

Notice of Meeting

Climate Change and Resource Recovery Advisory Committee Meeting

A Climate Change and Resource Recovery Advisory Committee Meeting of Byron Shire Council will be held as follows:

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 18 May 2023
Time	4.30pm

Shannon Burt
Director Sustainable Environment and Economy

I2023/738
Distributed 11/05/23



BYRON
SHIRE
COUNCIL

CONFLICT OF INTERESTS

What is a “Conflict of Interests” - A conflict of interests can be of two types:

Pecuniary - an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person or another person with whom the person is associated.

Non-pecuniary – a private or personal interest that a Council official has that does not amount to a pecuniary interest as defined in the Code of Conduct for Councillors (eg. A friendship, membership of an association, society or trade union or involvement or interest in an activity and may include an interest of a financial nature).

Remoteness – a person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to a matter or if the interest is of a kind specified in the Code of Conduct for Councillors.

Who has a Pecuniary Interest? - a person has a pecuniary interest in a matter if the pecuniary interest is the interest of the person, or another person with whom the person is associated (see below).

Relatives, Partners - a person is taken to have a pecuniary interest in a matter if:

- The person’s spouse or de facto partner or a relative of the person has a pecuniary interest in the matter, or
- The person, or a nominee, partners or employer of the person, is a member of a company or other body that has a pecuniary interest in the matter.

N.B. “Relative”, in relation to a person means any of the following:

- (a) the parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descends or adopted child of the person or of the person’s spouse;
- (b) the spouse or de facto partners of the person or of a person referred to in paragraph (a)

No Interest in the Matter - however, a person is not taken to have a pecuniary interest in a matter:

- If the person is unaware of the relevant pecuniary interest of the spouse, de facto partner, relative or company or other body, or
- Just because the person is a member of, or is employed by, the Council.
- Just because the person is a member of, or a delegate of the Council to, a company or other body that has a pecuniary interest in the matter provided that the person has no beneficial interest in any shares of the company or body.

Disclosure and participation in meetings

- A Councillor or a member of a Council Committee who has a pecuniary interest in any matter with which the Council is concerned and who is present at a meeting of the Council or Committee at which the matter is being considered must disclose the nature of the interest to the meeting as soon as practicable.
- The Councillor or member must not be present at, or in sight of, the meeting of the Council or Committee:

- (a) at any time during which the matter is being considered or discussed by the Council or Committee, or
- (b) at any time during which the Council or Committee is voting on any question in relation to the matter.

No Knowledge - a person does not breach this Clause if the person did not know and could not reasonably be expected to have known that the matter under consideration at the meeting was a matter in which he or she had a pecuniary interest.

Non-pecuniary Interests - Must be disclosed in meetings.

There are a broad range of options available for managing conflicts & the option chosen will depend on an assessment of the circumstances of the matter, the nature of the interest and the significance of the issue being dealt with. Non-pecuniary conflicts of interests must be dealt with in at least one of the following ways:

- It may be appropriate that no action be taken where the potential for conflict is minimal. However, Councillors should consider providing an explanation of why they consider a conflict does not exist.
- Limit involvement if practical (eg. Participate in discussion but not in decision making or vice-versa). Care needs to be taken when exercising this option.
- Remove the source of the conflict (eg. Relinquishing or divesting the personal interest that creates the conflict)
- Have no involvement by absenting yourself from and not taking part in any debate or voting on the issue as of the provisions in the Code of Conduct (particularly if you have a significant non-pecuniary interest)

Committee members are reminded that they should declare and manage all conflicts of interest in respect of any matter on this Agenda, in accordance with the [Code of Conduct](#).

RECORDING OF VOTING ON PLANNING MATTERS

Clause 375A of the Local Government Act 1993 – Recording of voting on planning matters

- (1) In this section, **planning decision** means a decision made in the exercise of a function of a council under the Environmental Planning and Assessment Act 1979:
 - (a) including a decision relating to a development application, an environmental planning instrument, a development control plan or a development contribution plan under that Act, but
 - (b) not including the making of an order under that Act.
- (2) The general manager is required to keep a register containing, for each planning decision made at a meeting of the council or a council committee, the names of the councillors who supported the decision and the names of any councillors who opposed (or are taken to have opposed) the decision.
- (3) For the purpose of maintaining the register, a division is required to be called whenever a motion for a planning decision is put at a meeting of the council or a council committee.
- (4) Each decision recorded in the register is to be described in the register or identified in a manner that enables the description to be obtained from another publicly available document and is to include the information required by the regulations.
- (5) This section extends to a meeting that is closed to the public.

OATH AND AFFIRMATION FOR COUNCILLORS

Councillors are reminded of the oath of office or affirmation of office made at or before their first meeting of the council in accordance with Clause 233A of the Local Government Act 1993. This includes undertaking the duties of the office of councillor in the best interests of the people of Byron Shire and the Byron Shire Council and faithfully and impartially carrying out the functions, powers, authorities and discretions vested under the Act or any other Act to the best of one's ability and judgment.

BYRON SHIRE COUNCIL

BUSINESS OF MEETING

1. APOLOGIES

2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

3. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

- 3.1 Confirmation of minutes from 16 March 2023 meeting 6

4. STAFF REPORTS

Sustainable Environment and Economy

- 4.1 Future Discussion Items for Climate Change and Resource Recovery
Advisory Committee..... 13
- 4.2 Net Zero target and Carbon Offsets..... 15
- 4.3 Update on Resource Recovery and Waste Streams 23
- 4.4 Regional Waste Strategy and Waste to Energy..... 29

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Confirmation of minutes from 16 March 2023 meeting


5 **Directorate:** Sustainable Environment and Economy
Report Author: Michelle Wilde, Project Support Officer
File No: I2023/404

10

RECOMMENDATION:

That the minutes of the Climate Change and Resource Recovery Advisory Committee Meeting held on 16 March 2023 be confirmed.

15 **Attachments:**

- 1 Minutes 16/03/2023 Climate Change and Resource Recovery Advisory Committee, I2023/364 , page 8 [↓](#) 

20

Report

The attachment to this report provides the minutes of the Climate Change and Resource Recovery Advisory Committee Meeting of 16 March 2023 .

Report to Council

- 5 The minutes were reported to Council on 27 April 2023.

Comments

In accordance with the Committee Recommendations, Council resolved the following:

23-117 - **Resolved** that Council notes the minutes of the Climate Change and Resource Recovery Advisory Committee Meeting held on 16 March 2023.

Minutes of Meeting

Climate Change and Resource Recovery Advisory Committee Meeting

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 16 March 2023
Time	9.00am



BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

CLIMATE CHANGE AND RESOURCE RECOVERY ADVISORY COMMITTEE MEETING
MINUTES 16 MARCH 2023

Minutes of the Climate Change and Resource Recovery Advisory Committee Meeting held on Thursday, 16 March 2023

File No: I2023/364

PRESENT: Cr Sarah Ndiaye, Cr Duncan Dey, Cr Asren Pugh (left at 10:16am), Cr Mark Swivel (left at 9:15am returned at 9:44am)

Staff: Sharyn French (Manager Environmental and Economic Planning)

Julia Adams (Sustainability Team Leader)

Danielle Hanigan (Manager Resource Recovery)

Sarah Child (Resource Recovery Strategy and Engagement Officer)

Community: Madeleine Green

Sasha Mainsbridge

Cr Ndiaye (Chair) opened the meeting at 9:08am and acknowledged that the meeting was being held on Bundjalung Country.

ATTENDANCE VIA AUDIO-VISUAL LINK: Fleur Brown (left at 10:30am), Bronwyn Elliott (left at 10:15am)

APOLOGIES: Shannon Burt (Director Sustainable Environment and Economy)

Daniel McCoy (Sustainability Officer, Utilities)

Luke McConell

Katrina Shields (ZEB representative)

John Taberner (Enova Community Energy Ltd)

Jean Renouf (Plan C)

DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

Madeleine Green declared a non-pecuniary interest. The nature of the interest being that Madeleine lives 2kms from the Resource Recovery Centre.

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

CLIMATE CHANGE AND RESOURCE RECOVERY ADVISORY COMMITTEE MEETING
MINUTES 16 MARCH 2023

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Confirmation of minutes of the Climate Change and Resource
Recovery Advisory Committee held on 17 November 2022
File No: I2023/86

Committee Recommendation:

**That the minutes of the Climate Change and Resource Recovery Advisory
Committee Meeting held on 17 November 2022 be confirmed.**

(Green/Ndiaye)

The recommendation was put to the vote and declared carried.

BUSINESS ARISING FROM PREVIOUS MINUTES

There was no business arising from previous minutes.

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

Report No. 4.1 Meeting Schedule for 2023 Climate Change and Resource
Recovery Advisory Committee
File No: I2023/84

Committee Recommendation:

1. That the Climate Change and Resource Recovery Advisory Committee notes the scheduled meeting dates and times for 2023.
2. That the Climate Change and Resource Recovery Advisory Committee advise of any agenda items for future meetings.
3. That the following items be put onto the agenda for our next committee meeting.
 - a) To get a report on the formal relationship between our Shire and the group of Shires.
 - b) A report on our current waste strategies in relation to incineration as a Shire and within the group.
 - c) A status report on the proposed waste to energy plant at Casino including the positions of the other councils within North East waste and the State Government post-election.
 - d) To consider a motion of no support for an incinerator (waste to energy) project in the region. (Ndiaye/Pugh)

The recommendation was put to the vote and declared carried.

CCRR Climate Change and Resource Recovery Advisory Committee Meeting page 4

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

CLIMATE CHANGE AND RESOURCE RECOVERY ADVISORY COMMITTEE MEETING
MINUTES 16 MARCH 2023

Report No. 4.2 Resource Recovery Project Updates
File No: I2023/158

Committee Recommendation:

That the Climate Change and Resource Recovery Advisory Committee notes the report.

(Swivel/Green)

The recommendation was put to the vote and declared carried.

Report No. 4.3 Annual Emissions Inventory for Council Operations
File No: I2023/159

Fleur Brown left the meeting at 10:30am therefore quorum was lost. The remaining committee members noted the report.

Committee Recommendation:

That the Climate Change and Resources Recovery Advisory Committee notes the report.

(Green/Swivel)

The recommendation was put to the vote and declared carried.

There being no further business the meeting concluded at 10:40am.

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

Report No. 4.1 Future Discussion Items for Climate Change and Resource Recovery Advisory Committee

5

Directorate: Sustainable Environment and Economy

Report Author: Michelle Wilde, Project Support Officer

File No: I2023/613

Summary:

10 This report summarises reports and information requested by the Climate Change and Resource Recovery Advisory Committee.

Future requests, resourcing and alignment with Council's Operational Plan can be tabled for discussion by the committee.

15 There were no requests for reports or information received from the Climate Change and Resource Recovery Advisory Committee members for this meeting.

RECOMMENDATION:

20 **That the Climate Change and Resource Recovery Advisory Committee notes the report.**

Report

There were no requests for reports or information received from the Climate Change and Resource Recovery Advisory Committee members for this meeting.

Requests for future items can be raised at this meeting.

- 5 These requests, resourcing and alignment with Council's Operational Plan will be tabled for discussion by the committee at the next meeting, to resolve whether they are taken to Council for consideration for inclusion in a future Council OP and budget.

Key issues

Nil

10 Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
1: Effective Leadership We have effective decision making and community leadership that is open and informed	1.2: Engage and involve community in decision making	1.2.4: Advisory Committees - Coordinate advisory committees to inform decision making on their areas of expertise	1.2.4.1	Coordinate and support Advisory Committees to assist with effective Council decision making

Recent Resolutions

Nil

Legal/Statutory/Policy Considerations

- 15 Nil

Financial Considerations

No detailed costings for requested items provided at this stage.

Consultation and Engagement

Nil

- 20

Report No. 4.2 Net Zero target and Carbon Offsets

Directorate: Sustainable Environment and Economy

Report Author: Julia Adams, Sustainability Team Leader

File No: I2023/418

5 **Summary:**

Council has less than three years to achieve its net zero emissions target (Res **17-086**) and Climate Active certification (Res **19-634**) for council operations by 2025. As a result, staff have been working on important milestones within our net zero journey.

This report will focus on the following topics and milestones:

- 10
 - Complexities of claiming 'net zero' status,
 - Timeline to achieve Climate Active target in 2025,
 - Draft Carbon Offset Procurement Policy for Council operations.

15 The report will also unpack the staff recommendations of achieving Climate Active carbon neutral certification in 2025 and shifting the net zero target to 2030, in order to achieve a genuine net zero goal and remain fiscally and ethically responsible to our community.

RECOMMENDATION:

20 **That the Climate Change and Resource Recovery Advisory Committee:**

1. **Note the proposed revised net zero target date to 2030,**
2. **Note the principles of the draft Carbon Offset Procurement Policy,**
3. **Note the pathway and steps to achieving carbon neutrality using the Climate Active Standard.**

25

Report

5 The sustainability team has been working with Councillors, internal staff and consulting with industry professionals to understanding whether or not we can achieve our net zero emissions target by 2025, and the different pathways available to us.

Staff have established that Council should not claim to have achieved net zero emissions in 2025. This is because industry advice states that net zero emissions can only be achieved if we first reduce our emissions 'as much as possible', and then only purchase carbon offsets as a last resort.

10 When Council declared to be 'net zero emissions in 2025' it is reasonable to say that this was considered to be the same as achieving carbon neutrality. In the five years since, the term has evolved and matured in the international community into a multi-faceted concept.

15 Byron Shire is a highly educated and progressive community, and many community members will understand that council will not truly be achieving net zero emissions if we are to claim this in 2025.

The commonly agreed definitions of net zero and carbon neutral are:

Net zero is achieved when we reduce our CO2e- emissions to the lowest amount before balancing our residual CO2e- emissions, by purchasing carbon removal offsets only (also called credits), as a last resort.

If we've achieved net zero we've also achieved carbon neutrality.

Carbon neutrality is achieved when all our CO2e- emissions are balanced by purchasing standard carbon offsets (also called credits). Reducing emissions is not required.

Climate Active is a carbon neutral certification.

Carbon removal offsets are generally more expensive due to the nature of the project and high global demand. To be net zero you must purchase this calibre of credits.

20 Standard carbon offsets are generally cheaper by nature of the projects e.g. renewable energy projects. They are also called 'carbon avoidance offsets' as you are not investing in projects that take carbon out of the atmosphere.

25 For Byron Shire Council, net zero is a long-term goal that can only be achieved with the continued introduction of new technologies, such as electric vehicles and sustainable asphalt, and a decrease in their costs. This is why we should aim for carbon neutrality in 2025 using the highly regarded Climate Active certification.

Realigning our net zero target to 2030 will allow for us to collaborate regionally with other Northern Rivers councils that have the same goal, including Tweed and Ballina. It will also allow for Council to significantly reduce its emissions whilst remaining financially and ethically responsible to our community.

- 5 To achieve carbon neutrality using the Climate Active certification, Council will need to purchase carbon offsets. Staff present a draft Carbon Offset Procurement Policy for discussion. The drafted policy will be presented to Council at the June Ordinary meeting. If supported, it will then be placed on public exhibition for comment.

Climate Active Project Timeline

- 10 Council resolved to become Climate Active in 2019 in order to provide a transparent and independently audited framework for it to calculate and track emissions reduction and progress towards our net zero target.

- 15 As there is no State or Federal legislation or guidelines in this space, the Climate Active Standard has proved to be very useful in helping us to understand what emissions we need to be tracking, how to calculate them and what steps we should be taking to improve our climate mitigation activities.

- 20 The Standard also helps Council to balance our fiscal and ethical responsibilities with progressive environmental action. It also allows us to send a message to our community that Council is committed to reducing carbon emissions, and is doing so using a transparent and regulated method.

Figure 1 below outlines the high-level steps that Council must follow to achieve successful Climate Active certification. We have already completed steps two and three, and are now getting ready to start step four.

Getting & staying certified.

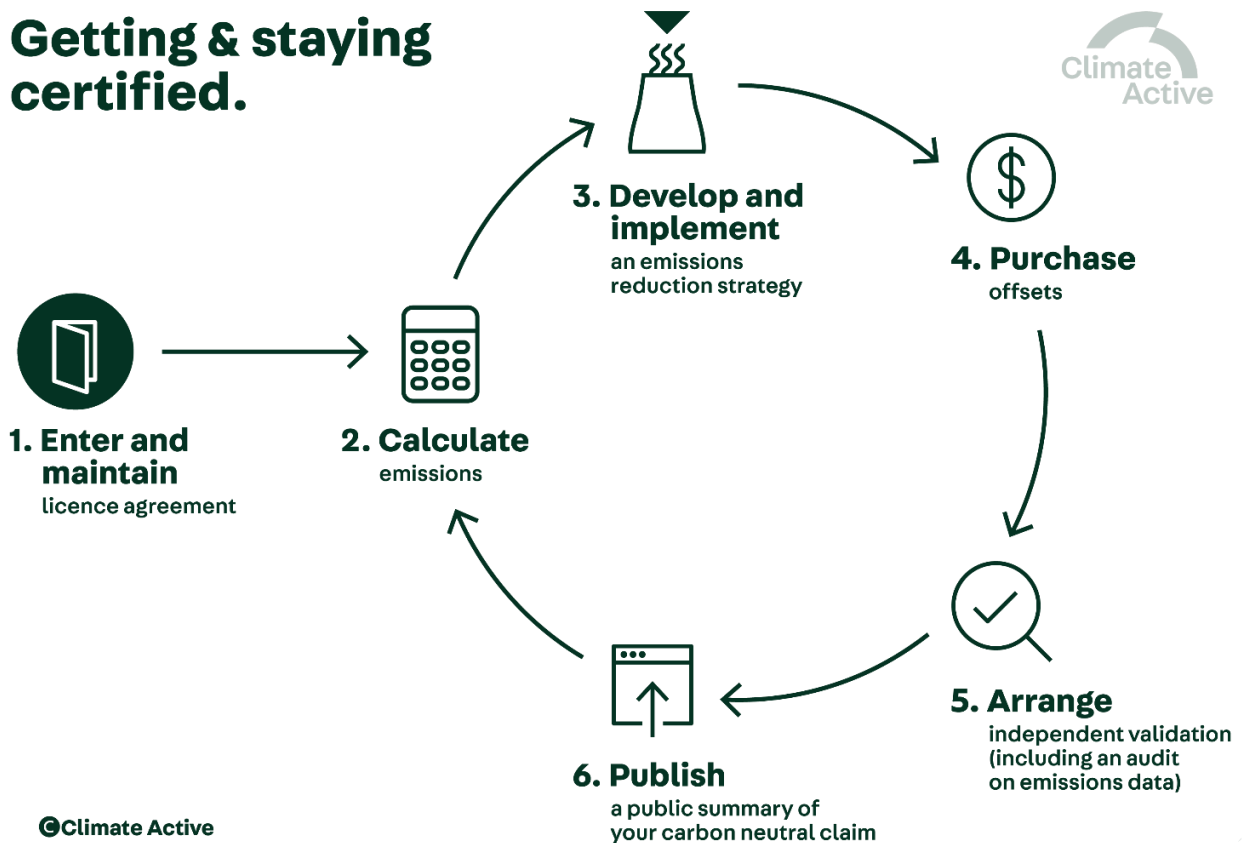


Figure 1. The high-level steps Council will follow to achieve Climate Active carbon neutral certification. Source: [Climate Active website](#).

5 Staff have developed a 'carbon neutral' project timeline for Council so we can become certified by our 2025 deadline. Figure 2 below shows the steps that will be required over the next few years in order for us to achieve carbon neutrality.

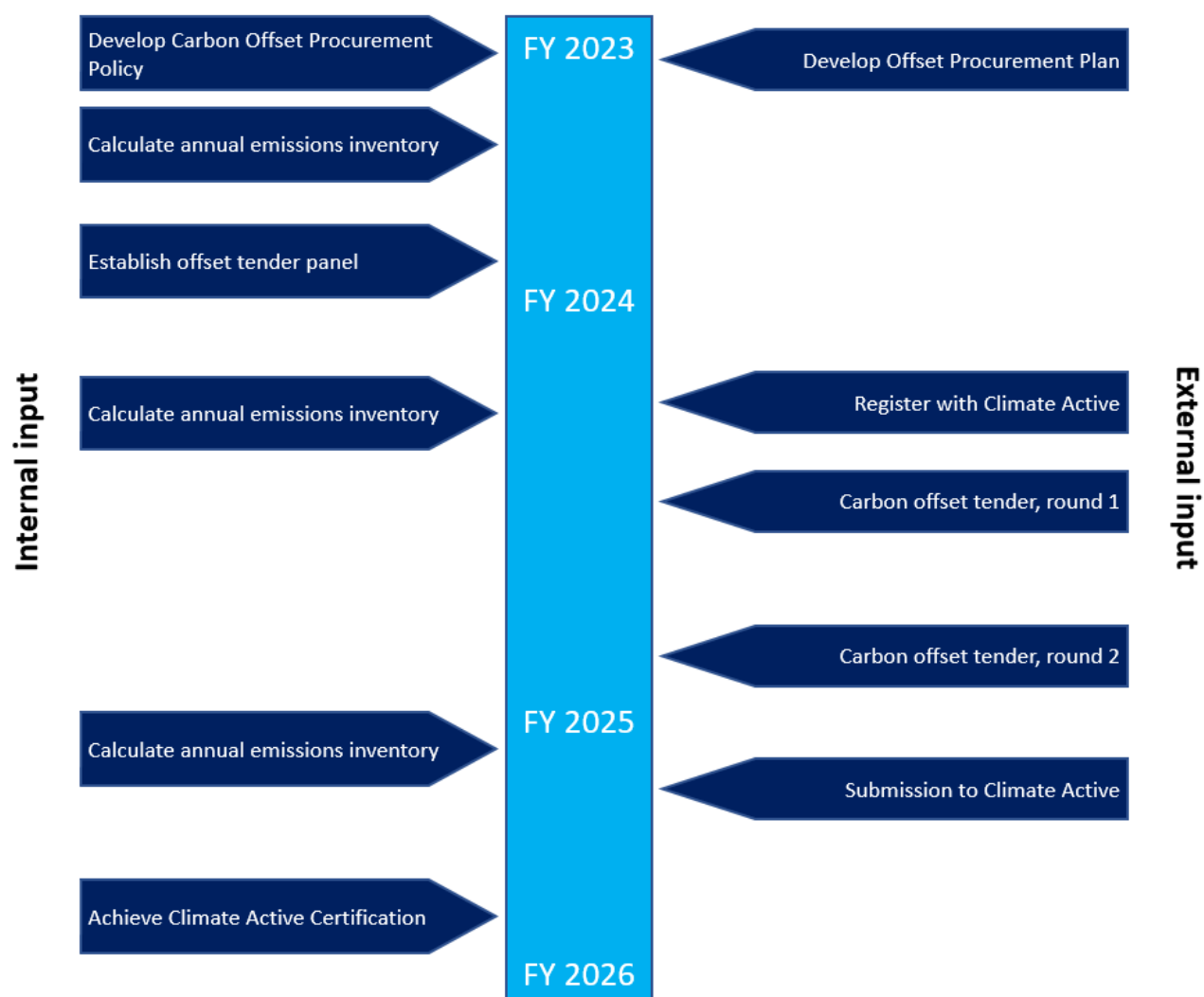


Figure 2. Approximate timeline of major steps for Council to achieve Climate Active certification by December 2025.

Draft Carbon Offset Policy

- 5 Part of Climate Active certification (and achieving net zero) is the purchasing of eligible carbon offsets. Accordingly, staff have been progressing FY22/23 Operational Plan activity 3.4.4.1 – *Develop a carbon offset policy and procedure for Council in order to achieve net zero emissions.*
- 10 This is important as it will be the most expensive recurring component of the ‘net zero project’ and therefore we need to start planning now in order to understand our future budget requirements.
- To understand how others have been managing these costs and commitments, staff have been engaging with other councils who have similar net zero targets and have achieved Climate Active carbon neutrality.
- 15 Lessons learnt include:

- All Councils purchase a combination of offsets, with only a small percentage being Australian offsets (ACCUs) (see Table 1). This is due to cost and availability. ACCUs are in high demand.
 - Purchasing offsets is a complicated tender process that requires a broker to access the environmental market.
 - A long-term procurement plan is recommended to assist the Finance and Sustainability teams.
 - New environmental and landfill levies are often introduced to pay for offset purchases.
- 10 To mitigate financial and reputational risk, staff recommend purchasing a combination of Australian and international offsets. Table 1 outlines what blend of offsets have been purchased by other Climate Active councils and governmental organisations.

Table 1. Sample of Climate Active certified governmental organisations and their carbon offset portfolios.

Council/ Organisation	Carbon Offset Purchases (%)			
	ACCUs	Verified Carbon Units (VCUs)	Verified Emission Reductions (VERs)	Certified Emission Reductions (CERs)
Brisbane	8.7	91.3		
Darebin		96.4	3.6	
Sydney	9	91		
Yarra		100		
Landcom	93	7		
Mornington Peninsula	10	90		
Surf Coast Shire	5	3		92
Taronga Zoo		100		

- 15 Consequently, we have developed a draft high-level Carbon Offset Procurement Policy that identifies our priorities and values when purchasing offsets, to guide staff in future requests for tenders.

The purpose of the Policy will be to provide a framework for Council to purchase verified carbon offsets in order to achieve its climate change mitigation commitments, whilst having due consideration of financial risk, reputation and environmental responsibility.

The draft Policy's objectives are to:

- Ensure that Council's decision-making regarding the purchase of carbon offsets considers relevant verification standards, additionality, permanence, measurability, transparency, and other co-benefits.

- Demonstrate leadership in Council's own decision-making in responding to climate change on a corporate level and continue to be a progressive and transparent environmental leader.

Council will use the following principles in order to achieve the objectives:

- 5 • Purchase carbon offsets in alignment with its environmental, economic, and social values, as described in the Community Strategic Plan;
- Prioritise local and Australian carbon offsets over international offsets where possible, and proportionally aim to purchase at least 10% Australian carbon offsets;
- 10 • Ensure it purchases high quality offsets that have undergone a thorough due diligence process;
- Consider local offsetting options when the market become viable; and
- Make these purchases in a fiscally responsible manner, meaning the offset types may change from year to year.

15 Staff also intend on engaging external consultants in the next financial year in order to project future market trends and advise us on what is required to purchase carbon offsets over the next few years. There is an allocation of \$10,000 for this work in the FY23/24 operational budget.

20 Following discussion at the Climate Change and Resource Recovery Advisory Committee, the draft Policy will be reported to Council at the June Ordinary Meeting for resolution and public exhibition.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
3: Nurtured Environment We nurture and enhance the natural environment	3.4: Support and empower our community to adapt to, and mitigate our impact on climate change	3.4.3: Monitoring and reporting - Monitor and report on actions that aim to address climate change	3.4.3.2	Prepare Annual Emissions Inventory to determine progress towards 2025 Net Zero Emissions Target.
3: Nurtured Environment We nurture and	3.4: Support and empower our community	3.4.4: Net Zero - Work towards	3.4.4.1	Develop a carbon offset policy and procedure for Council

enhance the natural environment	to adapt to, and mitigate our impact on climate change	achieving Council's 100% net zero-emissions target		in order to achieve net zero emissions.
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Recent Resolutions

- Resolution 17-086
- Resolution 19-634

Legal/Statutory/Policy Considerations

- 5 The issues and actions described in this report are part of Council's plan to decarbonise its operations and mitigate climate change. They are described in *Net Zero Emissions Strategy for Council Operations 2025* and *Net Zero Emissions Action Plan for Council Operations 2025*.

Financial Considerations

- 10 There are two relevant allocations in the FY2023/24 budget:
- Draft Carbon Offset Plan - \$10,000
 - Annual Emissions Inventory - \$10,000

Further budget allocations may be required depending on the amount of consultancy work needed to further develop a carbon offset plan for Council operations.

15 Consultation and Engagement

The issues and draft Policy discussed in this report will also be reported to the June 2023 Council Ordinary Meeting for consideration.

Depending on the outcome of this June Council report, further consultation and community engagement may follow.

Report No. 4.3 Update on Resource Recovery and Waste Streams

Directorate: Sustainable Environment and Economy

Report Author: Sarah Child, Resource Recovery Projects & Education Officer

5 **File No:** I2023/548

Summary:

10 The Report provides the Committee with an overview of the various materials and waste streams that are managed by Council through our kerbside collection service and the Byron Resource Recovery Centre (BRRC). The report details the volumes of material received on an annual basis and where these materials are processed and/ or disposed of.

15 With over 17,000 tonne of material picked up in wheelie bins across the Shire, and over 25,000 tonne coming through the Resource Recovery Centre, the focus is on programs to ensure that we are recovering as many resources as possible to reduce these figures. Simultaneously we are working to educate the community and implement initiatives that prevent waste from being generated in the first place, and unsure resources are reused, repaired and kept in circulation for as long as possible

20

RECOMMENDATION:

That the Climate Change and Resource Recovery Advisory Committee note the report.

25

Report

Byron Resource Recovery Centre (BRRC)

- 5 The Byron Resource Recovery Centre (BRRC) is located at 115 The Manse Road, Myocum and operates under two Environmental Protection Licences, EPL 6057 (Landfill) and EPL 13127 (Resource Recovery). The Centre operates primarily as a transfer station, whereby waste and materials are brought into the Centre where they are sorted and transferred to various locations for processing or landfilling. There is no operational landfill
10 at the site.

All residual waste is taken to the Ti-Tree Bioenergy Facility at Willowbank (SE QLD) whereby renewable energy is generated from the methane produced within the landfill cell. General waste is received from the kerbside collections as well as self-hauled by residents and commercial customers.

- 15 The BRRC also houses the Re-Market Tip Shop, MAF Composting facility, Public drop off facility and Community Recycling Centre for problem wastes.

The Re-Market (tip shop)

- 20 The Re-Market sells quality second hand items that otherwise would have been destined for landfill. Items discerned to be of sufficient quality can be dropped off for free. Staff also identify and recover valuable items from the public drop and construction and demolition areas and take them to the shop for sale. In 2021-22 FY, 50.51 tonnes were recovered from the public drop off. This has increased this FY, with 72.89 tonnes recovered in the 10 months July 2022-April 2023. Whilst the true diversion rate of items is unknown, as the public can take things directly to the Shop prior to entering the rest of the facility via the
25 weighbridge, sales and patronage have steadily increased and The Re-Market will continue to expand through reuse and repair workshops and improved presentation and storage of items which will keep them out of the weather and in suitable condition for sale.

Mobile Aerated Floor (MAF) Composting Facility

- 30 Self-hauled garden waste dropped at the BRRC is shredded and then put through a pasteurisation process using MAF technology. Developed in Germany, the MAF system aerates the shredded garden material through a system of pipes underneath the compost piles.

The BRRC receives over 3,300 tonne of garden waste annually, which is processed and composted into a mulch product that is sold to residents, farmers and primary producers.

- 35 **Community Recycling Centre (CRC)**

The CRC is for the collection of household quantities of problem wastes including paint, batteries, smoke detectors, gas bottles, fire extinguishers, motor oils and other oils. It is free for residents to drop these items off, with the aim of keeping these problem and

potentially toxic wastes out of landfill and eliminate long term storage in homes. The collection and recycling is funded by the NSW EPA.

Other streams received at the centre for processing and transfer include:

- polystyrene
- 5 • mixed recyclables
- cardboard
- construction and demolition waste
- concrete
- scrap metal
- 10 • e-waste
- tyres

Kerbside collection system

- 15 Byron Shire Council manages a 3 bin (landfill, recycling and Food Organics Garden Organics – FOGO) system in urban areas and a 2 bin (landfill and recycling) system for rural areas.

- 20 Council also offers commercial 2 bin collection for businesses. Currently waste collections are contracted to Solo Resource Recovery. Both recycling and FOGO are taken direct to processing facilities by the collection contractor, whilst landfill waste is taken to the BRRC to be bulked up and transferred to the landfill facility in SE QLD.

The collection budget across the three streams as well as public place bins is \$2,200,000 this FY.

Landfill waste

- 25 In 2021/2022 financial year, Byron Shire Council processed 18,806 tonne of landfill waste (plus additional 3,600 tonne of flood waste). Landfill waste is bulked up into 100m³ capacity trucks and transported to Ti-Tree Bioenergy Facility in Willowbank, QLD. This includes 7,702 tonne of kerbside and public place red bin waste. Transport and disposal for landfill waste is budgeted at \$4,190,000 this financial year, and this is set to increase next FY due to an increase of \$10 per annum in the waste levy.

30

Co-mingled Recycling

BYRON SHIRE COUNCIL

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

4.3

Byron Shire Council's domestic and commercial co-mingled recycling (yellow bin) is sent to Re.Group Materials Recycling Facility (MRF) in Chinderah. In the financial year 2021/2022 Council sent 4,729 tonne of kerbside recyclables to Re.Group.

- 5 The materials at the MRF are separated into glass, plastic, paper and metal through hand sorting and machinery. Staff remove contaminants where possible. To make it through the process successfully, materials need to be of a certain size and weight. Materials are baled and sent to market, with destinations fluctuating dependant on price, demand and quality.
- 10 Currently recyclable materials are sent to:
- Paper: Visy Recycling
 - Cardboard: Re.Group Enfield MRF combined product for export
 - Aluminium: Re.Group Rocklea – combined product for export
 - Plastics (mixed): ReGroup Hallam for reprocessing
- 15
- Glass: Visy Recycling Brisbane

The Recycling Transport and Disposal budget this FY is \$737,200

Food Organics Garden Organics (FOGO)

Byron Shire Councils domestic FOGO waste is sent to Phoenix Organics Recyclers for processing into compost via in vessel composting system.

- 20 In 2021/2022 financial year, 6,175 tonne of FOGO material was sent to Phoenix for processing.

The Transport and processing budget for FOGO processing is \$1,050,800 this FY.

Table 1: Waste and material streams snap shot

Material Stream	Processing facility	Annual Volume (2021-22)
General Waste / landfill	Ti-tree Bioenergy Facility, Willowbank, SE QLD	18,806 tonne total (not including flood waste) Consisting of: <ul style="list-style-type: none">• 7,702 tonne kerbside and public place bin collection• 11,104 tonne self-haul direct to BRRC

BYRON SHIRE COUNCIL

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

4.3

Co-mingled recycling	Re.Group Materials Recovery Facility, Chinderah NSW	4,729 tonne kerbside collection Approx. 90 tonne via self-haul to the BRRC
Food and Garden Organics	Phoenix Recyclers, Yatala SE QLD	6,175 tonne
Green Waste	Byron Resource Recovery Facility (MAF Pad) / Go Grow Ballina	3,370 tonne
Scrap Metal	Infrabuild Recycling, Hemmant SE QLD	1,120 tonne
E-waste	Ace Recycling, Meadowbank, SE QLD	43 tonne
Cardboard	Richmond Recycling, East Lismore	127 tonne
Polystyrene	Processed partially at BRRC via the extruder and then transported to IS Recycling, Wetherill Park, NSW	3 tonne
Concrete	Bens Recycling, Alstonville	250 tonne since October 2022 (newly commenced)
Problem Waste (via the CRC)	Toxfree, St Marys, NSW	37 tonne

Next steps

The Resource Recovery Team will continue investigations to increase resource recovery of a range of materials, including construction and demolition wastes, textiles and soft plastics.

- 5 Reduced fees have been proposed for source separated concrete, plasterboard and timber in the draft Fees and Chagres for 2023/24 to encourage viable resource recovery of these material streams. This is in addition to an individual price for mattresses so that these can be recycled instead of landfilled.
- 10 Staff have recently been trained in “test and tag” meaning any electrical items that are brought to The Re-Market can be checked to ensure safety and on-sold, where previously they would have been sent for recycling or possibly landfilled.

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4.3

Measures away from the operational facility such as the introduction of a Single-Use Packaging and Materials Policy for Council, and projects that focus on reuse and repair will have an onflow effect on the amount of material that goes into our kerbside bins and through the BRRC, and ultimately reduce the amount of materials produced and having to be managed as waste.

5

Report No. 4.4 Regional Waste Strategy and Waste to Energy

Directorate: Sustainable Environment and Economy

Report Author: Danielle Hanigan, Manager Resource Recovery

5 **File No:** I2023/550

Summary:

10 The Report provides the Committee with an overview of Councils involvement in the North Coast Waste Investment Review Project, Richmond Valley Councils Jobs Precinct and Energy from Waste investigations and how these activities relate to relevant strategies Council is working under to reduce waste, increase resource recovery and manage residual waste.

Council's relationships with other Northern Rivers Councils in relation to regional waste management is also detailed, highlighting the importance of collaboration with our neighbouring Councils.

15 The report provides response to questions raised at the March 2023 CCRRAC meeting which sought information on the following;





- the formal relationship between our Shire and the group of Shires.
- our current waste strategies in relation to incineration as a Shire and within the group.
- 20 • Status on the proposed waste to energy plant at Casino including the positions of the other councils within North East Waste and the State Government post-election.
- consideration of a motion of no support for an incinerator (waste to energy) project in the region.

5 **RECOMMENDATION:**

That the Committee:-

1. **Note the report.**
2. **Support maintaining an open, investigative approach to long term waste management, including alternative waste treatment, ensuring options are assessed transparently to ensure the best outcome for the environment and our communities.**
3. **Is updated on regional waste management initiatives and any progression or changes in energy from waste status locally or at a State level as part of the Resource Recovery Update report provided to this Committee each meeting.**

15 **Attachments:**

- 1 Report 17/11/2022 Climate Change and Resource Recovery Advisory Committee North Coast Regional Waste Investment Project and Richmond Valley Council's waste update for Councils, I2022/1474 , page 41 [↓](#) 
- 2 NEWASTE_Annual_Report_2022, E2023/43964 , page 46 [↓](#) 
- 3 NEW_FINAL_WASTE STRATEGY 2022, E2023/43984 , page 79 [↓](#) 
- 4 RVC - Energy from Waste update - November 2022 Council Report, E2023/43992 , page 104 [↓](#) 

Report

a) To get a report on the formal relationship between our Shire and the group of Shires.

- 5 Byron Shire Council works with neighbouring Councils through formal and informal relationships on a range of issues. In many cases, partnering with other Councils and sharing information can result in much better outcomes for our communities. This can be particularly prevalent in waste management where economies of scale, and the challenges faced in transportation in regional areas can be overcome through collaboration and regional projects. This is reflected in Council's Towards Zero: Byron Shire's Integrated Waste Management and Resource Recovery Strategy 2019-2029 (Towards Zero Strategy)

Objective 4 Lobbying for Policy Reform - Actively participate in all relevant NJRO and NEWaste actions and consultations.

Relationships that Byron Shire Council has with other Councils which may effect waste management are as follows;

15 North East Waste (NEW)

A group of councils on the North Coast of New South Wales, working together towards cost-effective waste management solutions. The group has a voluntary membership, and aims to achieve the development and implementation of local and regionally based solutions to waste management.

- 20 The member councils include Ballina Shire, Byron Shire, Clarence Valley, Lismore City, Kyogle, Richmond Valley and Tweed Shire. North East Waste is a member group of RENEW NSW and is supported / funded by its member Councils and the NSW Environmental Protection Agency (EPA). The group operates under a Memorandum of Understanding and Council contributes approximately \$32,000 in annual membership.
- 25 Continued membership and participation in North East Waste is a recurring action within Councils adopted Operational Plan, and Towards Zero Strategy, with meetings attended on a quarterly basis.

Northern Rivers Joint Organisation (NRJO)

- 30 The Northern Rivers Joint Organisation (NRJO) represents the Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed NSW local government areas.

With representation by the Mayors and General Managers of each Council, NRJO's role is to facilitate and lead advocacy, political representation and cooperative action on matters of regional significance.

- 35 The NRJO's Strategic Regional Priorities identifies *Innovative, sustainable energy, water and waste management* as one of the 5 regional priorities for the region.

North Coast Waste Investment Review Project – Steering Group

- Byron Shire Council is one of 13 Councils in the NSW North Coast region participating in the North Coast Waste Investment Review Project which commenced in 2019. This is an informal, voluntary group, devised to drive a specific project. The Project has considered options to develop regional responses to collective waste challenges, including infrastructure to divert residual waste (the waste left after resource recovery and recycling) from landfill, to enhance resource recovery rates and to support the security and local opportunity of the recovered materials supply chain through to end markets.
- The Project has been driven by Richmond Valley Council with support and expertise from Resource Recovery and Waste staff and General Managers from all participating Councils. This has included all NEW member Councils as well as additional Councils across the North Coast region. Participation in this project is in accordance with Councils adopted *Towards Zero Strategy*, and included commitment to provide information on waste streams, and to investigate possible solutions through a Market Sounding and Expression of Interest activity.
- Towards Zero Strategy Key Goal: determine the feasibility of pursuing a regional Alternative Waste Treatment (AWT) Solution.*
 - Delivery Plan and Operational Plan Activity 3.5.3.2: Support the progression of a regional; alternative waste treatment facility in alignment of the adopted strategy and relevant resolutions.*

b) A report on our current waste strategies in relation to incineration as a Shire and within the group.

- Council works under a number of strategic documents, policies and regulations at a Local, Regional, State and Federal level. These guiding documents help to determine the pathway that we as an organisation take in best practice waste management and environmental protection and provides support for future planning and investment.

Federal: National Waste Policy Action Plan *link below*

- State:** The NSW Waste and Sustainable Materials Strategy (WASM) *link below*

This is the key overarching strategic document that guides State and Local Government through setting direction, waste reduction targets and providing funding programs to assist in the delivery of projects and strategic outcomes. The WASM has shifted the focus from managing waste in a linear manner at the end of its life cycle to looking at the design and manufacture of materials and how we can reduce and eliminate waste through keeping things in circulation, moving NSW to a circular economy model. The WASM also discusses the role of energy from waste as a necessary residual waste treatment as follows;

Recovering energy from waste can be a legitimate and necessary residual waste management option where it can deliver positive outcomes for the community and the environment and assist in lowering our carbon footprint and reducing the need for landfill. Energy recovery can reduce emissions by replacing more carbon-intensive fuels and by stopping harmful methane emissions from materials in landfill.

We want to support energy recovery where it makes sense to do so and where it is used to manage residual waste, not as an alternative to recycling.

Thermal energy from waste facilities are the most common technology. These generate some electricity as well as heat and steam. Other types of energy recovery include anaerobic digestion.

NSW Energy from Waste Policy Statement: Supporting the WASM, the NSW EPA has also released the *NSW Energy from Waste Policy Statement* (Policy Statement) which aims to apply the following overarching principles to waste avoidance and recovery:

- higher value resource recovery outcomes are maximised
- air quality and human health are protected
- 'mass burn' disposal outcomes are avoided
- scope is provided for industry innovation

The Policy Statement states that *incineration facilities for the destruction of waste* as a thermal treatment application are excluded from the Policy as they are not considered to be undertaking genuine energy recovery. This means that incineration is not permitted under this Policy Statement as an energy from waste activity.

Under the Policy, proposals must:

- Meet current international best practice techniques, including emissions controls
- Use technologies that are proven, well understood and capable of handling the waste inputs
- Meet technical, thermal efficiency and resource recovery criteria
- Undertake monitoring with real-time feedback.

Furthermore, such facilities will only be supported where they are used to manage residual waste, not as an alternative to recycling.

NSW Energy from Waste Infrastructure Plan and POEO Regulation

The NSW Energy from Waste Infrastructure Plan and subsequent *Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022* put into law the Government's *Energy from Waste Infrastructure Plan* to strategically locate energy from waste facilities in four designated locations in NSW in a bid to maximise efficiencies in infrastructure, waste management, innovation and energy recovery. The Richmond Valley Regional Job Precinct has been identified as one of these four locations along with West Lithgow Precinct, Parkes Activation Precinct, and Southern Goulburn-Mulwaree Precinct.

Regional: NE Waste Regional Waste Strategy 2022-2027

A high level regional strategy that includes actions at a regional level to assist in achieving the targets and objectives of the WASM. The associated annual action plan is currently under development. Strategy is attached E2023/43984.

5 **Byron Shire Council:** Towards Zero: Byron Shire's Integrated Waste Management and Resource Recovery Strategy 2019-2029

Councils adopted *Towards Zero Strategy* is guided by the principles of the waste hierarchy and a circular economy model. This means that everything we do is aimed at avoiding, reducing, reusing, recycling and keeping materials in circulation through improved product design and manufacture, and allowing innovation to create systems that allow this to occur. The Strategy also encompasses objectives relating to the investigation of Alternative Waste Treatment (AWT) as a means to manage residual waste as an alternative to landfilling. Development of the Strategy included high level assessment of AWT technologies including combustion, gasification and mechanical biological treatment. Specific actions within the Strategy that address AWT are highlighted below;

Objective 2: Solutions for Residual Waste

Key Goal: By 2020, determine the feasibility of pursuing a regional AWT solution

This directs the work that has been undertaken to date as part of the North Coast Waste Investment Review Project.

20 *Objective 4 : Lobbying for Policy Reform*

Key Goal: Actively participate in all relevant NJRO and NE Waste actions and consultations

- *Engage the NSW and Federal governments to advocate bigger picture policy review and reform, aligned with BSC strategic objectives*
- 25 • *Clear policy and guidelines on Energy-from-Waste developments*

There is no objective, goal, or action that mentions incineration within the *Towards Zero: Byron Shire's Integrated Waste Management and Resource Recovery Strategy 2019-2029*.

Investigation of AWT and energy from waste technologies is a strategy to manage waste after all other steps within the waste hierarchy are taken. As an alternative to landfilling, and a renewable energy source there may be new technologies emerge that prove to deliver better environmental and financial outcomes. Landfill generates 50% of Councils emissions, despite the landfill being out of operation since 2015, and with Councils commitment to net zero emissions, the generation and management of waste will play a vital role in emissions reduction.

Byron Shire Council Community Strategic Plan, Delivery Plan and Operational Plan

A number of key goals in the Community Strategic Plan and actions within the Operational Plan relate to the issues addressed in this report. These are highlighted in the **Strategic Consideration** section of this report.

c) A status report on the proposed waste to energy plant at Casino including the positions of the other councils within North East Waste and the State Government post-election.

- 10 The status report at the November 2022 CCRRAC Meeting (I2022/1474 attached), provided an overview of the North Coast Waste Investment Review Project and how this has coincided with the release of NSW Energy from Waste Policy, Plan and Regulation.

In brief, the stages of the project have been as follows:

- Waste Stocktake analysis (Arcadis Consultants)
- 15 • North Coast Regional Waste Investment Review Project Report (Arcadis Consultants)
- Market Sounding and Expression of Interest (Mike Richie and Associates Consultants)

Update - Expression of Interest

- 20 In mid-2022, Richmond Valley Council (RVC) on behalf of nine Councils on the North Coast sought Expressions of Interest (EoI) from the waste management industry to provide long term alternative waste treatment infrastructure in the North Coast region. The EoI sought solutions for processing residual waste, recyclates and organics (food and garden).
- 25 Sixteen submissions were received, covering a range of technologies for various waste streams including;
- 1) thermal treatment of residual waste via
 - moving grate
 - fluidised bed
 - 30 • gasification
 - pyrolysis
 - autoclaving

2) processing organic waste via

- in vessel composting
- anaerobic digestion

3) separation of co-mingled recyclables

- 5
- material recovery facilities

The EoI process demonstrated that there was interest in establishing facilities in the region, and that those dealing with organics and recyclables could be further pursued. Options to deal with residual waste streams given the volumes in the region would be reliant on new technologies that would need to be proven for a minimum of two years before seeking any approvals from the EPA.

10

Status of Energy from Waste in Casino – Richmond Valley Council

Following the EOI process, and owing to the impacts of the Energy from Waste Regulation, Richmond Valley Council provided a report to their November 2022 Council Meeting recommending that they resolve a position that Council:

15

- *Pauses its active investigation into an Energy from Waste facility for the Richmond Valley while the Parkes Special Activation Precinct EfW proposal proceeds and monitors progress, community reactions and outcomes;*

20

- *Continues to consider other options in the Alternative Waste Treatment Solutions Expression of Interest responses and keep North Coast Councils updated on any progress and opportunities for collaboration.*

The full Council Report is attached (E2023/43992).

RVC has provided a public statement as follows:

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STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

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Statement on energy-to-waste: *Richmond Valley Council has been working with other North Coast councils to help resolve regional waste management issues and find a better solution to landfill.*

- 5 *The recent expressions of interest process, conducted by RVC in conjunction with other coastal councils, confirmed the level of interest in establishing alternative waste treatment facilities, but also highlighted the challenges of navigating government policy and regulation to deliver these solutions in an appropriate manner.*

- 10 *Council has previously expressed its disappointment with the way the NSW Government's Energy from Waste Regulation has been drafted. As a result, Council resolved in November to pause its investigation into an energy-from-waste facility in the Richmond Valley until such time as these matters become clearer.*

In keeping with Council's resolution, and recognising that there is no development proposal for such a facility in the Richmond Valley, no further media comment will be issued regarding this matter.

- 15 *In the meantime, Council will continue to explore other options for waste management, including recycling and repurposing industries.*

- 20 RVC has advised that Lithgow has been revoked as one of the four locations within the EfW Infrastructure Plan, however no further information is known as to why or how this has occurred. RVC has confirmed that there has been no change the November Council resolution and the statement above. They have paused awaiting further direction and support from the State Government, and to see what happens with the Parkes Project, which currently looks uncertain. No changes are known to have occurred to any of the NSW strategy following the NSW State election at this point in time.

- 25 Other North East Waste Councils have provided the following as to their position on Energy from Waste.

Tweed Shire Council

Tweed Shire Council does not currently have a formal position on waste to energy.

- 30 Tweed Shire Council's Towards Zero Waste Strategy does recognise that to achieve 90% diversion of waste from landfill that some form of Alternative Waste Treatment may be required and includes *Strategic Objective 3.5: By June 2025, we will establish a Council position statement on an 'energy from waste' treatment solution for landfill bound waste.*

Kyogle Council

Kyogle Council doesn't have a formal position on waste to energy.

Lismore City Council

- 35 Lismore City Council's Resource Recovery and Residual Waste Strategy 2022-2032 - Key Theme 3: Determining Solutions for residual Wastes Items 6.2 Investigate different technologies and by-products (excluding residual waste to energy by incineration)

Item 6.3 Lismore City Council does not support waste to energy from residual waste stream incineration in the Northern Rivers.

This followed the below Council resolution:

97/21	On submission to the meeting the motion was RESOLVED that the:
	<ol style="list-style-type: none">1. draft 2022-32 Resource Recovery and Residual Waste Strategy: Sharing the Responsibility towards a Circular Economy and Resourceful Community be placed on public exhibition for a period of at least 28 days.2. draft strategy be reported back to Council by April 2022.3. Council opposes the Waste to Energy proposal and exclude it from the strategy.
	(Councillors Guise/Lloyd) (BP21/821)
	Voting for: Councillors Bird, Casson, Cook, Ekins, Guise and Lloyd
	Voting against: Councillors Marks and Moorhouse

- 5 The Strategy was adopted after the exhibition period.

Clarence Valley Council

Clarence Valley Council doesn't have a formal position on waste to energy.

Ballina Shire Council

- 10 Does not have a waste strategy and has provided no response as to their status on waste to energy.

d) To consider a motion of no support for an incinerator (waste to energy) project in the region.

- 15 As detailed within the *NSW Waste and Sustainable Materials Strategy* and associated *NSW Energy from Waste Policy Statement, Infrastructure Plan and Regulation*, under the Policy, proposals must:

- 20
- Meet current international best practice techniques, including emissions controls
 - Use technologies that are proven, well understood and capable of handling the waste inputs
 - Meet technical, thermal efficiency and resource recovery criteria
 - Undertake monitoring with real-time feedback.
- Furthermore, such facilities will only be supported where they are used to manage residual waste, not as an alternative to recycling.

- 25 The Policy states that *incineration facilities for the destruction of waste* as a thermal treatment application are excluded from the Policy as they are not considered to be undertaking genuine energy recovery. This means that incineration is not permitted under this Policy Statement, and therefore a motion of no support for an incinerator is non-consequential in this instance, as they are already not supported by the Regulator.

Council should maintain an open, investigative approach to long term waste management, assessing all options, particularly in an environment where new technologies are emerging

and innovation is supported. The environmental impact of landfilling as well as the generation of electricity from non-renewable sources should be assessed against new technologies as they emerge to ensure we can provide the best outcome for our environment and our communities. Progression and increased support for circular economy, resource recovery and diversion and avoidance of waste generation should all take priority, as investment in these areas will ultimately reduce our overall need for alternative waste treatment or landfilling.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.1: Waste management and resource recovery strategy - Implement Integrated Waste Management and Resource Recovery Strategy - Towards Zero	3.5.1.1	Maintain membership and participation in the North East Waste regional waste management group
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.3: Waste collection and landfill - Maintain and enhance solutions to recover / treat / dispose of residual waste	3.5.3.1	Maintain and manage Waste and Resource Recovery Collection, processing and disposal contracts
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery	3.5.3: Waste collection and landfill - Maintain and enhance solutions to	3.5.3.2	Support the progression of a regional; alternative waste treatment facility in alignment of the adopted strategy

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	practices	recover / treat / dispose of residual waste		and relevant resolutions
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.4: Education - Empower the community to increase avoidance, reuse, and recycling activities	3.5.4.3	Develop and support community based sustainability and circular economy initiatives

Legal/Statutory/Policy Considerations

[National Waste Policy Action Plan 2019 \(dcceew.gov.au\)](https://www.dcceew.gov.au/waste/policy-action-plan)

[NSW Waste and Sustainable Materials Strategy 2041](#)

5 [NSW Energy from Waste Policy Statement](#)

[Energy from Waste Infrastructure Plan \(nsw.gov.au\)](https://www.nsw.gov.au/energy-from-waste)

[Towards Zero Integrated Waste Strategy 2019 to 2029 - Byron Shire Council \(nsw.gov.au\)](#)

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

3.4

Report No. 3.4 North Coast Regional Waste Investment Project and Richmond Valley Council's waste update for Councils

Directorate: Infrastructure Services

5 **Report Author:** Danielle Hanigan, Manager Resource Recovery

File No: I2022/1474

Summary:

10 The Report provides the Committee with an overview of the North Coast Waste Investment Review Project to date, and how this has coincided with the NSW Governments Policy and Planning around Energy from Waste.

15 The intent of the North Coast Waste Investment Review Project, from Council's point of view, is to determine the volume and types of materials we are dealing with as a region, the possible solutions for avoidance, reuse, recycling, recovery and as a last resort energy recovery and disposal. Through working with neighbouring Councils, solutions for a range of waste streams have been discussed, with a move to a Circular Economy model at the forefront.

20 Concurrently, the NSW government has put in place regulation and policy around Energy from Waste and stipulated locations in which it would allow this to occur, which includes the Richmond Valley Jobs Precinct.

RECOMMENDATION:

25 **That the Climate Change and Resource Recovery Advisory Committee notes the report.**

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STAFF REPORTS - INFRASTRUCTURE SERVICES

3.4

Report**Background**

Byron Shire Council is one of 13 Councils in the NSW North Coast region participating in the North Coast Waste Investment Review Project (The Project) which commenced in 2019. The Project has considered options to develop regional responses to collective waste challenges, including infrastructure to divert residual waste (the waste left after resource recovery and recycling) from landfill, to enhance resource recovery rates and to support the security and local opportunity of the recovered materials supply chain through to end markets.

The project has been driven by Richmond Valley Council with support and expertise from Council Waste staff and General Managers from all participating Councils.

Stage 1: Waste Stocktake and North Coast Regional Waste Investment Review Report

Thus far the Project has delivered a *Waste Stocktake* analysis, assessing the amount and type of waste within the region, as well as the infrastructure that currently exists to deal with this waste. On this basis the *North Coast Regional Waste Investment Review Report* was developed. These reports provide the information base for Councils to test the market for Alternate Waste Treatment (AWT) solutions for all waste streams that are environmentally, economically and socially acceptable to North Coast communities. AWT refers to a range of activities that process mixed solid waste into products (such as compost, fuel, biogas, energy) as an alternative to landfilling. Modelling included financial analysis, carbon profiling and also described opportunities to support the emergence of a local circular economy.

Stage 2: Market Sounding and Expression of Interest

In the second stage of the Project, 9 of the original 13 Councils committed to participation in a Market Sounding and Expression of Interest (EOI), for the establishment of regional waste facilities with a focus on alternative waste treatment solutions for both residual and recyclable waste streams. Consultants MRA were engaged to undertake the EOI process on behalf of the 9 Councils. This allowed companies who have the suitable technology to deal with the volume and classifications of waste within the region to put forward a proposal, and for these proposals to be assessed transparently.

Richmond Valley Council have received submissions to the EOI put to the market. Responses covered residual, recycle and food organic/green organic streams. A wide range of technologies have been put forward, including energy from waste facilities. Submissions have been assessed using the methodology outlined in the EOI documents. MRA has assisted Richmond Valley Council with the EOI process and assessment. The EOI process has demonstrated that there is strong market interest in establishing alternative waste technologies on the North Coast.

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Energy from Waste: NSW Government

Concurrent to the North Coast Regional Waste Investment Project, the NSW Government has released the *Energy from Waste Infrastructure Plan* to support the *NSW Waste and Sustainable Materials Strategy 2041*. The *Plan* recognises that thermal treatment of waste

5 will form part of the future solution for managing residual waste in NSW, providing an opportunity to replace less environmentally sound energy sources, such as coal-fired power stations, and avoid methane emissions from landfill. Alternate waste treatment will not be prioritised over reduction and reuse.

In July 2022 the NSW Government put in place new energy from waste regulation - *The Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022* which put into law the Government's *Energy from Waste Infrastructure Plan* to strategically locate energy from waste in four designated locations in NSW to maximise efficiencies in infrastructure, waste management, innovation and energy recovery. The Richmond Valley Regional Job Precinct has been identified as one of these

10 four locations.

15

Any proposals within the priority infrastructure areas would be required to comply with current planning and environmental legislation and policies, including the NSW Government's Policy Statement on Energy from Waste Facilities.

20 This policy statement, released in June 2021, provides for extensive community consultation and includes some of the most rigorous environmental controls in the world.

Under the Policy, proposals must:

- Meet current international best practice techniques, including emissions controls
- Use technologies that are proven, well understood and capable of handling the waste

25 inputs

- Meet technical, thermal efficiency and resource recovery criteria
- Undertake monitoring with real-time feedback.

Furthermore, such facilities will only be supported where they are used to manage residual waste, not as an alternative to recycling.

30

North Coast Waste Investment Review Project: As at November 2022

Private companies have made submissions via the EOI process. The details of these submissions have not yet been made available to the participating Councils, and there are several other steps required before the Project would proceed to this stage if at all.

35

Richmond Valley Council, as the lead in the procurement process, has provided the following information with regards to next steps;

40 *To further consider the possibilities of an Alternate Waste Treatment solutions for the North Coast, the following next steps are proposed:*

- *Confirming the depth of support from the State Government and any funding that may be available for Alternate Waste Treatment facilities*
- *Exploring the process by which the Parkes Energy from Waste facility is being procured, and how proposals in Lithgow and Goulburn are progressing*

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STAFF REPORTS - INFRASTRUCTURE SERVICES

3.4

- *Exploring the contractual arrangements underpinning the Energy from Waste facilities that have been developed in Western Australia*
- *Developing relationships with potential advisors*
- *Developing a communications strategy to inform the community on all options*
- 5 • *Developing potential procurement strategies for the different options*
- *Continued liaison and partnering with North Coast councils*

10 Within the Byron Shire a long-term sustainable option for residual waste management is a key priority, given the sole licensed landfill is scheduled for closure and remediation within the next 12 months. Currently residual waste is transported to Ti-Tree Bioenergy Landfill in South-East Queensland for disposal, however a more localised facility is preferable.

15 Whilst individual Councils have committed to being a part of the Market Sounding and EOI process, this does not commit to continuation in the project overall. Council's participation will be determined by the opportunities presented through this process and a rigorous assessment process which includes consultation with Councillors and alignment with Councils Strategies which strongly preference Circular Economy and Resource Recovery Initiatives above any disposal options.

20 Next steps

The Climate Change and Resource Recovery Advisory Committee will be kept updated as more information comes to hand in relation to the North Coast Waste Investment Review Project, as well as any developments in relation to Richmond Valley Council and Energy from Waste.

- 25 Councils are simultaneously looking at a range of options which include Projects to process construction and demolition waste and keep it in circulation, further food and garden processing facilities, recycling through Materials Recovery Facilities and plastics processing. Future projects aim to assist in designing out waste at the source, implementing reuse programs to eliminate single use materials and ensuring recycled content materials are pulled through supply chains, decreasing the need for disposal options
- 30

Strategic Considerations

[Towards Zero Integrated Waste Strategy 2019 to 2029 - Byron Shire Council \(nsw.gov.au\)](https://www.nsw.gov.au/towards-zero-integrated-waste-strategy-2019-to-2029)

35 Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
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BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

3.4

3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.3: Waste collection and landfill - Maintain and enhance solutions to recover / treat / dispose of residual waste	3.5.3.1	Maintain and manage Waste and Resource Recovery Collection, processing and disposal contracts
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.3: Waste collection and landfill - Maintain and enhance solutions to recover / treat / dispose of residual waste	3.5.3.2	Support the progression of a regional; alternative waste treatment facility in alignment of the adopted strategy and relevant resolutions

Legal/Statutory/Policy Considerations

[NSW Waste and Sustainable Materials Strategy 2041](#)

[NSW Energy from Waste Policy Statement](#)

- 5 [Energy from Waste Infrastructure Plan \(nsw.gov.au\)](#)

NE WASTE ANNUAL REPORT
..... 2021-22



NOVEMBER 2022



The North East Waste acknowledges the funding contribution it receives from the
NSW Environmental Protection Agency.

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FOREWORD



OUR TEAM

This report outlines the activities and outcomes of North East Waste (NE Waste) for the 21-22 financial year. We are a group of seven Councils working towards regional solutions to effective waste management. Our member Councils are Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley, and Tweed. The management of waste and resource recovery in our region has been severely challenged in the past few years - the pandemic, bushfires and more recently floods have all impacted on the way we operate and deliver our projects and programs. Despite this we have delivered and engaged our community, schools, businesses and government in many waste minimisation, avoidance and recovery activities.

Our core projects and achievements, and those of our member Councils, are the subject of this report. Our primary focus is on education, food waste reduction, business waste reduction, problem waste recycling, litter, asbestos disposal, and illegal dumping. Other priorities included training, research, regional collaboration and fostering relationships with State Government and the broader waste community.

In developing and funding our programs and advising Councils on the changing waste regulatory landscape we have worked closely with the NSW EPA, who provide 50% of our operational funding. This year we

embark on a new era as this funding comes under the umbrella of the Waste and Sustainable Materials Strategy 2041 (WaSM). In response to this Strategy NE Waste is developing a new regional waste strategy to guide our activities over the next 5 years. This is due for completion in Dec 2022.

NE Waste's vision remains to achieve more sustainable waste management and better resource recovery through a proactive and collaborative approach with our member Councils and community. The ongoing support of our member Councils and our success in securing grant funding allows us to engage our region in an innovative and proactive way, with our programs often duplicated by other Councils in both the metropolitan and regional areas. Our incredible team of project coordinators and educators continue to inspire and this year went beyond their remit to assist residents and businesses impacted by the floods with advice and information, in the communication vacuum that encased our region.

In the coming year we intend to explore new and innovative ways to encourage and engage our communities, aiming to support Councils in a move towards a more circular, lower emissions economy.

Jeanie McKillop, *NE Waste Coordinator*



Jeanie McKillop
Coordinator



Linda Tohver
Education Coordinator



Karen Rudkin
Project Coordinator



Kim Potter
Business Waste
Coordinator



Nicki Walker
Organics Program



Joanne Hoy
Asbestos Program



REGIONAL PROJECTS AND ENGAGEMENT

In 2021-22 NE Waste coordinated 14 major projects focused on community engagement, reuse, business waste management, organics, training, illegal dumping, litter, and problem waste management. We also successfully secured 3 new grants. The following section outlines the key features, and highlights outcomes of each project.



NE WASTE COMMUNICATION AND PARTNERSHIPS

OVERVIEW

Each year NE Waste increases its communication collateral and expands the mechanisms and distribution of our key messages. We have aimed to build a diverse yet consistent brand that focuses on engaging and raising the awareness of our community around waste and resource recovery. Media campaigns remain a core component of many of our projects. Print, radio, television, and electronic media are well utilised to maximise our reach, and our social media presence continues to expand through Facebook and Instagram, with our Councils closely linked to our programs, utilising the resources we provide for them. In the past year our education coordinator Linda Tohver has had 38 radio segments called 'Talking Rubbish' on the ABC and written 28 articles for their newsletter. We have had a regular monthly column in a local magazine and multiple media releases in print and online media.

This year the importance of communication took on a whole new level as flooding devastated our region and Covid continued to effect communities and businesses. Due to our continued regular presence in the media we were able to keep the community informed of State and local government responses to the natural disaster, in addition to fielding numerous requests for information and assistance from affected residents and businesses.

We also get our message out and share our experience beyond our region through networking, representation on steering committees and panels and through presentations at conferences.

Through networking and in the delivery of our projects NE Waste has formed many partnerships across the region and State. In addition to long term relationships held with LGNSW, the NSW EPA, this year partners included:

- Northern Rivers Area Health Service
- Southern Cross University
- Regional Development Australia
- Northern Rivers Food
- Northern Rivers Food Donation Network
- Business NSW
- Richmond Waste
- Mullum Cares
- Positive Change for Marine Life
- Northern Rivers Joint Organisation of Councils
- Richmond Tweed Regional Libraries; Upper Clarence Richmond Regional Libraries
- Social Media Influencers including Plastic Free Mermaid
- Bunnings

We attended and presented at 3 conferences on regional cooperation (No Time To Waste), our successful business projects (Waste 2022) and our asbestos management experience (Asbestos Safety and Management Conference).



“ Increase the awareness of waste reduction activities across the region and engage the community. ”



MAIN ENGAGEMENT CAMPAIGNS



270K+
engagements

SECOND HAND SATURDAY

700+ Garage sale holders

5944 App users

CIRCULATE NORTHERN RIVERS PROJECT

200 new contacts
800 business registered for the newsletter

ILLEGAL DUMPING

1600 incidents reported

17% increase in public reporting

#RecycleRight

Adopted by over

30

Councils in 3 States

LOVE FOOD COMMUNITIES

1300+ Food Smart sign-ups

40 Your Business is Food sign-ups

FOOD DONATION EDUCATION PROJECT

220+ food donation agencies and businesses newsletter subscribers

COMMUNITY RECYCLING CENTRES

216,000 Kg

89% of community awareness of CRCs

HOUSEHOLD ASBESTOS PROGRAM

404 TESTS

14% REDUCTION IN ILLEGAL DUMPING

ALL MEDIA

WEBSITES
65K+
VIEWS



PRINT ADS
64



AIRED ★
3000+
TV Commercials



NEWS
30+
EDITORIALS



38
RADIO INTERVIEWS



930
RADIO ADS



89
Community EVENTS



REGIONAL COORDINATION AND STRATEGY



OVERVIEW

NE Waste develops and delivers multiple projects, seeks funding and engages contractors to fulfill the objectives of our Regional Waste Strategy, which is currently under revision. The past year was an arrangement of interim transition funding, bridging the gap between the Waste Less Recycle More program and the new 20 year Waste and Sustainable Material Strategy (WaSIM).

One of our primary functions is to act as a conduit between the State Government and our Councils and this will be particularly important in the development of our next Regional Waste Strategy 2022-27. There has been extensive consultation with the EPA, Councils and other VRWGs to develop a framework for this Strategy which suits all parties. Consensus was reached and guidelines developed in May, with the new strategy rolling out in November 2022.



“To support regional initiatives, guide strategic direction, and administer North East Waste in its liaison with State Government and industry.”

KEY OUTCOMES

- 8 contractors were engaged to deliver 14 regional projects, many adapted to pandemic and natural disaster events
- 5 meetings in person with waste managers, 4 with waste educators, additional consultations with both groups
- 3 new grants were secured – a C&D waste pilot project that is focusing on diverting more builders waste from new builds and demo sites, the Scrap Together Campaign to encourage residents to use their FOGO bin and a Litter Own it and Act projects looking at mangroves as litter traps on the Clarence River
- Increased collaboration with both regional and State agencies on the flood response in February 2022
- Love Food communities, Bin Trim and Illegal Dumping grant programs were all completed
- All Councils recommitted funding to NEW for the year and were actively involved in project delivery
- Fulfilled all reporting requirements to the NSW EPA.
- 3 submissions, 8 consultations, ongoing consultations with EPA on Strategy development, natural disaster responses, program logic workshops

EDUCATION AND COMMUNITY ENGAGEMENT PROGRAM

OVERVIEW

NE Waste’s Education and Community Engagement Program drives behaviour change initiatives to achieve the region’s waste diversion and recycling targets. This year there has also been an increased focus on education around circular economy. The program is delivered through a combination of community research/surveys; face to face engagement at events, schools, preschools, online activities and workshops, partnerships with other organisations; social media marketing and broader communication approaches.

The programs are researched and designed in conjunction with the regional waste educators group to optimise collaboration and ownership of the programs by our member Councils, ensuring they are useful and appropriate to each LGA. During 21-22, there were impacts to the delivery of our face to face programs – particularly the Wipe out Waste schools and community events with more than 90 events cancelled or postponed due to Floods and Covid, including our Second Hand Saturday program. Many of these were pivoted and adapted for on-line content and the resource library expanded.

The range of programs highlighted here includes:

Wipe out Waste Education – our marquee and team of experts provide a range of school and community activities from the newly developed Love Your Lunch program, recycle relays, drama based education, beeswax wrap making and audits. Our team has now developed a series of online content as well – from DIY beeswax wraps, composting and recycling.

Regional Waste Educators – driving force of collaboration and innovative best practice education program in our region.

#RecycleRight campaign – community and schools education on our #RecycleRight and Lift the Lid Campaign

Conference/Workshop Participation: Regional Waste Conference (speaker), Asbestos Awareness Conference (speaker and panel), NSW Waste Conference (participant), Northern Rivers Food (presentation)

Early Childhood Program – includes staff training, parent and child education sessions.

External participation on committees, working groups: Steering Committee Recycle Mate App, Behaviour Works/ Monash Uni participate in Reuse/repair program development

Special Events – including National Recycling Week, Compost Awareness Week, World Environment Day and Plastic Free July – NE Waste provide regional media and Council collaborative activities to support these special events.



KEY OUTCOMES

- Community education yearly reach was in excess of 15,000 householders who have directly participated in NE Waste and partner education programs and 65,000 reached via social media and general media outlets.
- Our Wipe out Waste education activities included 5 x online workshops and 54 x face to face events/workshops/activities.
- Online resources and videos developed and uploaded onto NE Waste Youtube channel, website and social media pages.
- Plastic Free July, National Recycling Week, Sustainable Christmas, Compost Week and World Environment Day – media packages developed for Councils, and community workshops held;
- School's engagement program - delivered High School workshop to TAS teachers across the region. Worked with Recycle Relays, our Wipe out Waste show, waste audits and the Love your Lunch Program with 9 schools. Unfortunately 10 other schools had to be cancelled due to COVID and then floods. Through the Love your Lunch program, and average 46% reduction in edible food waste from children's lunchboxes was achieved, with one school achieving a 93% reduction.
- Council staff engagement – beeswax wrapper workshops held at Councils and libraries during Plastic Free July.
- Professional Development opportunities – Tour of the Materials Recycling Facility at Tweed Shire Council with the regional Waste educators group.
- 38 x ABC North Coast "Talking Rubbish" segments/interviews and newsletter articles written.



Wipe out Waste

59 community event days reaching 2,500 people directly. Over 90 events had to be cancelled or postponed due to Covid and Flood impacts.

Scrap Together

TV ads: Recycle Right, Love Food Hate Waste, SCRAP Together, CRCs – reaching over 65,000 people across the region

International/National Events:

World Environment Day, Plastic Free July, National Recycling Week, Christmas Campaign, International Compost Week – reach 65,000 community members

50,000+ reach & 10,200+ engagement from 1,500+ TV ads, 89 community events,

1323 sign ups to Food Smart, 40 businesses sign up to Your Business is Food.

20 x multimedia resources, 10 business case studies, 4 recipe cards, 4 x comms packages

DIVERTING FOOD FROM LANDFILL: EDUCATION ABOUT ORGANICS MANAGEMENT

OVERVIEW

Diverting food from landfill, education about food waste avoidance, ensuring householders use and present their kerbside FOGO bins correctly, as well as looking at opportunities for organics management in rural communities are priority areas for NE Waste and member Councils. Three NE Waste projects are aiming to achieve organic waste diversion in the region: Scrap together, a rural compost project and Love Food Communities. NE Waste was successful in receiving funding for the newly developed “Scrap Together” education campaign from the NSW EPA. The campaign TVC was filmed in the Northern Rivers region, featuring NE Waste and Council staff as ‘extras talent’. The funding received from the NSW EPA is to deliver the “Scrap Together” program from June – November 2022.

In order to provide some preliminary information around how householders in rural communities who do not have access to a kerbside FOGO service, were managing their organic waste, NE Waste developed a survey in conjunction with the Council waste educators group. The results of the survey are in the case study provided.

Education around food waste avoidance and the love food hate waste campaign has been delivered through the Love Food Communities Project since 2019/20. The project worked with community, Councils, schools, food hospitality businesses, food manufacturers and media in an effort to highlight food waste issues and provide skills and incentives to reduce food waste.



“Increase awareness about food waste avoidance issues, and increase skills and adoption of food waste avoidance behaviours in households and business communities.”



KEY OUTCOMES

- SCRAP Together resource library for Councils - The campaign resources feature TVCs, radio ads, print and web resources which has been edited and/or developed for our Northern Rivers region and specific Councils.
- SCRAP Together program was launched on the 23rd June with Lismore and Ballina Shire Council mayors.
- SCRAP Together pop-up events, workshops, talks and demonstrations as well as media and social media packages have been developed and are being delivered to 30 November 2022.
- Love Food Communities Program reached 50,000 people in the community through TVC, Social Media campaign, workshops and pop up events.
- The team worked with 40 businesses (including 5 manufacturers) with 29 undertaking the final survey assessment, and over half reporting active changes they made to reduce food waste.
- Love your Lunch Schools Program was designed as part of LFC and the results are promising with an average reduction of 46% in edible food waste from children's lunchboxes (from 8 schools in Term 2 2021, with 1171 students), with one school achieving a 93% reduction.

CASE STUDY: RURAL COMPOST SURVEY PROVIDES INSIGHT INTO FOOD WASTE MANAGEMENT

Across the Northern Rivers, rural residents without access to a kerbside FOGO (Food Organics and Garden Organics) service were invited to complete a survey about home composting. The survey's aim was to provide some insight into how these properties currently manage their food waste, and explore future options for rural communities and households not currently serviced by a kerbside FOGO bin. The results of the survey included:

- A total of 377 responses were received from across the Northern Rivers.
- Most respondents (84%) felt strongly about keeping food out of landfill, and that the majority (65%) reported to be managing their food waste through home composting, while a further 26% gave food scraps to chickens, and other farm or domestic animals.
- Whilst 31% of respondents would like the option of having a FOGO kerbside bin service made available to them, the majority (45%) did not support an increase in rates to support it and additionally >70% preferred to home compost, rather than have a FOGO kerbside bin service.
- 50% of respondents reported they would not use a kerbside FOGO service even if it was provided to them.

The results of this survey are being used to develop a composting education program for rural householders in 2023.

CIRCULATE NORTHERN RIVERS PROJECT



OVERVIEW

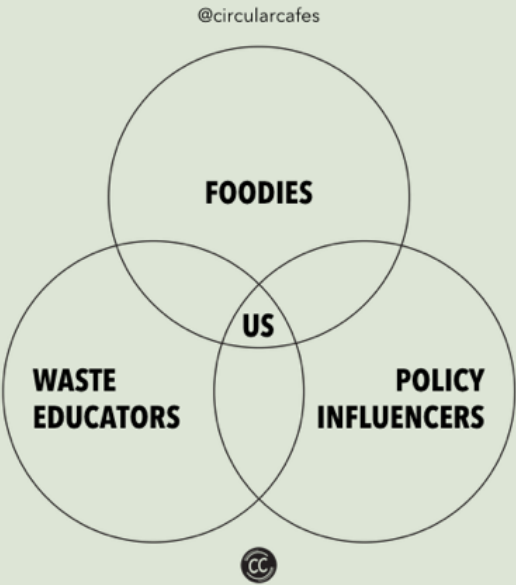
To utilise our unique position, working across the Northern Rivers to drive the Circular Economy, by delivering projects that actively harness existing networks, effective and innovative solutions, to create less wasted resources, and a stronger more resilient Northern Rivers.

The collaboration between North East Waste Member Councils, the activities of the business program, and business and industry network connections throughout the region means NE Waste is ideally positioned to facilitate, develop and support Circular Economy activities across the Northern Rivers.

Circular Economy initiatives meet the strategic objectives of the NE Waste business program to divert waste from landfill, they will also support member Councils to transition towards a zero waste and lower carbon future for the Northern Rivers.



“Circulate Northern Rivers aims to inspire encourage and assist local businesses to participate in the Circular Economy. Fostering local connections and solutions, supporting the Northern Rivers shift to a prosperous, sustainable and healthy local economy.”



KEY OUTCOMES

Circular Cafes is an industry based approach to building and supporting the circular economy in the Northern Rivers. Our aim is to work as a powerful collective to significantly influence how business is done in our region. Helping to redefine the current business model, to one that reaps the benefits of a regenerative circular economy. The Circular Cafes project was funded by through the Bintrim program and continues to be available to business. See circularcafes.com.au for more information.

Business Support

- Additional businesses- assessments, action plans, support.
- Flood Response: business support provided through Southern Cross University Business Hub
- Regular, quality, educational electronic communications to business database (700 contacts)

Presentations

- Waste 2022
- Circular Economy in Local Councils
- 2021 AWRE NSW EPA Circular Economy Panel

Farewell from Kim

It has been a pleasure to deliver the business project on behalf of North East Waste, in what has been a pretty exciting and interesting time in the waste industry. The Circular Economy Leaders Launch and Circular Cafes project were a highlight, and businesses should be very proud of the outcomes achieved through these projects. NE Waste will play a crucial role in our regions future around Circular Economy, and I know they will continue to do good things.

THE OUTCOME:
WE WORKED WITH **100**
food businesses



KAREN FROM SHINY BREW, HOLDING A REPURPOSED TETRAPAK AS A CUP TRAY WITH HER HUSKEE CUPS.

TO:

SAVE **895 TONNES**
OF RESOURCES FROM LANDFILL

RE-CIRCULATE **348 tonnes**
OF WASTED FOOD INTO LOCAL COMPOST SYSTEMS

TRIAL **8** CUP SWAP PROGRAMS

IMPLEMENT OVER **100** WASTE ACTION PLANS

CAPACITY BUILDING ACROSS COUNCILS AND WASTE SERVICE PROVIDERS TO BETTER SERVICE BUSINESS NEEDS.



FACILITATING CONNECTIONS

We also delivered the Circulate 2021 Leaders launch where sixty regional business and local government leaders had the opportunity to get an understanding the Circular Economy and the opportunities for the Northern Rivers. Our speakers we guided to re-imagine business-as-usual, hear best practice examples. Learn how to turn circular economy concepts into

profitable and purposeful opportunities. The objective of the event was to deliver CE education to the regions decision makers and begin to develop a community of ambitious leaders working towards a resilient future for the Northern Rivers.

ILLEGAL DUMPING PROJECT



OVERVIEW

The regional illegal dumping program continued to develop and deliver education resources and facilitate coordinated networking and knowledge sharing opportunities, to support council's own prevention initiatives.

In 2021-22 Clean up and Prevention (CUP) Rd 7 grant funding, supported the delivery of a region wide program with the objectives of reducing household kerbside and asbestos dumping incidents, establishing baseline data on commercial dumping into public bins and increasing public reporting.

The projects objectives were achieved in part, through the successful implementation of the project activities but were significantly influenced by the prevention initiatives of member councils, particularly Byron and Kyogle, who also completed their own CUP Rd 7 programs in 2021-22.



“To reduce illegal dumping across the North East Waste region and improve our member Council’s capacity to prevent illegal dumping behaviour.”

KEY OUTCOMES

- 1,603 Illegal dumping incidents were reported across the region – a reduction of 5% from 20-21 (18% reduction over 5 years)
- A sustained regional increase of 17% in public RID online reporting
- 10% of all dumping incidents reportedly cleaned up by perpetrators or landowners - mostly frequently in Byron and Ballina Shires
- 14% reduction in number of reported asbestos dumping incidents and a large estimated reduction in the quantity (tonnes) dumped
- 462 household asbestos test (HAT) kits distributed - 154% increase indicating greater awareness and community participation in the safe management of household asbestos
- Expansion of the suite of illegal dumping collateral including radio ads, signage, press ads, social media, Youtube instructional videos for asbestos kits and QR codes
- Targeted communication and media scheduled strategically to support and leverage off other programs and campaigns e.g. Think Twice About Asbestos, Be Asbestos Ready, post flood clean up event
- Redevelopment of the Household Asbestos Scheme webpage resulting in a 3 fold increase in traffic
- Completion of the illegal dumping in public bins audit and report in Ballina Shire
- Audit data indicated 133 (37%) bins contained illegal dumping, which contributed significantly to overfilling and littering and impacted negatively on the surrounding environment and clean up costs
- Better practice guide for preventing dumping into public bins is in development and will be available to all member councils
- Active participation in the LGNSW Asbestos Network
- Presented on disaster response and household asbestos scheme at the annual NSW Asbestos Safety Conference

FOOD DONATION PROJECT



OVERVIEW

Following the successful completion of the 2020-21 Food Donation Education grant funded program, NE Waste continued to work in this space in 2021-22, to maintain the momentum gained particularly in regard to networking and collaboration between food relief agencies.



The project was closely linked to other NE Waste food waste programs including Love Food Communities, Your Business Is Food and Circular Cafes. This continuing collaborative approach promotes food rescue, redistribution and donation as the primary sustainable options for food businesses to deal with unavoidable surplus food.



“To reduce the quantity of surplus edible food going to waste across the Northern Rivers by supporting and improving activities, which are likely to lead to increased food rescue and donation.”

KEY OUTCOMES

- Maintenance of the Food Donation website and food networking contact list of 235+ recipients
- Website downloads – Toolkit (149), Food donation agency contact list (450)
- Sourcing and sharing/promotion of regional food donation stories of interest
- Quarterly ‘Food for Thought’ e-Newsletter distributed – high opening rates ~40%
- Regional Community Grant Directory updated – to simplify and stream-line searching for funding
- Post floods (Mar 22) – available financial assistance and grant information was collated and distributed to assist our network of food relief agencies
- Collaborated with another regional waste group (CRJO) in the development of their food donation toolkit



COMMUNITY RECYCLING CENTRES PROJECT



OVERVIEW

2021-22 saw sustained improvements in use of the region’s Community Recycling Centre (CRC) and small drop of cabinet (CRS) network. Improved outcomes have been achieved progressively over the 6 years that the 8 CRCs have been in operation but most particularly in the last two years.

The commitment of NE Waste member councils and the ongoing collaboration with other NSW regional waste groups (RWG), have been key factors in the successful development and delivery of progressive NE Waste Education and Communication Plans.

In 2021-22 the significant improvements in target material collection were due, most specifically to:

- targeted education around correct disposal, particularly of handheld batteries and x-rays
- promotion of the regions small drop off network of 30 CRS
- rapid response to unfolding crisis (C-19 lockdown & flood disasters) to successfully communicate with residents on changes to HPW disposal.



“To deliver a communication and education program to maximise community participation in the correct use of the regions network of free and easily accessible Community Recycling Centres and small ‘Community Recycling Stations’, for the recycling or safe disposal of targeted household problem wastes.”

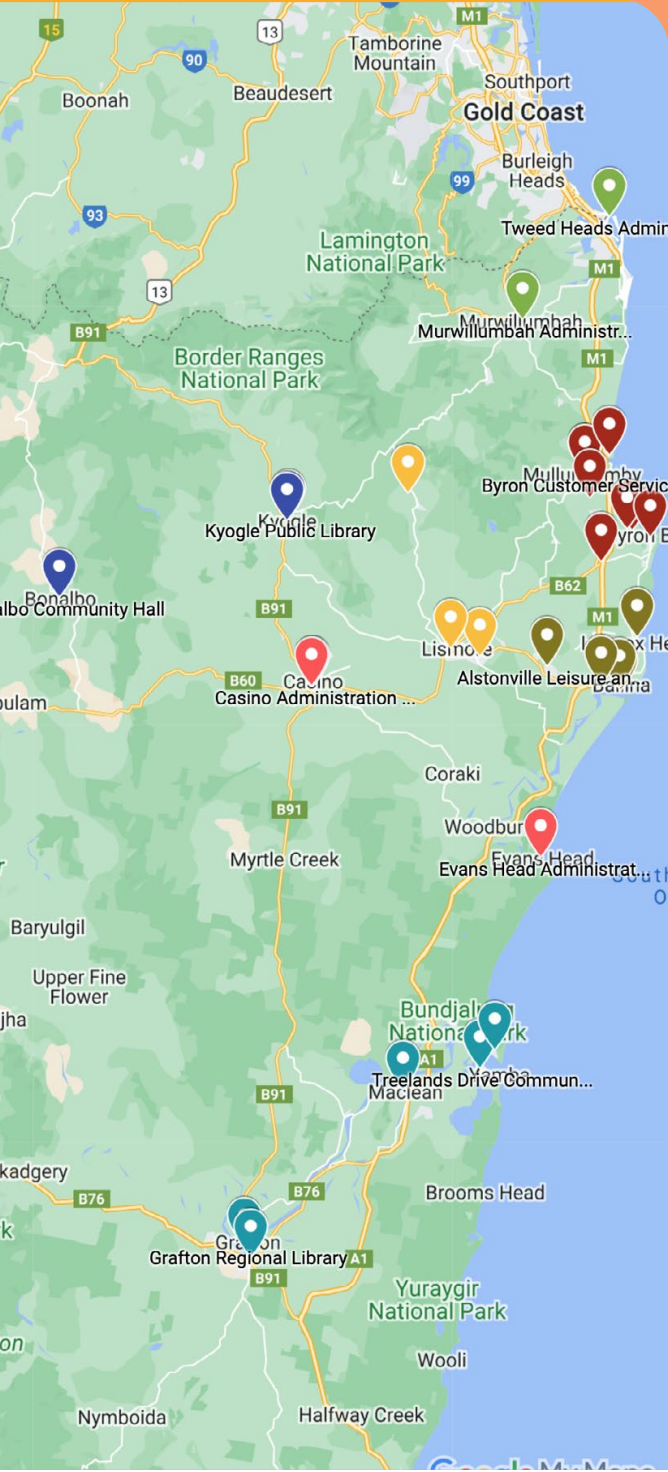
KEY OUTCOMES

- Regionally, 216 tonnes of household problem waste (HPW) was dropped off for free
- An estimated annual cost saving of \$438,664 to councils and the community
- A sustained increase in the collection of targeted HPW and sustained reduction in by-catch (non targeted household chemical waste)
- Paint continued to be the most common HPW item collected at 128 tonnes (65% of all HPW)
- X-ray collection increased to 2.5 tonnes - more than double the previous year following the installation of collection bins at all CRCs
- Resource library continued to be expanded including – 3 new info-graphic videos, press ads, social media for CRS and a postcard/fridge magnet
- CRC refresher training arranged for 30+ council staff at 6 CRC locations
- Household chemical clean out event at Ballina – was attended by 60 householders, diverted 1047 kgs of chemical waste and was a key opportunity to promote the CRC/CRS network

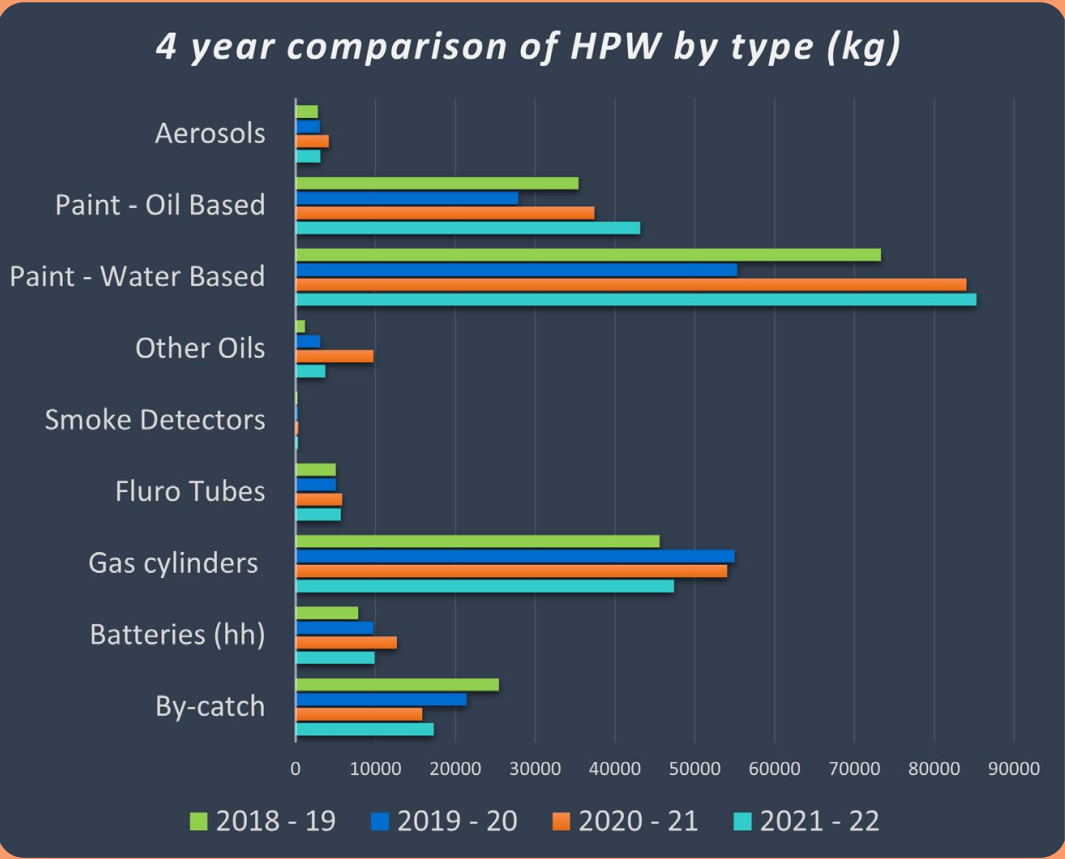
KEY OUTCOMES *CONT..*

- Comprehensive communication program and media campaign bursts at peak times (amended to support COVID lockdown and post flood clean up) - TV ads (1,536), radio ads (280+), press ads & stories(22), social media posts (44), public engagement events (7)
- An independent survey of 506 regional households was completed and indicated:
 - 89% of respondents were aware of CRC and 57% of CRS (small drop off stations)
 - 80% knew the location of their nearest CRC and 68% of had visited in the previous 12 months
 - Correct disposal rates for HPW: gas bottles 82%, car batteries 725, motor oil 70%, paint 47%, handheld batteries 39%, other oils 35%, smoke detectors 30%, light bulbs 17%

CRS LOCATIONS MAP



4 year comparison of HPW by type (kg)



HOUSEHOLD ASBESTOS TESTING PROGRAM



OVERVIEW

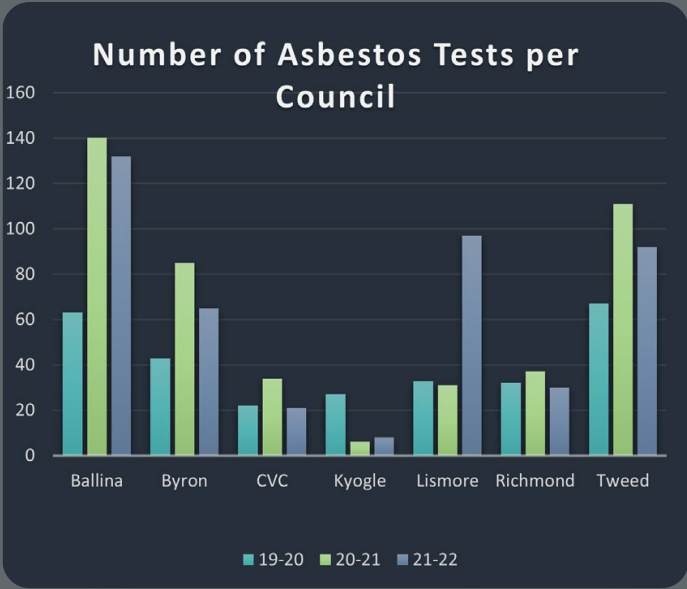
The Home Asbestos Testing Kit program has now been operational for seven years. The program allows homeowners two free of charge tests to identify asbestos in their homes before undertaking renovations. Instructions and PPE are provided to the householders with a satchel to deliver the sample to the laboratory. Post a positive result the coordinator forwards advice from Safe Work and provides information about professional asbestos removal in the region to encourage residents to do the right thing. In 2021-22 the program organised 445 tests for seven Northern Rivers Councils.



“To increase public awareness about the disposal of asbestos and improve their ability to deal with asbestos disposal safely ”

KEY OUTCOMES

There was a substantial increase in the number of tests carried this year in Lismore, potentially as a result of the floods. All other Councils remained consistent, with Ballina residents utilising the program the most.





OVERVIEW

NE Waste is one of eight Voluntary Regional Waste Groups (VRWGs), which operate in rural and regional areas of NSW. All VRWGs are members of RENEW NSW, encompassing over 95 regional Councils. We work together to improve resource recovery and waste management in regional NSW and meet four times a year. RENEW provides an excellent platform to share ideas, resources and experience between the groups. Together we have built campaigns that provide a uniform message that extends beyond NE Wastes boundaries, saving duplication and harnessing a wide creative talent pool. Our meetings in regional NSW and the Sydney EPA offices enable groups to examine other facilities, share project ideas and resolve common issues with the State and at home. The Chair of RENEW is Wes Knight (Tweed Council) and the groups also include Northern Inland Regional Waste, Netwaste, Midwaste, Riverina and Murray JO, Canberra Region JOC and RERROC.

RENEW




“Providing training, professional development and networking opportunities for regional waste groups and personnel”

This year the regional groups met in November in Tamworth and May in Coffs Harbour as well as online in February and October. The RWG’s have been under transitional funding for the past year as we transition to the new Waste and Sustainable Materials Strategy (WaSIM) so much of the discussion with the EPA has been around securing ongoing funding under the new model, and this has now eventuated. There were also many conversations around our past reporting regimes and ways for this to be improved, which is ongoing.

Our previous Regional Waste Strategy 2017-21 is now under redevelopment and review in response to WaSIM and is expected to be completed in November 2022.




TRAINING



“Provide training, professional development and networking opportunities for landfill and education staff in the region.”

Training and professional development is an important part of making NE Waste a cohesive and collaborative entity. It enables contractors and Councils to build skills that contribute to an enhanced performance in their roles. In 2021- 22 the NEW Training budget was used to allow 3 contractors and 7 Council Staff to attend the Waste 2022 Conference in Coffs harbour. This conference, over 3 days, showcases innovation, learnings and developments in waste management and is a great opportunity to learn and share experiences. Kim Potter from the NEW Business program presented her highly regarded Circular Economy initiatives at the conference.

THE BETTER WASTE RECYCLING FUND



“To support voluntary waste groups with regional coordination and infrastructure planning.”

In 2021-22 the Better Waste Recycling Fund continued to support the delivery of new and existing programs. The Business Program was further resourced to expand the development of the Circulate Northern Rivers, which fosters circular economy initiatives in the region.

The Household Asbestos Testing Program and the #Recycleright campaign were also continued under this funding.

The Waste Wise Events trial resulted in signage that was collaboratively developed with Councils and audits and surveys were conducted at Markets. This resulted in us going back to the drawing board as patrons reported that signage was still too confusing. Designs were refined and simplified and then made available to councils.

The BWRF ended as a non-contestable fund this year but NEW applied to extend its support of the above programs until funding is exhausted later this year.

BALLINA SHIRE COUNCIL



LLOYD ISAACSON
MANAGER RESOURCE RECOVERY
@ BALLINA SHIRE COUNCIL

INNOVATIONS AND ACHIEVEMENTS

- Completed a masterplan for the Ballina waste management facility to plan for future infrastructure requirements and to maximise resource recovery, customer experience and environmental performance for the facility.
- Commenced new 7-10 year kerbside FOGO organics collection contract
- Commenced new 3-5 year FOGO processing contract with SoilCo at their new Stotts Creek facility
- A comprehensive resource recovery education and communication guide was designed and distributed to over 16,000 Ballina shire properties with a 3 bin service;
- Upgrade of transfer station signage to promote clarity and simplify site for increased resource recovery
- Let's Get It Sorted (LGIS) kerbside support program targeting all households within a low socio-economic street with known contamination issues. Activities have included a face-to-face needs surveys in collaboration with Housing NSW, kerbside bins fixed and bins stickered and resource recovery packs provided (kitchen organics caddies, Recycle Right magnet, compostable liners, education resources);
- LGIS MUDs support program commenced, providing advice, resources, resident letter, caddies, liners, bin bay signage, posters, magnets;
- Wardell area provided with 50 resource recovery packs for flood affected homes;
- 9 schools visited/supported or remotely supported, 3 community events attended, 2 community group presentations;
- Huskeeswap reusable coffee cup program was expanded to include cafes within the Ballina CBD
- Reusable party kits provided for loan by the community across the shire in collaboration with three LGA libraries and a community hub;
- Upgraded bin systems in our 3 LGA libraries with clear signage to promote and allow access to recycling for both staff and visitors.



FOGO processing contract with SoilCo



Reusable party kits

KEY CHALLENGES

- Clean-up and management of waste generated from the March flood events
- Collaborating with the state government to establish, operate and decommission a temporary regional waste transfer station at the Tuckombil quarry in Alstonville to manage over 30,000 tonnes of waste generated from the Feb-Mar flood event.
- Maintaining environmental compliance at the waste management centre and landfill during a period of unprecedented rainfall volumes brought about by an intense la nina weather pattern.
- On-going challenges to effectively resource and deliver an essential waste service in climate of labour shortage

BYRON SHIRE
COUNCIL



DANIELLE HANIGAN
TEAM LEADER RESOURCE RECOVERY
@ BYRON SHIRE COUNCIL

INNOVATIONS AND *ACHIEVEMENTS*

- Successful in obtaining \$75,000 NSW EPA On Ground litter prevention grant to implement a small scale local takeaway container reuse system, Bring it Back Bruns in Brunswick Heads
- Successful in obtaining \$50,000 NSW EPA Own It and Act prevention grant to monitor litter entering into our waterways and trial stormwater infrastructure as a prevention mechanism
- Conducted a public place bin audit to determine how public place bins are being used and the contents within the bins.
- Implemented a uniform textile recycling program, Worn Up in 7 local primary schools.
- Completed Illegal dumping prevention project (funded by NSW EPA grant of \$119,000) which achieved the following:
 - 23.4% reduction in illegal dumping incidents
 - 30% increase in public reports
 - 20% of incidents cleaned up by offenders following Council response.
- Installation of new security system at the resource recovery centre. This system currently monitors all major traffic areas within the facility including a load inspection camera at the weighbridge.
- Stormwater diversion works completed at mulch pasteurisation area. This will assist with the reduction of stormwater infiltration into existing leachate system.
- BRRC efficiency workshop completed May – This has assisted with improving site processes
- The Resource Recovery Team was divided from Open Spaces at BSC in recognition of the growth and importance of Resource Recovery and Circular Economy by Council Executive. The department now has a Manager dedicated to this team as well as a Project Officer to assist with the delivery of Major Projects over the next two years which include upgrade of the leachate management and storage system, capping of the Southern Landfill expansion and implementation of the Stormwater Management Plan
- Kerbside Collections Contract for waste, recycling and FOGO extended for a 3 year period. This includes processing of FOGO for the first 2 years of the 3 year extension period.



| KEY CHALLENGES

The February and March floods in the region have significantly challenged the Resource Recovery Department, with clean up of half of the Shire being led by the Team. As of June 30, requests are still being received from residents for assistance with flood waste as some areas have been inaccessible, or delayed insurance process has meant that they have been unable to clear flood damaged materials until now. The Team has facilitated waste removal from residents cut off by significant landslides via helicopter, dealt with a significant amount of waste within the Byron Resource Recovery Centre transfer Station, taking a normal monthly volume within the first week following the February flood.

CLARENCE VALLEY COUNCIL



KEN WILSON
WASTE AND SUSTAINABILITY
CO-ORDINATOR @ CLARENCE VALLEY COUNCIL

INNOVATIONS AND ACHIEVEMENTS

- 10 year Waste Collection, Recycling and Organics Processing Contracts- This tender was released in late March 2022. The tender assessment process was undertaken (up till 30th June 2022) and the contracts for all three parts were awarded to JR Richards (August 2022 Council Meeting- after this financial year reporting period).
- Tender of new landfill Cell 4C – A tender was prepared for the construction of the next landfill cell (Cell 4C - 220,000 m3) at the Grafton Regional landfill. Tenders were assessed and Council awarded the tender to a local construction firm, Valley Earthworks in June 2022. Construction will commence in the 2022/23 financial year with work expected to be completed in early 2023. This cell is expected to last 4-5 years.
- Record amount of FOGO – There was a record amount of domestic FOGO processed in 2021/22 with 9700T of FOGO processed through the organics recovery facility (ORF). This was likely due to the extremely wet summer and perfect growing season.
- Rural FOGO Review - As part of the preparation for Council's new domestic waste collection contract, Council wrote to all rural residents who have a two (2) bin service (residual/ recycling) and asked if they would like a weekly organics service in line with urban residents who receive a three (3) bin service. The letters went to 3,743 rural property owners and there were 1054 responses (28% response rate). Of these responses 91% did not want the organics service and 9% wanted a service. From this result Council did not offer FOGO to rural properties.
- Grafton and Maclean Waste Transfer Station Redevelopment Concept Design – Council called for tenders to undertake a concept design for the redevelopment for the Grafton and Maclean Waste Transfer Stations. This was awarded to Talis Consulting and they are expected to finalise these concept designs in late 2022.
- Council prepared a feasibility study for a mid-scale solar and gas energy generation project at the Grafton Landfill. This project should be able to offset all CVC energy use. The feasibility study will be assessed by Council towards the end of 2022.



Staff photo with costa dirtgirl and scapboy



Landfill cell 4c due for completion in 2023

KEY CHALLENGES

Major Flood Events February / March 2022 -Flood Waste Cleanup – The flood and storm events in February/ March caused significant damaged to many properties in the Clarence Valley. There was over 1500 tonnes of flood waste collected for disposal at the Grafton landfill. To assist impacted households and businesses Council undertook a kerbside flood waste collection. Residents were also able to take flood and storm damaged waste to the Landfill and other Waste Transfer stations for free disposal. Council assisted other flood affected LGA's to the north by accepting some flood waste at the Grafton Landfill. Council has applied to Public Works to be reimbursed for eligible flood related costs.

KYOGLE COUNCIL



AMANDA CLARK
MANAGER DEVELOPMENT & REGULATORY
SERVICES
@ KYOGLE COUNCIL

INNOVATIONS AND *ACHIEVEMENTS*

In 2021/22 Kyogle Council progressed a number of projects and initiatives to modernise Council’s waste management services and provide further opportunities for the community to reduce their environmental impact by recycling more and diverting more waste from landfill.

- In September 2021 the EPA approved use of the new Stage 2 Cell for landfilling waste. The new cell provides necessary capacity to meet community needs for landfilling residual waste in the short-medium term.
- In June 2022, Council unanimously approved a proposal to implement a three-bin kerbside waste collection service consisting of separate bins for general/residual waste, comingled recyclables and food and garden organics (FOGO) to commence in 2023/24. The decision means Council’s kerbside waste collection service will be commensurate with the service provided by all other North East Waste Region Councils. It will also ensure that Council meets the State Government’s mandate to provide all households and selected businesses (e.g. supermarkets, hospitality businesses and other businesses that generate large amounts of food waste) with a FOGO collection service by 2030.
- Council was successful in securing a \$500,000 grant under the EPA’s Organics Infrastructure Fund to assist Council with implementation of the FOGO collection service. The grant will also allow Council to offer rural residents without a kerbside collection service a small portable FOGO bin to enable them to collect FOGO waste for disposal at Council’s waste facilities or to compost on their own property.
- In March 2022, Council completed our Illegal Dumping Baseline Data Project, funded by a grant under the EPA’s Combatting Illegal Dumping: Clean-up and Prevention Program. The project enabled Council to collect historic dumping data and establish a good understanding of illegal dumping behaviour in the Kyogle LGA. Council prepared a Draft Illegal Dumping and Litter



Kyogle Landfill Facility



Community Recycling Centre

Prevention Strategy to help reduce the adverse impacts of illegal dumping and littering. The Draft Strategy outlines several key actions Council will endeavour to implement over the next five years in an effort to address illegal dumping behaviour across the Kyogle LGA.

- Council also purchased 13 new recycling collection bins for the Kyogle Main Street. Once installed, the bins will allow the community to recycle when using public spaces, rather than disposing of recyclable items in general waste bins.
- In May 2022, residents of the Kyogle LGA also reached a significant milestone – recycling 7 million containers via our Reverse Vending Machine under the Return and Earn Scheme. The RVM commenced operations at the Kyogle Landfill Facility in November 2020.
- Council, with the assistance of North East Waste, also conducted audits of both our kerbside waste collection bins and public street bins, in an effort to learn more about our community’s behaviour. Further audits will also be conducted after the introduction of new waste services and infrastructure to measure the effectiveness of the initiatives in changing behaviour and reducing the amount of waste going to landfill.

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LISMORE CITY COUNCIL



KEVIN TRUSTUM
COMMERCIAL SERVICES BUSINESS MANAGER
@ LISMORE CITY COUNCIL

INNOVATIONS AND *ACHIEVEMENTS*

In July 2021, a mattress recycling program commenced. With Council receiving on average more than 4000 mattresses annually at the Lismore Recycling and Recovery Centre (LRRRC), the program aims to minimise the amount of waste sent to landfill, reduce methane gases being produced from decomposing mattresses and recycle end-of-life waste products by turning them into a resource. The cost is \$25 per mattress (any size).

After a 2-year hiatus, Council started selling BIOcycle compost again in September 2021. The compost was produced onsite at Lismore Recycling & Recovery Centre and sold in bulk quantities or for \$14/20L bag. These are the last batches made by Council as this material will be processed off-site from next FY.

In October, Council started operating its new polystyrene processing machine. Council recycles around 30 tonne of polystyrene every year which saves around 550 cubic metres of landfill space. The machine cost \$191,000 and was made possible by the NSW EPA's Better Waste and Recycling Fund.

Council is in the early concept design phase for our new landfill cell. Council has engaged an external consultant to undertake a Landfill Expansion Due Diligence Study including financial modelling and residual waste strategy. This work will be completed in FY22/23.

Over December to February, a 'Lift the Lid' bin inspection program was carried out with NE Waste to provide direct feedback to residents regarding recycling behaviour and compliance in the home. The program had to be put on hold until 2023 due to the floods.

In June 2022, Lismore's Resource Recovery and Residual Waste Strategy 2022-2032 was adopted by Council. This new strategy really focuses on transitioning Lismore to a circular economy over the next 10 years.



'Lift the Lid' bin inspection program



Flood waste at Lismore Art Gallery

KEY CHALLENGES

July 2021 – June 2022 was a year of adversity for Lismore City Council and its community.

With COVID restrictions continuing into 2021 and then several lockdowns between August and October, this created significant challenges and delays in operating essential waste services and all waste-related programs & projects.

The declared natural disaster on 28 February 2022 caused the most severe flooding on record for Lismore at 14.4m and significantly affected every aspect of life including services, facilities and business as well as households. This was compounded by a second major flood in March. Between February and June, most of Council's efforts were in emergency response and then initial recovery to these events with significant support from NSW Public Works Advisory and the Australian Defence Force. The LRRRC continues to be utilised by NSW Public Works Advisory for initial sorting and transfer of flood related waste. Council continues to transfer municipal and kerbside waste to Queensland following significant damage to our landfill cell.

There have been numerous changes in key staff and direction. The new Council appointed John Walker as acting General Manager in early February 2022. Several vacancies were created in the Resource Recovery Team Leader, Resource Recovery Coordinator, Resource Recovery Operations Manager, and Resource Recovery Program Manager roles. Council has filled some key roles with highly skilled and experienced staff and is actively recruiting to fill the remaining vacancies.

Council is currently reviewing and refocusing our core resource recovery operations and education programs following significant challenges in FY21/22. Lismore City Council is also committed to leading the region in the creation of a circular economy in alignment with our Resource Recovery and Residual Waste Strategy 2022-2032.

RICHMOND VALLEY COUNCIL



CARLA DZENDOLET
COORDINATOR
WASTE AND RESOURCE RECOVERY
@ RICHMOND VALLEY COUNCIL

INNOVATIONS AND *ACHIEVEMENTS*

- Council provided continual waste services during and following the floods. Services to the community were maintained while dealing with flood waste.
- Council facilitated the use of Petersen’s Quarry at Coraki as a temporary waste transfer station. This helped manage flood waste from across the northern rivers.
- Solo Resource Recovery and Richmond Waste were awarded a contract for transporting and disposing of Council’s bulk residual waste.
- A tender was released for the construction of a new landfill cell at the Nammoona Waste & Resource Recovery Facility. Construction will be completed in 2023.
- Three new trucks joined the collection fleet. The trucks are equipped with GPS technology and software to improve collection routes and monitor contamination.
- A manager was recruited for the Waste & Resource Recovery Team to lead the development of Council’s resource recovery initiatives.



Education Officer Beside Evans Surf Club Public Place Bins



Our crew and the new collection trucks

KEY CHALLENGES

- Contamination in kerbside and public place bins is an ongoing issue requiring a dedicated public education campaign.
- The lack of regulation regarding compostable bags and logos creates confusion about which bags are appropriate for kitchen waste. This increases FOGO contamination. Similar issues with confusion and contamination will arise with the proliferation of alternative products to single use plastics.
- With limited and costly regional FOGO processing facilities available, an options appraisal is underway to determine the best composting route for Council.
- The tight labour market is creating difficulties recruiting experienced and skilled staff.
- The community rebuilding after the floods will see increased volumes of C&D waste over the next 18 months. This will add to the demands on an already strained workforce.

TWEED SHIRE COUNCIL



ROD DAWSON
UNIT COORDINATOR
RESOURCE RECOVERY, WASTE MANAGEMENT
@ TWEED SHIRE COUNCIL

INNOVATIONS AND *ACHIEVEMENTS*

In August we completed the first year of our processing of organics on site in the new processing facility. In the 12-month period we received 16,395 tonnes of household organics with a contamination rate of less than 1%.

The tip shop JUNKtion, was extremely popular taking over 400 customer per week between Wednesday and Saturday. We have included new measures in the new collection contract to ensure that recoverable items in the kerbside bulk waste collection can get a second chance through the tip shop.

The final Cell at the Stotts Creek site will be finished in January 2023 with significant time lost to this year’s wet weather, and we have awarded a contract to upgrade the entry to the site including a new weighbridge, site office and roads network.

We also received grant money which allowed us to purchase a new excavator, to install a cardboard compactor and to double the size of the undercover area at the tip shop.

- Education projects included:
- Waste Wizard - an inquiry based system available to the public on the Council internet which allows residents and customers to search their type of waste and to be able to determine how to manage the material.
 - Way to grow compost – The provision of bags of compost made from our organics that can be distributed at events to promote the organics collection service and the benefits
 - National Recycling Week, Asbestos Awareness and Clean up Australia Day
 - Redesign of the signage and livery on the new collection service vehicles to promote our services, and
 - The circular cafes program targeting commercial organics at restaurants and cafes was continued with the service now offered beyond the trial.



KEY CHALLENGES

This year was another year full of challenges with Covid 19 persisting to be part of life in general and the pressure of trying to manage yet another flood of epic proportions. Despite this we continued to provide service and have succeeded in achieving important milestones for both Council and the community. The flood provided us with a unique set of circumstances that impacted every part of the community and our operations and which lead to the generation of over 20,000 tonnes of additional waste including over 2,750 tonnes of asbestos containing material. All of this material was transported to the Stotts Creek landfill with the majority of it then bulk hauled to Queensland.

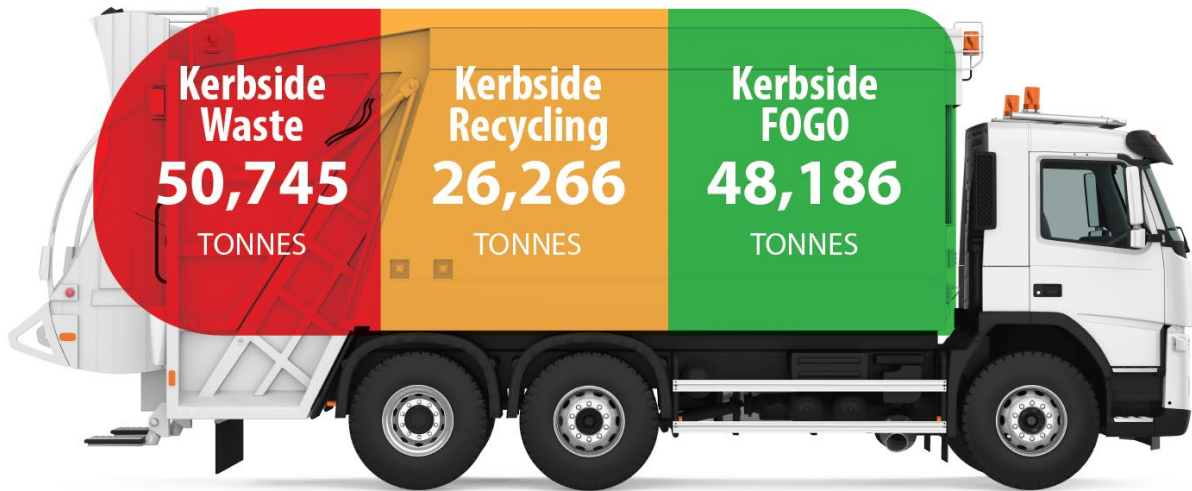
Tweed put their hand up to help the region with all other waste facilities in the northern rivers being decimated by the floods. Many of those facilities were inundated with infrastructure destroyed and we have been the only site north of Grafton able to accept asbestos. In the period since the flood, we have set up a cell for the asbestos with the approval of the EPA and will continue to operate this until full.

The flood meant the closure of the JUNKtion tip shop for several months as all waste being brought in was potentially contaminated, however we have reopened and our customers in turn flooded back in.

WASTE DISPOSAL AND RESOURCE RECOVERY

Reporting From
July 1st 2021 To 30th June 2022

2021-22 has been a challenging year for NE Waste Councils. Effective resource recovery in our region continued to be impacted by the pandemic and this was added to by the February floods. There was an increase in the amount of FOGO in kerbside bin's but recycling and waste remained much the same as the previous year. The increase in residual waste dropped at transfer stations and landfills may have been a result of the floods.



RESIDUAL WASTE
DROPPED OFF
20,495
TONNES



RECYCLING
DROPPED OFF
1,876
TONNES



GARDEN ORGANICS
DROPPED OFF
13,014
TONNES



E-waste
257.5
TONNES



Batteries
118
TONNES



Metal
6,434
TONNES



Community Recycling Centres
216
TONNES



59.4% REGIONAL
RECYCLING
RATE

NORTHERN RIVERS FLOOD RESPONSE



OVERVIEW

The 2022 February floods left many communities in the Northern Rivers devastated. Lismore suffered such extensive damage that 8 months post the event, many residents are still homeless, businesses still closed and waste facilities remain impacted.

Across the region the dissemination of clear advice on a range of waste issues, including asbestos and hazardous waste disposal, was fragmented. Our own response was ill prepared, and this has led to a commitment to develop a regional disaster management plan as soon as possible.

Notwithstanding, we did what we could under the circumstances and NE Waste coordinators were assisting and engaged with Public Works Advisory, the EPA and Councils throughout the aftermath.

MAIN ACTIVITIES

- Provide clear communications on where and how to dispose of waste
- Relay Council and EPA/PWA messages through our social media and other channels
- Collect what data we could on recovery vs disposal tons
- Support evacuation and distribution centres
- Support local businesses through the established hubs
- Communicate our experiences at conferences and other networking event and seek collaboration on future preparedness for natural disasters

WASTE VOLUMES

Our Councils managed the following tonnages

- Byron – 10,000
- Kyogle – 317
- Lismore – 19,110 and 342 asbestos
- CVC - 2,500
- Ballina – 5,200
- Richmond - 3,022
- Tweed – 18,000 and 1,700 asbestos

3 Transfer facilities were set up to manage the Flood Waste at
o Alstonville (Tuckombil Quarry) o Coraki (Petersons Quarry) o JC Carpark (Lismore CBD)

110 FTE staff worked for 45 days to receive approximately 79,127 ton of waste, of which 32,000 ton was disposed of in Queensland landfills.

NE WASTE GOVERNANCE & FINANCE

GOVERNANCE OF THE *GROUP*

NE Waste is governed under a Memorandum of Understanding between the 7 member Councils, that outlines the role and obligations of Councils and the Coordinator. A host Council administers our financial obligations and ensures our operations under their own policies and procedures.

This year was the final year that we were hosted by Clarence Valley and we would like to acknowledge their commitment to the group and amazing support to our operations for the past 5 years. From June 2022 Tweed Shire Council will take on the role of host Council.

Member Councils meet in person at least four times per year. In addition, NE Waste contractors meetings are held on alternative quarters to allow updates to the Coordinator, resource sharing and support across projects. The waste educators also meet with the NEW team on a regular basis to ensure regional and consistent communications reach our community.

Reporting to the EPA by the Waste Group is annual and is currently undergoing a review. Once reporting is complete, funding is allocated for projects and administration.



THE NORTH EAST WASTE TEAM



FINANCES AND PROCUREMENT

The NSW EPA provides funding to develop and implement our projects and NE Waste reports on our outcomes, achievements and resource recovery on an annual basis. In addition, each member Council contributes between \$0.80 to \$1.00 per head of population towards operations, project development and implementation. This is capped at maximum of 50,000 residents. This means each Council shares in decision-making and contributes a proportionate share of running costs and project expenses.

Not all waste groups are fortunate enough to operate under this model and NE Waste appreciates that this combined expenditure allows us to develop and deliver high quality programs. Additional funding is sought from grant programs under the Waste and Sustainable Materials Strategy, the Environment Trust and the other initiatives for specific projects.

NE Waste can authorise expenditure for works or services by resolution at a meeting of the Working Group. Unless otherwise directed by the Working Group, procurement is undertaken in accordance with the procedures of the Host Council. The Host Council is responsible for the calling of and awarding tenders. The coordinator and group assist the Host Council by preparing any technical specifications and tender documents, assessing tenders, and making a recommendation to the Host Council regarding the preferred tenderer. NE Waste delivers

its projects through the engagement of contractors and consultants. This engagement is made under the procurement policies of the Host Council. In addition to the primary project coordinators a number of long term and experienced casual staff support NE Wastes education program. These contractors are vital to the ongoing delivery of projects and some have been fulfilling this role for more than 10 years. In 2021-22 they included:

Peter Notley, Nicki Walker, Sascha Piotrkowski, Joanne Hoy, Flavio Stankievich, Danielle Davidson, Sandra Signorini, Jenna Jackson and Danae Elarde.

In our operational and procurement decisions NE Waste strives to minimise our footprint by choosing to:

- Offset air travel
- Carpool when possible
- Purchase local or Australian made products
- Adopt, reuse and repair where possible
- Minimise waste, compost and recycle
- Use energy and water efficiently
- Make socially and environmentally ethical choices when operating for NE Waste

PROJECT EXPENDITURE AND BUDGET 2020-21

PROJECT	BUDGET ALLOCATED	EXPENDITURE
ABORIGINAL & OTHER PROJECTS	\$ 27,448.01	\$ 18,926.55
ASBESTOS HOUSEHOLD	\$ 26,132.71	\$ 34,434.13
BETTER WASTE RECYCLING FUND (BWRP)	\$ 82,877.60	\$ 59,974.30
BINTRIM	\$ 53,310.52	\$ 41,729.06
BUSINESS WASTE REDUCTION PROJECT	\$ 65,000.00	\$ 61,856.57
COMMUNICATION	\$ 38,000.00	\$ 34,922.41
COMMUNITY RECYCLING CENTRES (CRC)	\$ 66,459.40	\$ 61,362.34
CO-ORD AND PROJECT MANAGEMENT	\$ 100,000.00	\$ 101,579.64
EDUCATION CO-ORD & MANAGEMENT	\$ 70,000.00	\$ 63,774.11
FOOD DONATION	\$ 11,875.40	\$ 12,804.73
HOST COUNCIL CONTRIBUTION	\$ 7,000.00	\$ 7,000.00
ILLEGAL DUMPING PROJECT	\$ 72,329.99	\$ 70,647.97
LITTER	\$ 14,468.81	\$ 5,820.10
LOVE FOOD COMMUNITIES	\$ 115,887.43	\$ 71,798.84
LOVE FOOD HATE WASTE/SCRAP TOGETHER	\$ 22,000.00	\$ 21,386.55
RENEW	\$ 10,000.00	\$ 8,478.20
RESERVE PROJECTS	\$ 70,000.00	\$ 27,016.45
SCRAP TOGETHER	\$ 50,500.00	\$ 4,327.72
TRAINING	\$ 7,000.00	\$ 6,524.54
WASTE EDUCATION	\$ 100,000.00	\$ 109,687.31
TOTAL	\$ 1,010,289.87	\$ 810,051.51

NB: FUNDS NOT EXPENDED ARE ROLLED OVER TO NEXT YEAR OR RETURNED TO OUR RESERVE.



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2021 -2022

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NE WASTE REGIONAL WASTE STRATEGY 2022...2027



DECEMBER 2022



ACKNOWLEDGEMENT OF COUNTRY

North East Waste acknowledges the unceded sovereign traditional lands of the Bundjalung nation, upon which we operate, and we pay our respects to Custodians of the old ways, today's leaders and the knowledge holders of tomorrow. We hope our work helps to protect and enhance this country's lands, oceans, skies and communities.



'This program is funded and supported by the NSW EPA through the Waste and Sustainable Materials Strategy 2041.'



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INTRODUCTION

North East Waste is a voluntary regional waste group, formed in 1997 with Ballina Shire, Byron Shire, Clarence Valley, Kyogle, Lismore City, Richmond Valley and Tweed Shire Councils as its membership. It covers over 21,000 sq km and has an increasing population of over 307,000 residents. NE Waste is governed by a Memorandum of Agreement, with each Council having a vote and delegate at quarterly meetings. NE Waste is funded by the NSW Environment Protection Authority (EPA), contributions from Councils and grant funding.

Since 2013 a Regional Waste Strategy has been in place to set the strategic direction of waste management in the region through a coordinated and collaborative approach that optimises our skills and resource sharing opportunities. The key drivers for this approach have been

political, economic, and environmental imperatives including the requirements of the State Government targets and initiatives, the need to protect the environment and the economic benefits of sharing resources.

Over the past 9 years, under the NSW EPA's Waste Less Recycle More initiative, significant progress has been made in areas such as organics collection and processing, managing household problem wastes, waste avoidance and improved engagement of the commercial sector. However, the traditional challenges of limited landfill capacity in the region and a reliance on export of residual waste to South East Queensland remain and have been further exacerbated by the advent of the bushfires, the pandemic, and most recently the 2022 floods. A new approach is required to meet these challenges,

backed by genuine cooperation and innovative waste prevention measures, if we are to achieve a more resilient region.

This new Strategy will respond to the NSW EPA's Waste and Sustainable Materials Strategy 2041 (WASM), the more sustainable aspirations of other regional planning instruments and our member Councils own waste strategies. We intend to build on our past successes and develop new approaches to waste management that focus on retaining, enhancing, and circulating, not simply recovering, our regional resources.

North East Waste will continue to work closely with all stakeholders in our region, the NSW EPA and other agencies to fulfill the objectives and adhere to the principles outlined in this document.

Vision & PURPOSE

Our vision is to achieve more sustainable waste management and better resource recovery in the North East Waste region through a proactive, collaborative approach with our regional member Councils, the NSW EPA and our community

The purpose of this Strategy is to set out the direction North East Waste will take to achieve better waste avoidance, reduction and resource recovery for our region while supporting the targets of the NSW Waste and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027 and the National Waste Policy Action Plan.

We aim to do this by

- Delivering targeted and effective projects that engage and build capacity in our communities to improve waste minimisation and management outcomes.
- Creating strong Council partnerships that support collaboration and optimise resource sharing and funding opportunities.
- Involving the community through social enterprises and the development of local markets in recovered resources.
- Identifying gaps in infrastructure and secondary processing.
- Pursuing sustainable procurement opportunities that support reuse and recycling.
- Adhering to the principles of regional cooperation, the circular economy and the waste hierarchy.
- Communicating and sharing our knowledge while striving for leadership and innovation in waste.



Guiding PRINCIPLES

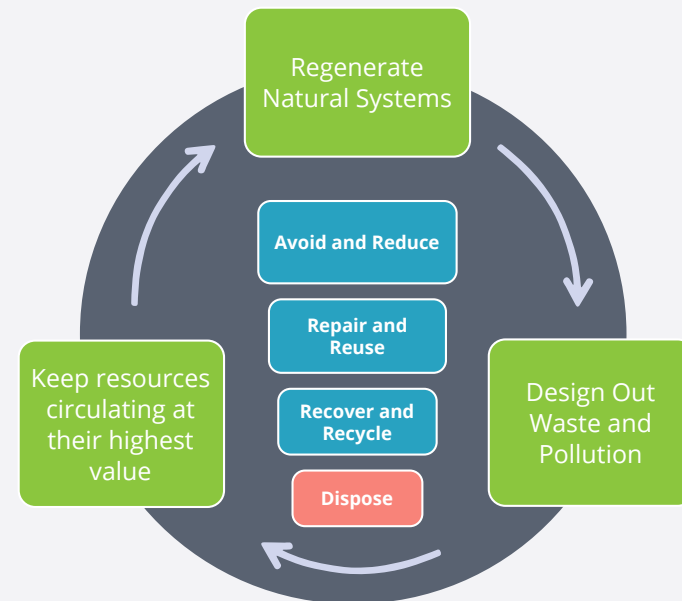
The principles that guide our actions need to be forefront in our mind when developing and implementing this Strategy. Fundamental to our operations is the need to collaborate regionally, support the waste hierarchy and move towards a more circular economy that reduces our emissions.

A balance needs to be struck between these principles and meeting the challenges local government face in the current resource recovery environment.

Through regional collaboration we can provide consistent messaging to reduce waste generation, recover more resources and find solutions to deal with what's left over. We can do this by exploring opportunities, facilitating connections, and providing Councils with a safe forum to share ideas and consider options. This collaboration gives Councils a conduit to State Government and provides a regional perspective to the State's regulatory and programs space that Councils don't have the capacity to engage in.

We continue to advocate adherence to the waste hierarchy and its fundamental tenets guide our planning and aspirations. We feel it fits within the broader principles of moving towards a more circular economy and is still relevant in the waste management activities we undertake, as the circular system encompasses avoiding and minimising waste and promoting the continual reuse of resources. In our transition to a more circular economy we aspire to the principle that to be truly circular means zero waste where nothing is thrown away, because waste is designed out by making things for repair, disassembly and reuse. However, we acknowledge that this remains an aspirational goal as the mechanisms required to reach this point are beyond the capacity of a regional waste group.

The Waste Hierarchy and WASM Principles for a circular economy



Background/ POLICY CONTEXT



BACKGROUND

This is the third in a series of strategies developed over the past 10 years to meet the challenging and changing landscape of waste management. There is an increased emphasis in this Strategy on reducing emissions and finding circular economy solutions, to help meet some of these challenges and to redefine concepts of 'waste' in our communities.

This Strategy has been developed in consultation with the NSW EPA and its structure is determined by their guidelines. Extensive consultation has also been undertaken with Councils' waste and education staff to accommodate and reflect the objectives of our members' current waste strategies, particularly as they work towards circular economy and zero waste outcomes. To further ensure its effective implementation, input has been provided by the NE Waste project coordinators, who were responsible for developing and delivering projects under the previous strategy 2013-21.

POLICY CONTEXT

In NSW, waste activities and strategy are primarily governed by the State under the direction of the NSW EPA and at a Federal level by the National Waste Policy and the Product Stewardship Scheme. This Strategy sits within this legislative framework and supports the intention and targets of the following instruments:

NSW Waste and Sustainable Materials Strategy 2041:

- Stage 1 – 2021-2027 that focuses on the environmental benefits and economic opportunities in how we manage our waste.
- NSW Plastics Action Plan that focuses on problem plastics, litter and research.
- The Circular Economy Policy Statement, which sets out the guiding principles to transition the State towards a circular economy.
- Net Zero Plan Stage 1: 2020–2030, aimed at reducing and offsetting carbon emissions, including from waste, to achieve net zero emissions by 2050.
- The National Waste Action Plan 2019 and Annexure 2022, which outlines the targets and actions required to deliver the 2018 National Waste Policy.

The targets for these Initiatives are to:

- Reduce the waste generated per person by 10%, increase resource recovery to 80%, triple the plastics recycling rate and halve the organic waste going to landfill by 2030.
- By 2025 the target is to phase out problem plastics and reduce litter by 30% (60% by 2030).
- Significantly increase the use of recycled content by government and industry.

In addition to these higher level targets our Strategy needs to encompass more regional aspirations. Therefore, in developing this document we:

- Worked extensively with other regional waste groups in NSW;
- Incorporated the aspirations and ideas of our member Councils through their own waste strategies and circular economy initiatives;
- Considered other regional plans such as the Draft North Coast Regional Plan 2041, which sets a 20-year strategic land use planning framework for our region.



Our Performance & OUTCOMES TO DATE

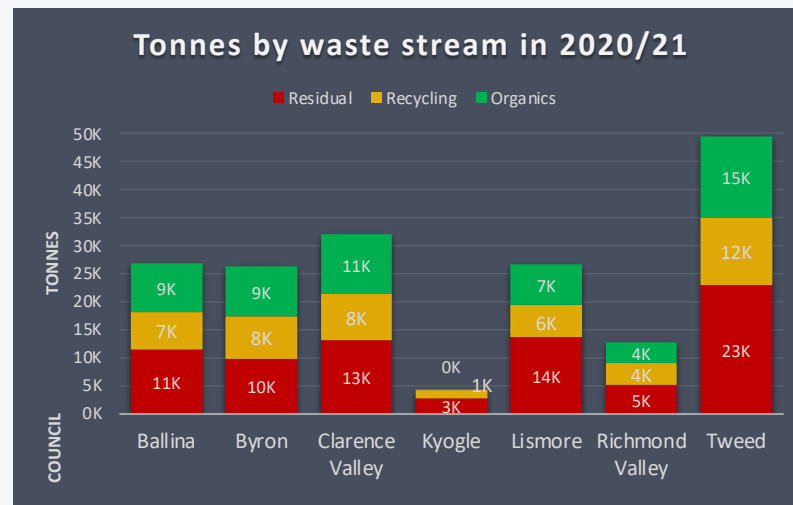
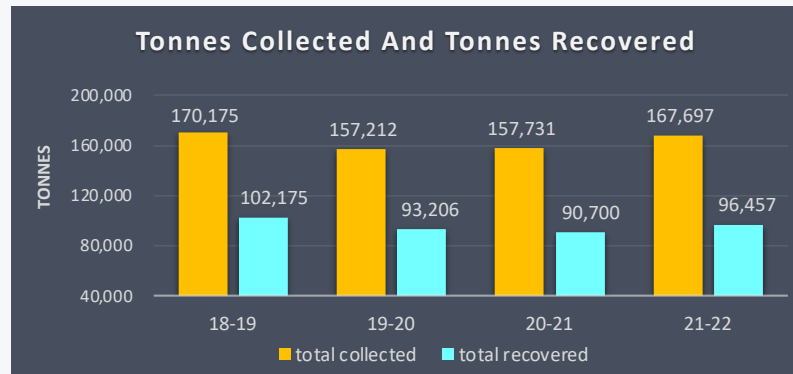
Despite the challenges of the past 4 years and an increasing population, NE Waste Councils have reduced the amount of waste and recycling collected at kerbside in the region since 2018-19, with an overall downward trend until the flood event of 2021-22. The recycling rate has remained constant at around 59%, and despite fires, floods and COVID-19 presenting significant waste management challenges, our region has performed strongly against the State average of 46.1 percent for 2021-22.



These results have been achieved through the delivery of multiple programs and projects over many years and are too numerous to list however, highlights include the delivery of many core projects such as

- Food waste avoidance/diversion programs
- Recycle Right Campaign
- School and community engagement initiatives
- Business Programs & Circular Cafes
- Food Donation
- Asbestos Awareness
- Illegal Dumping & Litter
- Community Recycling of household problem wastes

Collection and Diversion

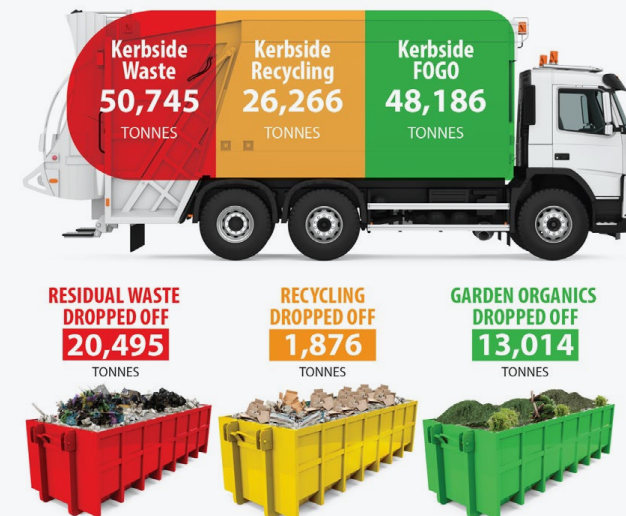


We calculate our annual tonnages by combining the waste collected at our kerbsides with waste and resources taken to landfills and transfer stations across the region.

These figures are reported annually to our Councils and the NSW EPA.

Our performance over time has improved and we have been able to maintain a recovery rate well above the State average, that we aim to increase with the implementation of this Strategy.

The increased uptake of Food and Garden Organic (FOGO) services has helped improve our recovery, diverting more than 60,000 tonnes of methane generating organic material from landfills in 21-22 (below). Now that systems are in place our aim is to further increase this diversion and target the organic material that remains in the household and commercial waste bins.



Organics Management Programs

NE Waste Organics Management Programs cover avoidance, recovery and recycling with householders and businesses. The following have featured highly over the years supported by grant funding:

LOVE FOOD HATE WASTE



Love Food Hate Waste aims to divert good food from landfill and promoting household and business food waste avoidance through workshops, events, communication campaigns, school program, business audits, case studies and action plans.

SCRAP TOGETHER Campaign



Promoting household FOGO recycling, diverting food from landfill and decreasing contamination, the NSW EPA's Scrap Together campaign was delivered intensively in our region from June 2022 - December 2022. The resources will continue to be used and improved.

FOOD DONATION Program



Feasibility study led to a program to improve networking and collaboration between food donors and relief agencies to reduce the quantity of surplus edible food going to waste. A multimedia campaign has been developed including TV commercials, a toolkit, newsletter and professional development workshops for food donation agencies.

CIRCULAR CAFES



Our business program worked with 100 cafes and restaurants across the region to introduce food waste avoidance and recycling and implement other resource recovery options.

Avoidance and Resource Recovery Programs

These are developed with our stakeholders and delivered for our regional community with support from NSW EPA funding.

COMMUNITY AND SCHOOLS ENGAGEMENT



Community and schools engagement is designed, delivered and evaluated on behalf of member Councils, through our Wipe out Waste Program and education team. It includes workshops, community events, school programs, partnerships, social media and annual programs including Plastic Free July, Second Hand Saturday and National Recycling Week.

ASBESTOS, ILLEGAL DUMPING & LITTER



Reduce the number of incidents of littering and illegal dumping and increase the frequency of public reporting through partnerships, improved infrastructure and prevention, communication campaigns, council training and capacity building. Improving public awareness around the safe management and disposal of household asbestos to reduce risk.

COMMUNITY RECYCLING CENTRES



Delivers a communication and education program that maximises community use of the regions network of 8 CRCs and 30 drop off stations. It has resulted in the recycling of 1,213 tonnes of household problem wastes over 6 years with an average saving of \$410,875 pa for member Councils.

RECYCLE RIGHT Campaign



Developed by NE Waste, filmed and designed locally, #Recycle Right is a multimedia communication program. It aims to increase resource recovery and reduce contamination.

Adopted and adapted by a further 30 Councils in 3 States.

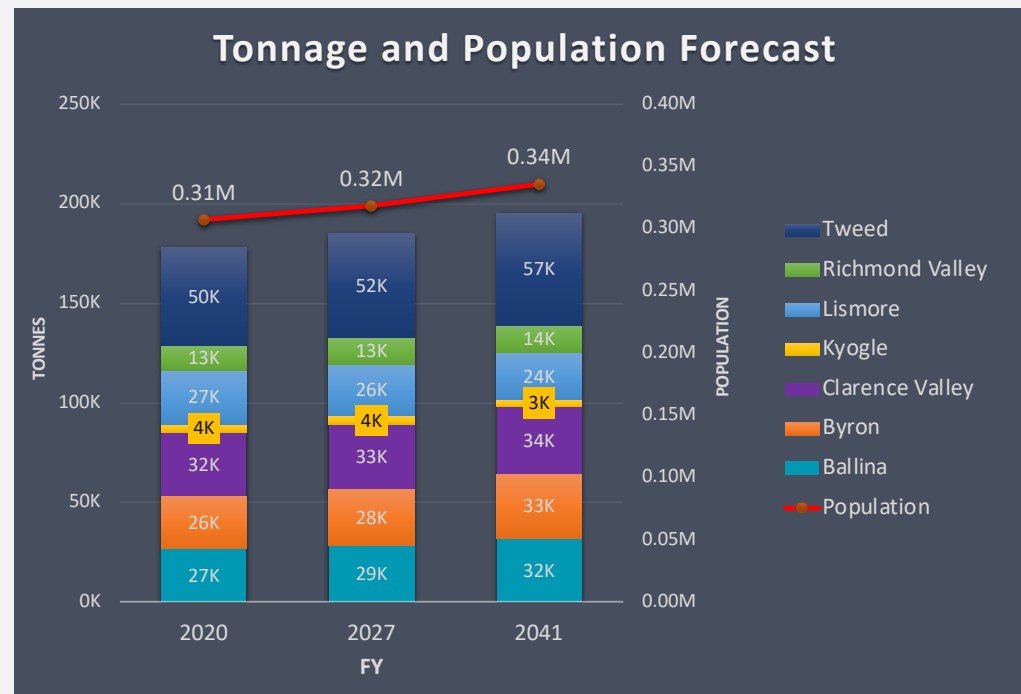
Population & PROJECTIONS

According to the ABS 2020, the region has a population of 307,047 living in 135,511 households. (see table) The average household contains 2.3 people.

There are 119,290 waste services provided, 116,701 recycling services and 90,776 FOGO services. All households have access to a drop off facility.

By 2041 our population is predicted to increase to 335,874. The amount of waste and recycling generated by the region at this time is expected to be in the vicinity of 196,000 tonnes; this is an additional 17,000 tonnes on top of the amount that was generated in 2020.

Population ABS 2020 Council	45,217 Ballina Shire	35,773 Byron Shire	51,730 Clarence Valley
8,788 Kyogle	43,667 Lismore City	23,490 Richmond Valley	98,382 Tweed Shire



Infrastructure & SERVICES

Infrastructure for recycling and organics processing is distributed evenly across the region. There are organics processing facilities at Stotts Creek in the north (FOGO - food and garden organics), Grafton in the south (FOGO) and at Byron (GO - garden organics only) in the middle of the region. There are material recycling facilities (MRF's) at Chinderah (Tweed Shire), Lismore and Grafton. There are 8 Community Recycling Centres (CRC's), 30 Community Recycling Stations (CRS's) and 4 Hazardous Waste Sheds for the collection and recycling or disposal of problem wastes (e.g. batteries and paint) and chemicals, giving good geographical coverage. All Councils have a tip or revolve shop to reuse and repurpose items and there are a number of more specialised opportunities for materials such as polystyrene, asbestos and timber.



Photo courtesy of Byron Echo News (echo.net.au)



TABLE 1 REGIONAL LANDFILL CAPACITY				TABLE 2 REGIONAL INFRASTRUCTURE						
Council Landfill	Capacity plus approved expansion (approx in tonnes)	Closure (year)	Potential unapproved (tonnes)	Landfill (L) or Transfer Station (TS)	MRF	Processing facility	Tip shop	CRC	Chemical Collection Shed	Landfill Gas capture/ flaring
Ballina Waste Management Facility (inactive)	2,500	2024-25	500,000	TS			★	★		
Byron Resource Recovery Centre (inactive)	10,000	2023	Nil	TS		MAF Composting, EPS	★	★		
Clarence Valley Grafton Regional Landfill	416,000	2030	2,000,000	TS & L	★	Tunnel composting	★	★★	★	★
Kyogle Landfill	158,328	2052		TS & L			★	★		
Lismore Wyrallah Road Landfill	225,360	2028	500,000	TS & L		Glass Crusher, EPS	★	★	★	
Richmond Valley Namoona landfill	250,000	2037	Nil	TS & L			★	★	★	
Tweed Stotts Creek Resource Recovery Centre	849,572 (including 153,000 constructed)	2050+	1,000,000	TS & L		Tunnel composting	★	★	★	★

TABLE 3 REGIONAL COLLECTION SERVICES					
Council	Residential Kerbside waste and recycling	Kerbside FOGO	Commercial waste and recycling	Commercial FOGO	Bulk collection/ Vouchers
Ballina	✓	✓	✓	✓	
Byron	✓	✓	✓	✓	Vouchers
Clarence	✓	✓	✓	✓	Bulk
Kyogle	✓	In progress	✓		
Lismore	✓	✓	✓	✓	Vouchers
Richmond	✓	✓	✓		
Tweed	✓	✓	✓	✓	Book in

Kerbside food and garden organics (FOGO) collection began in Lismore City Council in 1999 - the first Council to introduce a kerbside collection in Australia. Since then, 5 councils have moved to a weekly FOGO and fortnightly waste and recycling service collection for residential properties. The frequency of commercial services for FOGO depends on their location, but a number of businesses, such as cafes, receive a twice weekly service. The last Council to adopt FOGO is Kyogle, who were successful in obtaining a grant in 2022 and will implement their new 3 bin system in July 2023.

In 2020 we worked with the NSW EPA to identify the level of carbon abatement we had achieved from our FOGO services. We will continue to pursue emissions reduction and quantify our carbon abatement under our new Strategy.

Total NE Waste region Greenhouse Gas savings due to FOGO services by Local Governments

75,269
tonnes CO₂e

Or the average emissions of around



34,178
cars p.a.



Challenges & RESPONSE

Delivering projects and finding common ground across a region of seven Local Government Areas (LGAs) is understandably challenging. Local governments are charged with providing best practice services and infrastructure to their constituents and must balance the costs and benefits of doing so across all their activities. They encompass a diversity of ideas and positions and naturally seek to deliver what is best for their individual communities. Navigating a way forward to regional solutions requires agreement from all member Councils and takes time, commitment and resources.

This Strategy recognises some of the challenges 'which includes:

- Adequate waste disposal options due to limited landfill capacity in some areas and a reliance on SEQ for disposal.
- A growing population resulting in increased waste generation, and our regional capacity to landfill, recover materials and provide services that cater for this increase.
- The significant quantities of organics, and other potentially recyclable materials, that remain in the landfill bin.
- Lack of regional solutions or new businesses to deal with hard to recycle wastes such as mattresses, plastics, textiles and composite materials.
- Keeping a collaborative dialogue that results in equitable and collective decision making.
- Uncertainty in a changing regulatory environment and shifting market place, as well as rapidly evolving technological innovation.
- Ability to respond to emergency/disaster waste management.
- The high cost to transport resources and so broaden resource recovery services in regional and rural areas and the distance from the existing resource recovery processing facilities or markets.
- The difficulty for contingency planning due to our geographic location, diverse industries and population density differences.
- Securing funding and its misalignment with the increasing costs associated with waste management and the levy.



Flood waste clean up in Lismore, 2022.

Over the next 5 years we aim to find responses to some of the challenges we have outlined above. To achieve this we will:

- Actively seek innovative solutions or markets for materials that present at our landfills and transfer stations and are more difficult to recover than traditional recyclables, such as soft plastics, textiles, solar panels and commercial wastes.
- Identify the technological, political and social appetite for regional infrastructure sharing or solutions e.g. MRFs or other facilities that achieve economies of scale, include contingency options and are palatable to all member Councils.
- Establish, update and maintain our waste database for robust planning and decision making.
- Develop a proactive regional disaster management plan for waste management in floods, fires and other natural disaster situations.
- Explore new and innovative ways to further reduce our emissions from waste management activities.

Discussions have started and funding has been allocated to begin developing a disaster management plan that

- Has processes and procedures in place to respond quickly to waste removal and disposal needs.
- Identifies communication protocols and contacts to liaise with in an emergency.
- Identifies and maps designated interim sites for different waste types e.g. hazardous wastes, green waste.
- Works to establish equity in waste and resource recovery programs within vulnerable communities.
- Progresses to provide additional and immediate support to any State Government plan.
- Lobbies State Government to provide funding support such as levy relief in times of natural disasters.
- Includes planning considerations to ensure floor heights and choice of materials is included in flood prone areas.

OUR PRIORITIES & WASM

In preparation of this Strategy our 7 Councils undertook a survey to determine our priorities to inform the future activities of our implementation plan. The survey clearly identified, in order of priority, the following area for action:



As a result of this survey and consultation with other waste groups 4 regional themes were established:



Avoid & Reduce



Recover



Protect



Collaborate

These regional themes were aligned to the 3 WASM Priority areas to develop our objectives:

1

Meeting our future infrastructure and service needs.



2

Reducing carbon emissions through better waste and materials management.



3

Building on our work to protect the environment and human health from waste pollution.



Key : **I**= Infrastructure and service needs, **C**= Reduce carbon emissions, **P**= Protect human health and the environment

RESPONSE to WASM	NSW EPA Priorities and Strategy Themes				
Objectives	WASM Priorities	Avoid Reduce	Recover Resources	Protect The Environment	Strategic Collaboration
Contribute to the reduction of total waste generated by 10% per person by 2030	C, P	●	●		
Contribute to average recovery rate of 80% for all streams by 2030	I, C, P		●		
Continue to divert organic waste from landfill	C, I	●	●		
Support the NSW Govt to meet their target of net Zero emissions by 2050 through better waste and materials management	C, P			●	
Investigate and support innovative circular solutions to regional waste management	I, C	●	●		
Engage the community to correctly dispose of problem and hazardous waste	P			●	
Support the implementation of the NSW Plastics Plan	C, P		●	●	
Reduce the impact of litter and/or Illegal dumping on the environment	P			●	
Actively encourage equity in waste and resource recovery programs within vulnerable communities	P, I				●
Encourage Councils to achieve sustainable procurement outcomes to close the loop for greater local Circular Economy outcomes	C	●	●		
Support future waste and resource recovery infrastructure needs	I		●		●
Facilitate regional collaboration to improve disaster resilience	P, I			●	●
Facilitate regional collaboration for improved waste management planning	I, C				●
Continue to foster effective communication and collaboration with all stakeholders	I				●
Continue to advocate and contribute to policy decisions on behalf of RWG members	I				●



Our INTENTION



The development of our Action Plan and implementation of this Strategy is dependent on

1

the continued support of our Councils and the NSW EPA for operational funds and

2

the availability and release of grant funding and our success in securing this funding stream

The development of a full range of potential delivery mechanisms (actions) for the strategy will be undertaken in consultation with our Councils waste managers and educators and our own project coordinators, and an annual Action Plan will be completed by June 2023. It is anticipated that this consultation process will occur annually to remain flexible to changing priorities.

The Action Plan forms the first step in implementing the objectives of this strategy. It will continue to be a working document that will be updated annually as its progress against the key performance indicators are evaluated. It will also be flexible enough to adapt any changing policy direction and emerging technologies.

In the interim, at quarterly meetings, the actions will be scrutinised as part of an ongoing monitoring plan to strengthen the strategy's implementation. This monitoring process will provide an opportunity to measure progress towards targets, check against original objectives and determine if our actions are on schedule. In this way, our implementation plan will be kept at the forefront of the groups discussions, providing a mechanism for the review of our objectives. It will also allow for early identification of barriers to implementation and adjustment for future activities.

newaste
north east waste

NORTH EAST WASTE REGIONAL WASTE STRATEGY
2022 -2027

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ORDINARY COUNCIL MEETING AGENDA**15 NOVEMBER 2022****14.2 WASTE AND RESOURCE RECOVERY UPDATE****Author: Vaughan Macdonald****EXECUTIVE SUMMARY**

Council has been progressing its search for better waste management solutions over the past five years, with regular updates on progress being provided. A number of key milestones have now been reached to help clarify timeframes, options and costs.

These milestones include:

- A final decision on IPART's proposed changes to waste regulation;
- A better understanding of what may be available to the Richmond Valley in terms of technologies and proponents for alternative waste treatment, through the recent EOI process;
- Significant movement towards establishing an Energy from Waste facility in Parkes, one of the other nominated precincts in the NSW Government's Energy from Waste Infrastructure Plan.

IPART's recent decision to step away from active regulation of waste charges provides some welcome "breathing space" for NSW councils in planning their future waste management strategies. Council's policy position on waste management has always been an "all options are on the table" approach and the IPART decision allows more time to investigate and negotiate the best possible solution for the community because the risk of a 'waste peg' has been removed for the foreseeable future.

Richmond Valley is also in a stronger position than other North Coast councils, as there is capacity at the Nammoona landfill site, and the option to continue to transport residual waste to Queensland remains available, at least in the short term. Although this may not be the most cost-effective or environmentally desirable solution, it allows Council to maintain the level of service the community expects while it searches for better alternatives.

RECOMMENDATION

That Council:

1. Notes that IPART has decided to NOT use its powers to 'peg' Councils' waste management charges following its review of waste regulation;
2. Notes Council's responses to the Draft Thermal Energy Regulation consultation processes, both individually and with Parkes and Lithgow Councils;
3. Pauses its active investigation into an Energy from Waste facility for the Richmond Valley while the Parkes Special Activation Precinct EfW proposal proceeds and monitors progress, community reactions and outcomes;
4. Continues to consider other options in the Alternative Waste Treatment Solutions Expression of Interest responses and keep North Coast Councils updated on any progress and opportunities for collaboration.
5. Consults the community on the Draft Richmond Valley Regional Jobs Precinct Master Plan when it is finalised in 2023 and as part of that process provides the opportunity for the community to express opinions on Energy from Waste facilities as a solution to Council's residual waste management challenges.

DELIVERY PROGRAM LINKS

Sustain - Objective 11: Manage community resources and provide great service

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11D Deliver quality services for the community

11D1 Deliver efficient & affordable waste management services

BUDGET IMPLICATIONS

Council's Waste and Resource Recovery operations are continuing in line with Council's adopted budget for 2022/23.

Clr Hayes asked the following question at the August meeting of Council:

When Council receives and evaluates expressions of interest for regional waste solutions, can information be included in a future business paper based around the financial impacts that any solution would have on the ratepayers and industries, who will utilise any changes to the way that we will dispose of our waste into the future.

Council is not in a position to provide a financial analysis of all the options, as it was an Expression of Interest process which didn't require detailed financial responses for each of the proposals put forward. As Council progresses any discussions on waste management solutions an assessment of the financial, environmental and social impacts will be considered against our current Waste and Resource Recovery annual program revenues and expenses, and advice will be provided to Council.

REPORT**DISCUSSION****Regulation of Waste Management Charges – IPART review**

Under the *Local Government Act 1993*, IPART has powers to regulate the price that councils charge for their domestic waste collection services each year. The "waste peg" has never been applied to date, but over the past two years, IPART has been considering whether it should use these powers to control what it saw as "escalating costs" for domestic waste management. The local government sector strongly opposed this move and RVC wrote a comprehensive submission (Attachment 1) explaining how most of the "escalating costs" were beyond councils' control – and largely due to increases in the NSW Waste Levy. Councils argued that if a waste peg was imposed they would have to cut services.

After two years of deliberation, IPART announced last month that it would not apply the waste peg – nor would it consider doing so in the foreseeable future. Instead, it recommended that the Office of Local Government provide updated guidance and carry out targeted investigation of councils whose DWM charges seemed unjustifiably high. While this is a positive outcome for local government, it highlights that the NSW Government will continue to monitor our waste charges which have increased significantly in recent years due to the escalating cost of managing the community's waste. This means we must continue to search for more cost-effective measures that are sustainable over the longer term.

Further details on this review can be found at [Domestic waste management annual charges | IPART \(nsw.gov.au\)](https://www.ipart.nsw.gov.au/domestic-waste-management-annual-charges)

Alternate Waste Treatment Solutions – Expression of Interest Final Summary

In mid-2022, Richmond Valley Council (on behalf of nine Councils on the North Coast) sought Expressions of Interest (EoI) from the waste management industry to provide long term alternative waste treatment infrastructure. The EoI sought solutions for processing residual waste, recyclates and organics (food and garden). Sixteen submissions were received, which clearly demonstrates there is interest from the market in developing infrastructure on the North Coast.

Submissions covered all waste streams and included a diverse range of technologies - some well-established and internationally commercialised, and others that are newer to the market. Technologies included:

- thermal treatment of residual waste
 - moving grate

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- fluidised bed
 - gasification
 - pyrolysis
 - autoclaving
- processing organic waste
 - in vessel composting
 - anaerobic digestion
- separation of co-mingled recyclates
 - material recovery facilities

Proponents included:

- publicly listed international waste management businesses
- Australian recycling leaders
- Domestic developers with international technology licences
- technology providers
- global and domestic infrastructure investors

Proposed volumes ranged from:

- in the range of 10,000 – 50,000 tonnes per year for recyclate and organics streams
- in the order of 50,000 tonnes per year for novel modular thermal processes for residual waste, with the capacity to scale up
- above 50,000 tonnes per year for commercialised thermal processes for residual waste

The range of solutions proposed, the quality of the proponents and the potential capacities demonstrates that the Northern Rivers has a robust suite of options available. The EOI has shown that there is interest in establishing material recovery facilities and organics treatment options in the region and these possibilities will be pursued. While it is unlikely, based on current performance that our community will ever achieve “zero waste”, it can reduce the amount of residual waste it ultimately generates by increasing resource recovery rates. This is in line with the key directions set by Council’s Waste Management and Resource Recovery Strategy, adopted in 2020.

The EOI process has also shown that, with the volume of residual waste expected to be generated by the North Coast (approx. 100,000 tonnes), the region is more likely to attract Energy from Waste proposals that are based around newer technologies, rather than the more proven processes that are designed for volumes in excess of 300,000 tonnes. This may create some challenges in progressing a proposal to approval. New technology needs to be proven for a period of at least two years to satisfy the EPA as the regulator, so it is unlikely that a small-scale facility would be able to satisfy the new policy requirements established for NSW in 2021.

Impacts of the Energy from Waste Regulation

While Council has been investigating thermal treatment options including Energy from Waste facilities for over four years, the decision to limit these facilities to four areas - flagged in the EfW Infrastructure Plan, and later consolidated through Regulation – has shifted the course of the investigations.

Council had been working on the assumption - based on the NSW Sustainable Materials Strategy – that EfW facilities would form part of the government’s new vision for a circular economy and would be largely permissible in most areas, if they met the regulatory requirements.

The NSW EfW Infrastructure Plan 2021, which was designed to encourage investment in regional NSW, was the first document that specified EfW facilities could only be established in four LGAs in NSW (with some minor exemptions where a facility provided power for facilities within the same allotment). The Plan was written by the EPA, which included commentary that inferred that these

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facilities should not be built in metropolitan areas, despite the fact there are hundreds of them built in densely populated areas across the world.

This was a departure from the NSW Government's circular economy policy position and ultimately served to stigmatise EfW facilities, rather than encourage an informed exploration of the options. From this point on, the four identified areas Goulburn, Lithgow, Parkes & Richmond Valley have had to deal with the consequences of this prohibition approach, which has been embedded in the Thermal Energy from Waste Regulation early in 2022. Council made a submission to this draft regulation (Attachment 2) pointing out these challenges, however our concerns were largely ignored and the Regulation has now been made.

Council has been liaising with Parkes and Lithgow Councils, given our common interests, to advocate for more support from the NSW Government to assist with consultation and education of the community and to identify opportunities that could be achieved for communities that host an EfW facility. A detailed submission was prepared and signed by the Mayors of the three Councils back in March 2022 and is attached for information. In summary it outlines the challenges these LGAs face in handling concerns within communities and sought:

1. A State-initiated education/communication campaign on EfW
2. Community Impact/Economic Innovation Fund
3. Voluntary Planning Agreement Framework.

There have been discussions with Regional NSW, however, to date there has been no commitment to a specific Energy from Waste support.

Progress on the Parkes proposal

A procurement process is underway in Parkes for the establishment of an EfW facility in its Special Activation Precinct, with this process being led by the NSW Government's Regional Development Corporation. The process should provide a clear indication as to whether regional communities and State regulators are ready to embrace EfW technologies as part of the future of waste management. Given the progress already made with the Parkes proposal, it may be prudent to adopt a watching brief on this issue before actively pursuing any further interest in a local proposal. With a State election next March, it may also be prudent to pause investigations on this issue in case there is a change of Government, which would enable Council to confirm the position of the elected Government post-March 2023.

Should Council choose to wait for the Parkes outcome to be resolved, work could still continue on progressing investigation into solutions for recycling and composting. More detailed costings could also be prepared on all future options for residual waste including the option for Petersons Quarry in Coraki being used as a regional landfill facility once its quarry material resource is fully utilised. This work would help to inform the scheduled review of Council's Waste Management and Resource Recovery Strategy, which will be completed in early 2023. Consultation on the revised strategy is scheduled for March-April 2023.

CONSULTATION

Future consultation on the community's willingness to accept an Energy from Waste facility will be included as part of the consultation process for the Richmond Valley Regional Jobs Precinct Master Plan.

CONCLUSION

Council's journey towards finding a better waste management solution has been progressing, with many new developments along the way. The latest milestones provide an opportunity to pause and reflect on future strategic direction. It is recommended that Council resolve a position that it will not progress any active investigations until such time as the Parkes EfW assessment process has further progressed. This approach will enable Council to monitor the process and learn from it before making any decisions to actively pursue an EfW facility in the Richmond Valley as a solution to our waste management challenges.

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ATTACHMENT(S)

1. **Submission to IPART Waste Review October 2020 (under separate cover)**
2. **RVC EfW Regulation consultation response (under separate cover)**
3. **EfW Regulation - Joint submission PSC, LCC, RVC (under separate cover)**