NetWaste region (such as that shown of the site in Gilgandra), however a viable service or processing option will only be possible if delivered through a regional arrangement. NetWaste will be working to identify possible opportunities over the next three years in this regard.



## Infrastructure

> **Our goal is to provide appropriate infrastructure to meet local and regional needs.**

**Uncontrolled landfill sites**> Many small rural landfills are not controlled and pose management and environmental concerns to councils and the Environment Protection Authority.

What we are going to do:

- include landfill rationalisation planning into the NetWaste Training plan where options are examined, sensitivity analyses are undertaken and financial modelling prepared.

**Landfills without EMPs** > Some landfills operated by NetWaste member councils do not have an Environmental Management Plan (EMP) in place or have EMPs that are not monitored nor reported upon.

What we are going to do:

- include EMP reporting and quality control into the NetWaste Training plan.

**Organics recycling** > Organics management offers an opportunity to significantly reduce the quantity of waste going to landfill, yet only small scale organics composting is being undertaken in the NetWaste region and few domestic organics collection services are provided.

What we are going to do:

- divert organics from landfill messages to be included in the waste education plan
- undertake a study and assessment of the tried and proven composting systems, such as tunnel, Gorecover, aerated static pile, open windrow and Groundswell
- determine the respective benefits of the composting systems and the suitability of various applications for regional councils
- consider marketing options and complete business cases for the introduction of composting systems for participating councils.

**Electronic waste** > Electronic waste (e-waste) continues to be landfilled in ever increasing amounts.

What we are going to do:

- work with potential Arrangement Administrators to determine possible collection centres and service options for the NetWaste region
- undertake the annual e-waste collection campaign as appropriate
- continue to raise awareness with the community of the growing volumes of e-waste and opportunities for recycling.

**Low levels of commercial recycling** > There is limited recycling undertaken in the commercial sector and no commercial organics collection service provided in the member Councils' LGAs.

What we are going to do:

- undertake a pilot project with one Council and assess viability for future direction
- work with one or more small-to-medium identified businesses to identify waste streams and potential opportunities
- support source separation initiatives in partnership with the relevant Councils
- investigate and apply further opportunities with additional businesses.

The Material Recovery Facility (MRF) at Orange provides a critical service for the processing of kerbside recyclables for the Councils in the joint contract arrangement and is the only automated MRF in the NetWaste region.



- support the waste skip industry and encourage resource recovery from skip bins by 'spill and sort' or by the development of a C&D MRF
- prepare a template report for member councils that would support the introduction of differential waste disposal fees to encourage separation of recoverable materials from general waste taken to landfills and transfer stations.

#### Public place resources lost to landfill >

Significant quantities of recyclables are not recovered from public places and from events.

What we are going to do:

- review existing public place and event recycling guidelines as part of the WEP
- seek alliances with industry and undertake trial programs for events waste management and for public place recycling.



▲

NetWaste and five member Councils are currently trialling a mobile plant to crush glass containers with the aim to use product as a sand replacement. The mobile plant is first of its kind in Australia and will offer significant learning opportunities for the NetWaste group.

## Resource Recovery

> Our goal is to achieve an upward trend

**of recovered resources as measured year on year and move towards attainment of the WARR strategy goals.**

**Domestic resources lost to landfill >**

Unacceptable quantities of domestic recoverable resources continue to be lost to landfill.

What we are going to do:

- review waste service models in place across the region showcasing a variety of implementation approaches
- continue to develop and facilitate service contracts across the areas of scrap metals, greenwaste processing, kerbside and domestic waste services and used oil collection
- expand into new services for concrete crushing, e-waste and problem wastes and viable and appropriate.

**Markets for glass >** Glass is a heavy commodity of little value. It is cheaper to make new products than it is to recycle, particularly given the transport distances from the NetWaste region to markets.

What we are going to do:

- examine facilities in other regions where glass is successfully crushed and marketed for reuse
- review the outcomes of the Mobile Glass Crushing Project and identify and pursue where possible value adding opportunities considering regional focus and possible alliances with industry.

**Commercial resources lost to landfill >**

Significant quantities of recoverable resources from the commercial and Industrial sector and the construction and demolition sector continue to be landfilled.

What we are going to do:

- prepare templates to enable member councils to introduce the requirement for builders and developers to prepare waste plans when submitting Construction Certificate and Development Applications

*A summary of NetWaste's strategic waste plan*



# Monitoring, review, reporting and risk management

Monitoring, review and reporting of activities noted in the strategic waste plan will ensure that implementation will deliver the desired outcomes (or highlight where changes or improvements need to be made).

Monitoring, review and reporting will:

- enable performance to be measured against objectives
- provide the basis for implementing future change for improved performance
- assess performance in line with key performance indicators
- determine if outcomes are in line with expectations
- assess whether anticipated benefits have occurred
- evaluate the strategic plan's recognition of and response to community needs.

Monitoring will be undertaken by:

- quarterly NetWaste and Renew meetings
- contractor performance assessments
- community surveys
- waste audits
- examination of trend lines
- audits of environmental performance
- reviews of key performance indicators.

The strategic waste plan establishes the pathway for ongoing enhancement of regional waste and resource management over three years. It will be important that the strategy and its programs are reviewed annually to ensure relevance, and that factors have not emerged in the intervening period that will have an effect on the strategic primary aim and objectives.

## Risk management

NetWaste will prioritise actions in response to a well defined risk management framework, based on measures of the likelihood of a risk occurring assessed against the consequences in terms of damage to NetWaste's reputation, financial health, human resources and operational capacity.

## Learn more

Get in touch with the NetWaste team or visit [www.netwaste.org.au](http://www.netwaste.org.au) to obtain a copy of the full strategic waste plan which includes timetable for implementation or discuss anything related to the region's waste and recycling. We also welcome enquires regarding anything else related to region waste and recycling.



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