

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

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

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.

10

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

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

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.

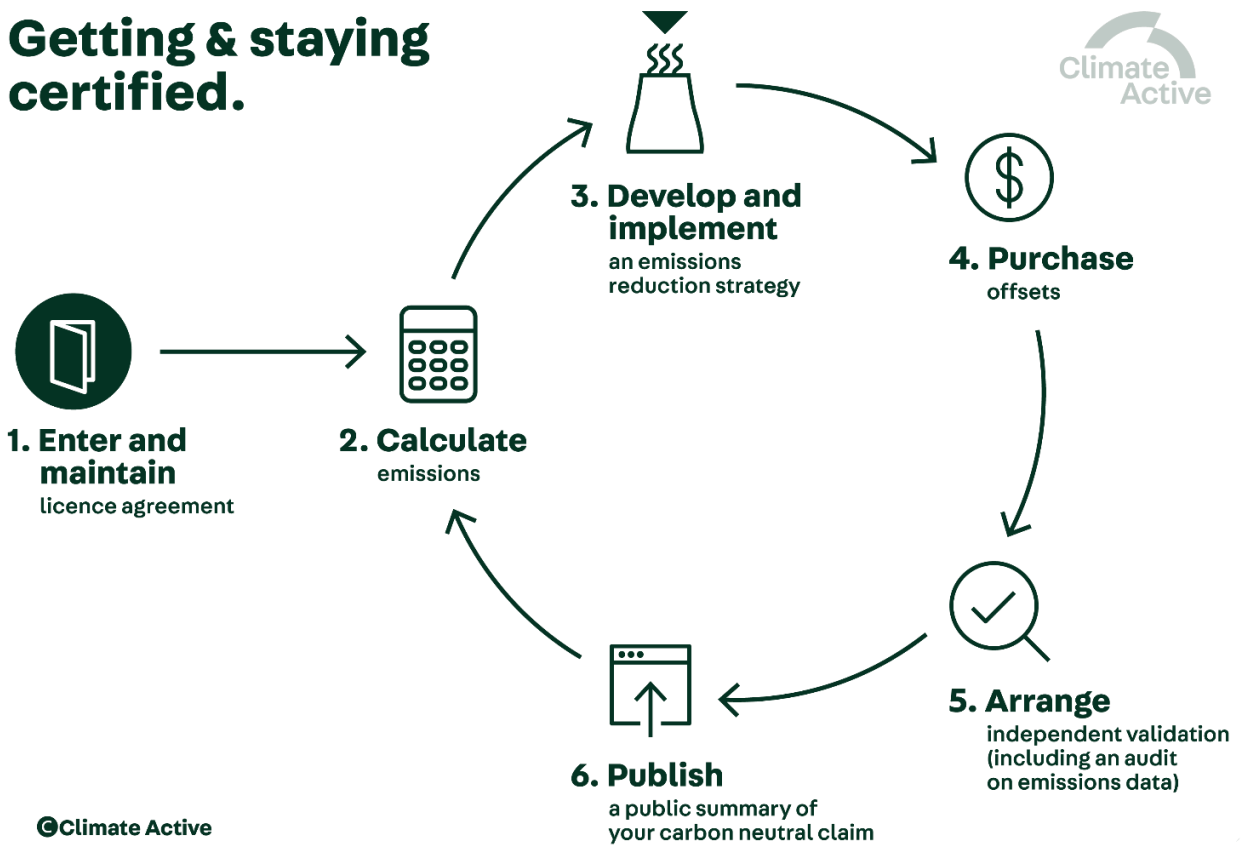


Figure 1. The high-level steps Council will follow to achieve Climate Active carbon neutral certification. Source: [Climate Active website](#).

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.

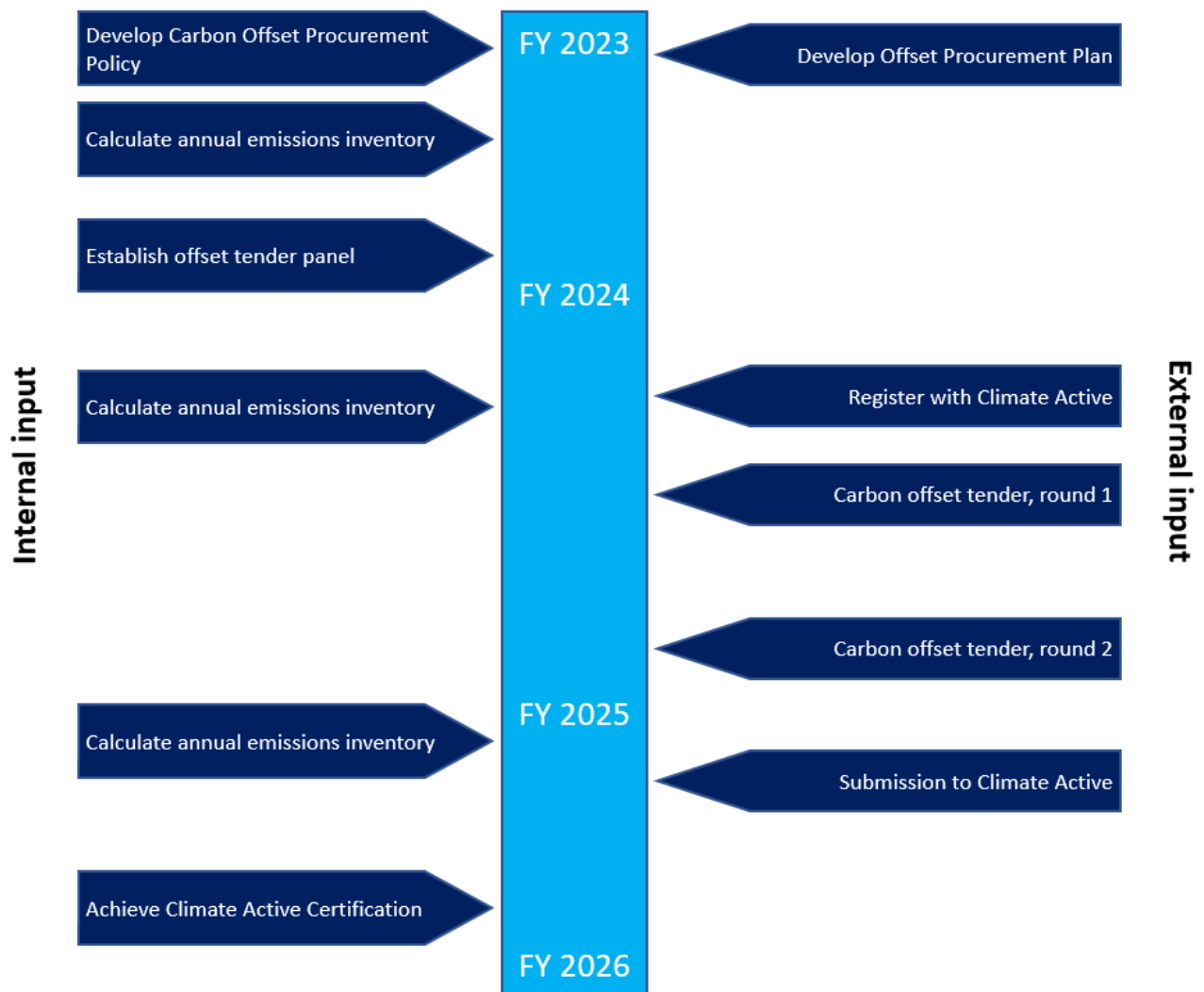


Figure 2. Approximate timeline of major steps for Council to achieve Climate Active certification by December 2025.

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.

20

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 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 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.

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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- 5 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.

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 [↓](#) 
- 20 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 [↓](#) 

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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)

10 *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

5 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.

10 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.

- 15 • *Towards Zero Strategy Key Goal: determine the feasibility of pursuing a regional Alternative Waste Treatment (AWT) Solution.*
- 20 • *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.

25 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*

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

35 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;

5 *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.

10 *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
- 15 • air quality and human health are protected
- ‘mass burn’ disposal outcomes are avoided
- scope is provided for industry innovation

20 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
- 25 • 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.

30 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

35 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

5 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.

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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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 <i>2022-32 Resource Recovery and Residual Waste Strategy: Sharing the Responsibility towards a Circular Economy and Resourceful Community</i> 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:

- 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.

20 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

10 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 \(dcccw.gov.au\)](https://www.dcccew.gov.au/national-waste-policy-action-plan-2019)

[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-infrastructure-plan)

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

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