

NOTICE OF MEETING



SUSTAINABILITY AND EMISSIONS REDUCTION ADVISORY COMMITTEE MEETING

An Sustainability and Emissions Reduction Advisory Committee Meeting of Byron Shire Council will be held as follows:

| | |
|-------|---|
| Venue | Conference Room, Station Street, Mullumbimby |
| Date | Thursday, 12 November 2020 |
| Time | 9.00am |

Shannon Burt
Director Sustainable Environment & Economy

I2020/1765
Distributed 05/11/20

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)

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.

BYRON SHIRE COUNCIL
SUSTAINABILITY AND EMISSIONS REDUCTION ADVISORY COMMITTEE MEETING

BUSINESS OF MEETING

1. APOLOGIES

2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

3. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

- 3.1 Adoption of Minutes from 10 September 2020 Sustainability and Emissions
Reduction Advisory Committee meeting 4

4. STAFF REPORTS

Sustainable Environment and Economy

- 4.1 Climate Emergency Response Update on Res 20-351 10
4.2 Sustainability and Emissions Reduction Projects - Update Report 16
4.3 Updates from Zero Emissions Byron and COREM..... 32

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 **Adoption of Minutes from 10 September 2020 Sustainability and Emissions Reduction Advisory Committee meeting**

Directorate: Sustainable Environment and Economy

Report Author: Kimberley Rogers, Environment Support Officer

File No: I2020/1721

RECOMMENDATION:

That the minutes of the Sustainability and Emissions Reduction Advisory Committee Meeting held on 10 September 2020 be confirmed.

Attachments:

1 Minutes 10/09/2020 Sustainability and Emissions Reduction Advisory Committee, I2020/1366 , page 6↓

Report

The attachment to this report provides the minutes of the Sustainability and Emissions Reduction Advisory Committee Meeting of 10 September 2020 .

5

Report to Council

The minutes will be reported to Council on 26 November 2020.

10

MINUTES OF MEETING



**SUSTAINABILITY AND EMISSIONS
REDUCTION ADVISORY COMMITTEE
MEETING**

| | |
|-------|--|
| Venue | Conference Room, Station Street, Mullumbimby |
| Date | Thursday, 10 September 2020 |
| Time | 2.00pm |

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

SUSTAINABILITY AND EMISSIONS REDUCTION ADVISORY COMMITTEE MEETING
MINUTES 10 SEPTEMBER 2020

Minutes of the Sustainability and Emissions Reduction Advisory Committee Meeting held on Thursday, 10 September 2020

File No: I2020/1366

PRESENT: Cr S Richardson, Cr M Lyon, Cr S Ndiaye

Staff: Shannon Burt (Director Sustainable Environment and Economy)
Sharyn French (Manager Environmental and Economic Planning)
Julia Curry (Sustainability Officer)
Hayley Briggs (Sustainability Officer)
Cameron Clark (Manager Utilities)
Rachel Thatcher (Sustainability Officer)

Community: Luke McConell
Chris Sanderson
Katrina Shields (ZEB representative)
Anthony Pangallo

Cr S Ndiaye (Chair) opened the meeting at 2.07pm and acknowledged that the meeting was being held on Bundjalung Country.

APOLOGIES:

There were no apologies.

DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

There were no declarations of interest.

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Minutes of previous meeting held 30 April 2020
File No: I2020/1249

Committee Recommendation:

That the Sustainability and Emissions Reduction Advisory Committee note the minutes of the 30 April 2020 meeting.

(Pangallo/Sanderson)

The recommendation was put to the vote and declared carried.

Note: The minutes of the meeting held on 30 April 2020 were noted, and the Committee Recommendations adopted by Council, at the Ordinary Meeting held on 27 August 2020.

BUSINESS ARISING FROM PREVIOUS MINUTES

SERAC Sustainability and Emissions Reduction Advisory Committee Meeting page 3

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

SUSTAINABILITY AND EMISSIONS REDUCTION ADVISORY COMMITTEE MEETING
MINUTES 10 SEPTEMBER 2020

There was no business arising from previous minutes.

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

Report No. 4.1 Sustainability and Emissions Reduction Projects - Update Report
File No: I2020/1230

Committee Recommendation:

That the Sustainability and Emissions Reduction Advisory Committee note the report on key projects.

(Pangallo/Shields)

The recommendation was put to the vote and declared carried.

Report No. 4.2 Updates from Zero Emissions Byron, COREM and the Climate
File No: Emergency Working Group
I2020/1250

Committee Recommendation:

That the Sustainability and Emissions Reduction Advisory Committee note the updates from Zero Emissions Byron, COREM and the Climate Emergency Working Group.

(Ndiaye/McConell)

The recommendation was put to the vote and declared carried.

There being no further business the meeting concluded at 2.52pm.

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

Report No. 4.1
Directorate: Sustainable Environment and Economy
Report Author: Rachel Thatcher, Sustainability and Emissions Reduction Officer
File No: I2020/1455

Summary:

Council resolved (20-351) at the 25 June 2020 Ordinary Meeting to progress the finalisation of a Climate Change Adaptation Plan and to explore the development of a resilience framework for Byron Shire by investigating where Council already has resilience measures in place and identifying where there may be gaps or areas to pursue.

Council also resolved to make contact with City of Sydney to discuss their Resilient Sydney Strategy, and with Resilience NSW to discuss what upcoming opportunities may be available for Byron Shire.

In addition to these recommendations, City of Melbourne was also contacted to discuss their Resilient Melbourne Strategy. Both Strategies from Sydney and Melbourne were evaluated as potential models for a Byron Shire resilience framework.

This report summarises the findings from each of these avenues and evaluates Council's current position on climate resilience.

RECOMMENDATION:

That the Sustainability and Advisory Committee note this report as an update on Resolution 20-351.

Attachments:

1 Pages 59 - Resilient Melbourne Strategy, E2020/77193 , page 15 [↓](#)

REPORT**Background**

At the 25 June 2020 meeting Council resolved, (**Resolution 20-351**):

- 5 1. *Request staff to progress the finalisation of a draft Climate Change Adaptation Plan which:*
 - a. *Considers the:*
 - i. *Identified areas of concern determined at the 6 September 2019 Councillor workshop;*
 - 10 ii. *Council researched gap analysis conducted and presented to Council 12 December 2019; and*
 - iii. *Contemporary and current science as it relates to Local Government best practice for Climate Adaptation within Australia.*
 - b. *Is peer reviewed where possible by the previously confirmed workshop participants; and*
 - 15 c. *Undergoes a Councillor and community engagement process before reporting to Council for consideration for adoption.*
2. *Agree to explore the development of a resilience framework and plan for Byron Shire.*
3. *Make contact with Resilience NSW to discuss the potential preparation of a Resilience Plan and how Council may partner in the early preparation of such a plan for Byron Shire.*
- 20 4. *Make contact with the City of Sydney to discuss their Resilience Plan framework and how it might be applied to Byron Shire.*
5. *Request staff to undertake a gap analysis of Council's current plans against a resilience framework such as the City of Sydney.*
- 25 6. *Request staff to present the findings of items 3-5 at a Strategic Planning Workshop and report to Council.*

To date, the following work has been done to progress this resolution.

1. Progress the finalisation of a Climate Change Adaptation Plan

- 30 As part of reducing Council's risk under our current insurance policy, key staff from all Council directorates recently participated in a series of climate change risk assessment workshops. The findings from these workshops are currently being compiled into a climate change risk report for Council operations. Major climate risks identified as being high to extreme will be used to further develop the Climate Change Adaptation Plan.

2. Explore the development of a resilience framework for Byron Shire

- 35 Byron Shire Council is relatively progressive in terms of its existing declarations, Strategies and Policies on Climate Change. To date, a large amount of work has already been completed to address climate mitigation and adaptation, both of which will inform and contribute to the overall resilience of Byron Shire.
- 40

- 45 In addition, recent funding from Federal and State Governments to address the recent bushfire disaster has also lead to a significant amount of project planning being done by Council to improve resilience in Byron Shire. A report on this disaster resilience project is expected to be tabled at the December Council meeting.

The following information will discuss where Council's existing work sits in relation to the development of a resilience strategy like Cities of Sydney and Melbourne.

3. Resilience NSW

Resilience NSW (formerly Office of Emergency Management) is a state government agency which oversees and coordinates emergency management policy, service delivery and all aspects of disaster recovery.

Contact was made with the available representatives from Resilience NSW to discuss opportunities for Byron Shire, however it was not indicated that there was anything for Byron to pilot at this stage. Contact will be maintained with Resilience NSW to keep up to date with any opportunities to collaborate, and any changes will be included in the SPW update as per item 6 of resolution 20-351.

4. City of Sydney

City of Sydney's [Resilient Sydney Strategy](#) is broken down into five 'Directions'. Each addresses different resilience challenges with corresponding actions, requiring various levels of government, community, and agency involvement. They also link to the UN Sendai Framework for Disaster Risk Reduction.

Feedback from Resilient Sydney Office –

City of Sydney's Resilient Sydney Officer, offered several key points to consider for the development of a resilience framework for Byron Shire:

- The foundation of the Resilient Sydney Strategy, including the five key 'Directions' which guide the document, emerged out of extensive community consultation and engagement workshops which identified key challenges, vulnerabilities, strengths, and suggestions.
- The core focus of the Strategy is predominantly on community-identified shocks and stressors, for example, the scale and impact of climatic events is amplified as community stressors increase, therefore incorporating community-identified vulnerabilities is key.
- Resilient Sydney is currently developing training resources and workshops to assist other regional NSW Councils to develop their own resilience framework.
- The collaboration is in its developmental stages, but is likely to involve a training workshop which will address the 'backbone' methodology and how to apply this to individual LGA's.
- It was indicated that training may be finalised for delivery in early 2021.

In relation to the last 3 dot points above staff are having ongoing conversations with City of Sydney about Council's early participation in such a program.

City of Melbourne

City of Melbourne's Resilient Melbourne Strategy was also examined alongside City of Sydney. Although the same methodology was applied, it has a slightly different structure. Four community resilience objectives are identified, each with a range of corresponding actions that are grouped into themes, *Adapt, Survive, Thrive, and Embed*. The Strategy is best summarised visually using the table on page 59 of the document itself (Attachment 1).

City of Melbourne's Resilient Melbourne Officer, offered similar advice to City of Sydney regarding a resilience framework for Byron Shire:

- Resilience means different things to different stakeholders, therefore it is essential that community engagement is used to define resilience for your community (community stressors undermine ability for community to respond to shock events).
- A preliminary resilience assessment used by City of Melbourne was provided as an example.

- City of Melbourne hosts [resilience training](#) for local and state government professionals, corporate organisations and professionals.

5. Undertake resilience gap analysis for Byron Shire

- 5 The preliminary stages of a gap analysis identified Council has a substantial amount of existing work in place to inform resilience. Council staff aim to present the full gap analysis at the December SPW as per item 6 of the above resolution. A summary of current preliminary research is outlined below:
- 10 *Byron Shire Disaster Resilience Project (BSDRP)*
Following the recent bushfire disaster, Byron Shire Council received funding from the Federal and State Governments to help mitigate the impact to the Shire and investigate future disaster resilience action. A program of works is being developed by the BSDRP (Res 20-117) to address three key resilience elements:
- 15
1. *Active Planning and Preparation*
 2. *Knowledge of, and involvement in, disaster management arrangements*
 3. *Building community cohesion*
- 20 *Existing climate actions, Strategies, and Policies*
There are several existing Council Strategies and Policies which were recently evaluated in terms of climate mitigation and adaptation. Many can be likened to actions within the City of Sydney and Melbourne Resilience Strategies. These include:
- 25
- Recycled Water Management Strategy
 - Draft Water Sensitive Urban Design Policy and Strategy
 - Climate Change Strategic Planning Policy
 - DCP Chapter C2 Areas affected by flood
 - Draft Byron Shire Bike Plan
- 30
- Draft Pedestrian Access and Mobility Plan
 - Strategic Transport Policy
 - Car Share Policy
 - Net Zero Emissions Strategy for Council Operations 2025
- 35 Note – the *Climate Change Adaptation Plan* will also contribute to this list once developed.
- Resilience within planning*
Town and land-use planning also play a role in building resilience. Consultation with Council's planning team identified that there are several actions similar to those within the Resilient Sydney Strategy, that are currently either underway or in progress that could also contribute to a resilience framework for Byron Shire:
- 40
- Heat mapping in Byron Town Centre Masterplan to inform landscape design and increase urban greening
- 45
- Investigation into *bioswale* to alleviate pressure on sewer system after flooding and increase urban greening
 - Community leasing of Old Byron Hospital as a community-led neighbourhood renewal project
 - *Lot 22, Mullumbimby* and *State Environment Planning Policy (SEPP) no. 70 - Affordable Housing* to address affordable housing
- 50

One key area that was identified within 'flagship' actions in both Resilience Strategies by Cities of Sydney and Melbourne was the concept of urban forestry and cooling streets and homes:

- Melbourne – Metropolitan Urban Forest Strategy (p63 Resilient Melbourne Strategy)
- Sydney – Cool Suburbs Strategy (p77 – Resilient Sydney Strategy)

The planning team have identified that this is a potential gap that could be investigated further to address resilience against heat waves, flooding, and to support mental wellbeing in Byron Shire. An example of an existing application within Byron Shire is the use of heat mapping to inform landscape design and tree planting, used in the development of the Draft Byron Town Centre Masterplan. The Stuart St Greenspine project is a similar action is mentioned in the Draft Mullumbimby Masterplan.

Next steps

Council staff will continue to finalise the climate change risk report over the coming weeks which will be used to inform the Climate Change Adaptation Plan.

Council staff will continue to liaise with City of Sydney to stay updated on any opportunities as they become available.

A further Council report and a Strategic Planning Workshop on the outcome of these investigations is scheduled for December as per item 6 of resolution 20-351.

STRATEGIC CONSIDERATIONS

Community Strategic Plan and Operational Plan

| CSP Objective | L2 | CSP Strategy | L3 | DP Action | L4 | OP Activity |
|--|-----|--|-------|--|---------|---|
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.1 | Work towards Council's zero-emissions target | 3.2.1.9 | Develop and implement a Climate Adaptation Plan |

Financial Considerations

Funds are available in the budget to deliver the Climate Change Adaptation Plan.













Council has received funding from Federal and State Government to invest in building community resilience; \$1,200,000 from the Commonwealth and \$100,000 from the NSW State government.

Consultation and Engagement

External:
Resilient Sydney Office
Resilient Melbourne Office
Resilient NSW

Internal:
Director, CACS
Community and Cultural Development Coordinator
Place Activation Coordinator
Planners

Each action will help achieve several resilience objectives

| | | | | RESILIENCE OBJECTIVES | | | |
|--|--|------|---|-----------------------|-------------------|-------------------|-------------------------|
| | ACTION | PAGE | ACTION TYPE | Stronger together | Our shared places | A dynamic economy | A healthier environment |
| ADAPT | Metropolitan urban forest strategy | 62 |  | | | | |
| | Integrated Water Management Framework | 68 |  | | | | |
| | The Neighbourhood Project | 74 | | | | | |
| | New apartments trial for public housing residents | 78 | | | | | |
| | Local Government Renewables Group Purchasing | 82 |  | | | | |
| | National Climate Resilience and Adaptation Strategy | 61 | | | | | |
| | Association of Bayside Municipalities Adaptation Planning | 73 | | | | | |
| | Working with Melbourne's tertiary and further education colleges and upper secondary schools to support STEM education | 87 | | | | | |
| Ask Izzy | 81 | | | | | | |
| SURVIVE | An emergency management community resilience framework for Victoria | 90 |  | | | | |
| | Understanding drivers of community resilience | 94 |  | | | | |
| | Community-based resilience compendium | 100 | | | | | |
| | Innovative insurance | 104 | | | | | |
| | IBM Smarter Cites Challenge and Twitter Data | 109 |  | | | | |
| | Flood Management Strategy – Port Phillip and Westernport | 93 | | | | | |
| | Multicultural water safety and settlement | 98 | | | | | |
| | 'Refuge': the role of art and culture in preparedness | 103 | | | | | |
| Building preparedness through relationships in Koori and culturally and linguistically diverse communities | 107 | | | | | | |
| THRIVE | The metropolitan cycling network | 112 |  | | | | |
| | Community-led neighbourhood renewal and development pilot projects | 116 |  | | | | |
| | Citymart Challenge – involving citizens in mobility and transport | 120 | | | | | |
| | Young and Resilient Living Labs | 126 | | | | | |
| | STEM Mentoring Melbourne | 130 |  | | | | |
| | Innovative business models | 134 | | | | | |
| | VicHealth Mental Wellbeing Strategy | 111 | | | | | |
| | Melbourne Metro Rail Project | 125 | | | | | |
| | Preventing Violence Together | 129 |  | | | | |
| | 30-year Infrastructure Strategy for Victoria | 137 | | | | | |
| EMBED | The Resilient Melbourne Delivery Office | 142 |  | | | | |
| | City of Melbourne chair in resilient cities | 148 | | | | | |
| | Resilience Training for Local Government | 152 |  | | | | |
| | Working to embed resilience and build social cohesion | 151 | | | | | |



Flagship Action



Supporting Action



Local Aligned Action



Primary resilience goal



Related goal

Report No. 4.2 **Sustainability and Emissions Reduction Projects - Update Report**
Directorate: Sustainable Environment and Economy
Report Author: Julia Curry, Sustainability and Emissions Reduction Officer
 Hayley Briggs, Sustainability and Emissions Reduction Officer
 Rachel Thatcher, Sustainability and Emissions Reduction Officer
5 **File No:** I2020/1557

10 **Summary:**

This report provides a short update on the key sustainability and emissions reduction projects across Council. Project managers will speak to their items.

15 **RECOMMENDATION:**

1. That the Sustainability and Emissions Reduction Advisory Committee note the report on key projects.
 2. That the Sustainability and Emissions Reduction Advisory Committee recommend Council enter into a one year trial partnership with ClimateClever.
-

Attachments:

- 1 DRAFT Byron Shire Council Net Zero Emissions Action Plan for Council Operations 2025,
20 E2020/39998 , page 21 [↓](#)

REPORT**Utilities Key Projects****5 Dingo Lane, Myocum Solar Farm Project Updates***Project Progress*

- Council meeting on 22nd of October – Owners Consent to submit DA
 - Photo-montages and site layouts are available on Council's project page - <https://www.yoursaybyronshire.com.au/dingo-lane-solar-farm1>

- 10 • Updated Business Case expected to be reported by February 2021

Business Case Key Issues

- While Council received broad interest from the market, respondents provided generally little information to support the project or to confirm their valuation of the project in terms of a potential price for energy per kW
- 15 • Project Team is continuing to work with energy providers to progress this, but it is possible that even the updated business case (Feb 2020) will contain some degree of untested assumptions about the anticipated revenue
- To progress the project (assuming the Business Case is still positive) then Council would need to enter into a firm contract with an energy provider before committing to the construction phase (this is standard practice). This firm contract would set the maximum allowable construction price to achieve the required payback period.
- 20 • One alternative is to "sell" the project, i.e. lease the land or some other similar mechanism. It should be noted that this is not necessary to meet Council's Net Zero Emissions and Renewable Energy Targets (these can be met independently via Green Power contracts for example)
- 25 • If Council made the decision to 'sell' the project in exchange for the renewable energy certificates (LGCs) this could open up other areas of risk. For example if Council chose to later source its power from a renewable energy provider then the LGCs would have no value for Council. It will also be necessary to determine if the provision of land for a solar farm development is of equivalent value to LGC certificates provided by the lease / developer. And if not, then what the minimum allowable / expected rental rate could or should be. If the primary financial beneficiary of the project becomes a private, non-local operator then Council would need to consider the project rationale, given that some of the policy objectives can be met through other means.
- 30
- 35

Byron Bay Sewage Treatment Plant Bioenergy Facility Project Updates

- ARENA regarded highly the technical premise and the team assembled for delivery of the Bioenergy Facility project
- Council is preparing the first EOI stage of the 3-step application for an ARENA Capital Deployment Grant
- 40 • Procurement is underway for the Environmental Impact Statement and the commercial business case, governance advisory and financial modelling services
- Council conducted the media launch for the Bioenergy Facility on October 29, as a major step forward in the community consultation
- 45

Brunswick Valley Sustainability Centre

- Council has engaged an electrical engineer to conduct a high-level feasibility analysis for the technical and financial potential of placing the 5 MW community solar adjacent to the Brunswick Valley STP; work is underway.
- 50 • A Councillor filed a Notice of Motion to contemplate natural burial at the Vallances Road property; Infrastructure Services will digitally map land-use constraints to contemplate this potential use.
- Council has begun a multi-stakeholder internal engagement to craft an Expression of interest for the broad uses of the nursery

- Council has engaged a consultant to conduct pre-feasibility analysis of potential business cases for the potential education and information centre; work is underway
- Council personnel have substantively advanced the grant application package (planned for January 2021 submission) to seek funds for bank stabilisation and riparian zone rehabilitation, in support of the 'Bringing Back the Bruns' efforts.

Sustainability Team Key Projects

Net Zero Emissions Strategy – Action Plan

- The *Net Zero Emissions Action Plan for Council Operations 2025* has finished public exhibition and received four public submissions. A report on these submissions and the final *Action Plan* is being presented to Council at the November meeting. There are no changes to the *Action Plan* (Attachment 1 – E2020/39998).

Annual Emissions Report

- The sustainability team is in the process of compiling Council's annual operational emissions data – a report will be presented to Council in December, as well as at the December Strategic Planning Workshop.

ClimateClever

- ClimateClever is a social enterprise that was developed in collaboration between City of Fremantle, Curtin University and the CRC for Low Carbon living (LCL) in WA. It aims to inspire action on climate change - <https://www.climateclever.org/>.
- The tried and tested program is delivered as an application for schools and households (businesses coming soon), and does three things:
 - *Measure* – calculate your carbon footprint, track your emissions annually and compare your results with others across the country.
 - *Audit* – understand how buildings and facilities consume resources and how they impact your overall carbon footprint. Compare appliances with other users.
 - *Action* – learn how to systematically reduce your carbon footprint. Assign tasks, set deadlines, implement initiatives, monitor progress and share experiences.
- Council's purpose –
 - Council has the opportunity to sign up as a partner with ClimateClever and pass on a 50% discount on all Apps for our community. Becoming a partner would also give Council access to our community's de-identified sustainability data including carbon emissions, costs, and actions. This could enable Council to begin tracking progress with community emissions. See here for more details - <https://www.climateclever.org/partners>
- Cost – it would cost \$850/year + GST. This cost includes a social media and promotional kit, but ClimateClever would still be responsible for all administrative work. The partnership would enable Council to encourage and promote community emissions reduction activities.
 - Cost for community – with a 50% discount, residential households could pay as little as \$15/year and costs for schools start at \$500 + GST.
- The sustainability team believes this could be a great first step towards developing a strategy for Byron Shire's community emissions and supporting Zero Emissions Byron's goals.
- Initial contact has been made with a few local schools and they have expressed interest and enthusiasm.
- It is recommended Council enter into a one year trial partnership with ClimateClever, using funds from the sustainability programs budget. A progress report will be provided to SERAC at the end of the trial period.

Climate Change Risk Assessment

- Council, as a member of the Statewide Mutual Liability Scheme (Statewide Mutual) selected to participate in the Climate Change Risk Assessment program offered to member Councils as part of its series of funded initiatives.
- The sustainability team ran a series of workshops with representatives from all Council directorates.
- A total of 71 risks were identified, with ratings ranging from Low to Extreme. The final report is currently being finalised. It will be presented to Council at a Strategic Planning Workshop later in 2020.
- The risks with ratings of High and Extreme require adaptation plans or initiatives to be developed for future implementation. These will inform Council's Climate Adaptation Plan, currently in development.

Sustainability E-Newsletter

- After consultation with the waste and media and communications teams, it was suggested that the Sustainability E-newsletter be restarted to encompass all aspects of sustainability and waste education for the community.
- Community feedback often mentions that Council does not talk enough about what they do in this space, and so the newsletter will be a great way to keep people informed about sustainability news and initiatives, upcoming events such as beach clean ups, community groups such as ZEB, and other education resources.
- The E-newsletter will be sent out quarterly to community recipients with the first one to be sent out at the end of this year.

PopCar

- A recent report to the Executive Team presented a cost benefit analysis of staff using Council pool cars versus staff using share cars.
- The analysis found that cost per kilometre of using a Council pool car is \$0.64/km, and the cost per kilometre of using a share car is \$0.65/km. The Executive Team resolved that share cars should only be used in the instance that pool cars are not available.
- Staff are currently setting up a system so that all staff will have access to share cars, should pool cars not be available. (Currently only 5 Council staff officially have accounts with PopCar.) It is expected that the all staff usage will be available and promoted to staff in early November.

Climate Wise Communities Website

- As part of Council's Disaster Resilience Project, Council has entered into a Memorandum of Understanding with Ku-ring-gai Council to reproduce a localised version of their Climate Wise Communities program.
- The Byron Shire version of Climate Wise Communities is currently under development and is due to be launched at the end of November, alongside the Disaster Dashboard, in time for storm season.

STRATEGIC CONSIDERATIONS**Community Strategic Plan and Operational Plan**

| CSP Objective | L2 | CSP Strategy | L3 | DP Action | L4 | OP Activity |
|--|-----|---|-------|---|---------|---|
| Community Objective 1: We have infrastructure, transport and services | 1.5 | Provide continuous urban water and sewerage | 1.5.1 | Increase the energy efficiency of Sewerage treatment Plants | 1.5.1.1 | Expand solar farms at Bangalow; Byron and Brunswick Valley Sewage |

| which meet our expectations | | services within the Shire | | | | Treatment plants |
|---|-----|--|-------|---|---------|--|
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.1 | Work towards Council's zero-emissions target | 3.2.1.1 | Prepare Emissions Reduction Strategy |
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.1 | Work towards Council's zero-emissions target | 3.2.1.2 | Prepare Bioenergy Project Plan |
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.1 | Work towards Council's zero-emissions target | 3.2.1.3 | Build community Solar Farms at Brunswick Valley STP |
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.1 | Work towards Council's zero-emissions target | 3.2.1.4 | Implement actions to achieve zero emissions by 2025 |
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.2 | Support community environmental and sustainability projects | 3.2.2.1 | Provide environmental and sustainability information |

Legal/Statutory/Policy Considerations

5 *Net Zero Emissions Strategy for Council Operations 2025*

Financial Considerations

10 This is a project update report only. Financial considerations for individual projects have been or will be considered on a case by case basis. Sustainability and emissions reduction projects have the potential to either cost or save Council money.

Consultation and Engagement

15 Manager Utilities, Infrastructure Services
 Process Consultant, Infrastructure Services
 Senior Project Manager, Infrastructure Services
 Senior Project Manager Dingo Lane Solar Farm, Infrastructure Services
 Manager Works, Infrastructure Services

BYRON SHIRE COUNCIL NET ZERO EMISSIONS ACTION PLAN FOR COUNCIL OPERATIONS 2025

INTRODUCTION

Byron Shire Council has long acknowledged its contribution to global carbon emissions, reducing its reliance on fossil fuels since 2004 and monitoring emission reductions since 2015. In 2017 Council resolved to achieve net zero emissions for Council operations by 2025, and to source 100% of its energy through renewable sources by 2027. Acting on this resolution, the *Net Zero Emissions Strategy for Council Operations 2025* was adopted in 2019.

The Strategy led to the completion of several major renewable energy projects, including an additional 400kW of solar installed across Council assets and further progress towards investigating a 5MW solar farm and a bioenergy facility within the Shire. In addition to this increasing renewable energy portfolio, Council offset over 2,600 tCO₂e- by choosing a carbon neutral electricity retailer, bringing its total net emissions down from 17,984 to 15,358 tCO₂e- in the 2018/2019 financial year.

There is still work to do in order to reach our 2025 target, and the next step forward is this Net Zero Emissions Action Plan. Since the adoption of the Strategy in 2019, Byron Shire has experienced a range of environmental disasters, and is currently in the midst of a global health crisis. The cumulative pressures caused by these events indicate that further operational changes are necessary to continue to mitigate Council's carbon footprint alongside the changing environment.

The Net Zero Emissions Action Plan aims to address the questions: where are we now, and what do we need to do to reach net zero emissions by 2025? It is mapped out through a series of Objectives, Goals, Actions, and Measures, providing Council staff with specific and practical steps as to how they can help meet net zero emissions targets. The five overarching Objectives provide the foundations for our emissions reduction goals, and are based on the principal contributing sources of emissions within Council operations:

1. Electricity;
2. Fuel;
3. Waste, Water, and Sewer;
4. Governance; and
5. Community Infrastructure.

GUIDING PRINCIPLES

The Net Zero Emissions Action Plan represents Council's commitment to tackling climate change alongside a growing cohort of leading Australian and international governing bodies. The rapid growth within the climate science space means that technology and policy will be constantly evolving throughout the implementation of the Action Plan.

Whilst we endeavour to reflect the most current state of affairs, it is important to note that there is some level of uncertainty and assumption within this document. Not all actions and measures are weighted equally, and therefore may not all be individually required to reach Net Zero Emissions by 2025. The goals in this plan are based on the figures and progress made over the past four years since Council's baseline was established in 2016.

It is therefore essential that we continue to learn and adapt our response to the climate crisis by reviewing and updating this document annually, together with Council's annual emissions reporting. This will ensure that the Action Plan remains up to date and relevant for Byron Shire Council in the context of changing climate science, technology and policy, and what emissions reduction goals we achieve along the way.

DRAFT SUMMARY TABLE

| VISION Net Zero Emissions by 2025 | | | | |
|---|---|---|--|---|
| OBJECTIVES <i>The objectives stem from the five principal contributing sources of emissions within Council Operations</i> | | | | |
| OBJECTIVE A <i>Electricity</i> | OBJECTIVE B <i>Fuel</i> | OBJECTIVE C <i>Waste, Water and Sewer</i> | OBJECTIVE D <i>Governance</i> | OBJECTIVE E <i>Community Infrastructure</i> |
| Improve electricity efficiency by 25% and transition to 100% renewable energy | Optimise fuel efficiency and transition to renewable fuel sources | Reduce waste and improve water efficiency | Disclose and improve emissions reporting and invest in high quality carbon offsets. | Minimise emissions from the construction of community infrastructure |
| GOALS <i>Goals are measurable longer-term targets that will guide Council towards achieving the relevant objective. They will align with the timeframe of the 2021-2025 Delivery Program.</i> | | | | |
| <i>Electricity</i> | <i>Fuel</i> | <i>Waste, Water and Sewer</i> | <i>Governance</i> | <i>Community Infrastructure</i> |
| <ul style="list-style-type: none"> Transition to renewable electricity at a minimum rate of 20% per annum Improve energy efficiency of Council operations by a minimum of 5% per annum Maximise renewable energy generation on Council owned assets | <ul style="list-style-type: none"> Reduce bulk fuel use by 2.5% per annum Transition passenger vehicle fleet to electric vehicles Pursue alternative renewable fuel sources for equipment and fleet Support the uptake of electric vehicles in the Byron Shire | <ul style="list-style-type: none"> Support a landfill free shire through best practice in waste avoidance, recovery and management Reduce inflow and infiltration to the wastewater system Maximise water efficiency in Byron Shire | <ul style="list-style-type: none"> Prepare Council for meeting "Climate Active" certification requirements Develop staff training and tools for emissions reduction and reporting Incorporate carbon offsetting across Council operations Provide planning policies that support emissions reduction in the Byron Shire | <ul style="list-style-type: none"> Assess and improve the emissions footprint of Council's infrastructure projects Support public and passive transport options in the Byron Shire |
| KEY ACTIONS <i>Key actions are specific and measurable steps for Council staff to deliver within approximately one financial year. They will be included within the annual Operational Plan.</i> | | | | |
| <i>Electricity</i> | <i>Fuel</i> | <i>Waste, Water and Sewer</i> | <i>Governance</i> | <i>Community Infrastructure</i> |
| A1. Investigate SMW solar farm at Dingo Lane, Myocum A2. Investigate bioenergy facility at West Byron STP A3. Facilitate bulk roll out of LED streetlights for Byron Shire A4. Investigate energy efficiency upgrade of Council Administration Building, Mullumbimby A5. Review pre-existing energy performance audits on all Council-owned buildings A6. Liaise with regional LGAs to collaborate and develop local energy projects, e.g. local energy purchasing | B1. Investigate new bulk fuel storage and monitoring system to minimise manual data entry B2. Develop and deliver Electric Vehicle Charging Station Policy and Procedure B3. Investigate potential to utilise car sharing services for Council pool cars B4. Investigate and transition from fuel to electric tools and equipment B5. Explore partnerships with electric vehicle providers for fleet transition B6. Review Council's passenger vehicle policies and procedures to encourage Hybrid and Electric Vehicle ownership B7. Review fuel efficiency of heavy vehicle fleet B8. Investigate operational logistics to maximise fuel efficiency B9. Investigate options for decentralised workforce | C1. Implement the Zero Waste Strategy (years 1-5) C2. Progress the Brunswick Valley Sustainability Centre Management Plan C3. Progress the closure and rehabilitation of the Southern Expansion landfill cell at the Byron Resource Recovery Centre C4. Increase efficiency of STPs and pump infrastructure C5. Improve water efficiency within the Shire and maximise use of recycled water and alternative water sources C6. Review operation of gas flare at Byron Resource Recovery Centre C7. Increase efficiency of STPs and pump infrastructure C8. Encourage events in Byron Shire to utilise the Event Guide for sustainable events and emissions reduction | D1. Embed emissions reduction into procurement policies and procedures D2. Conduct Councilor and staff education on carbon monitoring and offsets D3. Develop and implement a carbon offset policy for Council D4. Support the development of a local carbon offsetting industry D5. Develop an emissions disclosure framework for Council staff D6. Incorporate carbon neutral criteria into leasing and licencing of Council assets D7. Investigate an internal emissions reporting dashboard for Council Operations | E1. Implement the Integrated Transport Plan and Bike Plan E2. Finalise the Sustainable Visitation Strategy E3. Facilitate the development of the Byron Shire Rail Trail E4. Investigate alternative materials for construction of infrastructure |
| MEASURES <i>Measures are one or several indicators to determine the completion of an action.</i> | | | | |

OBJECTIVE A – Electricity

Improve electricity efficiency by 25% and transition to 100% renewable energy

Council's current electricity use accounts for 28.8% of its total emissions, which equates to over 5000 tCO₂e-per year. With over 600kW of solar installed on Council assets and plans for more in the future, Council has already shown its commitment to a transition to 100% renewable energy. In 2019, Council also switched to a carbon neutral electricity retailer to offset 100% of its emissions.

While offsetting electricity usage is a step in the right direction, if Council is to truly mitigate the carbon footprint of its electricity usage, more needs to be done to reduce the total consumption within Council operations. To help achieve a minimum 25% improvement in energy efficiency, using Council's total electricity emissions for FY2018-19 as a baseline, Council has the following goals:

- Transition to renewable electricity sources at a minimum rate of 20% per annum
- Improve energy efficiency of Council operations by a minimum of 5% per annum
- Maximise renewable energy generation on Council owned assets

| Action | | Measure | Leading Directorate/s |
|---------------------------------|--|--|---|
| <i>Projects Underway</i> | | | |
| A1 | Investigate 5MW solar farm at Dingo Lane, Myocum | Investigation complete. | Infrastructure Services (IS) |
| A2 | Investigate bioenergy facility at West Byron STP | Investigation complete. | IS |
| A3 | Facilitate bulk roll out of LED streetlights for Byron Shire | All streetlights in Byron Shire upgraded to LED technology | IS in collaboration with Essential Energy and Sustainable Environment and Economy (SEE) |
| <i>Future Projects</i> | | | |
| A4 | Investigate energy efficiency upgrade of Council Administration Building, Mullumbimby | Completed comprehensive energy audit of the Administration Building Develop and report on business case for upgrades Reduced total energy consumption of Council Administration Building | SEE in collaboration with Corporate and Community Services (CCS) |
| A5 | Review pre-existing energy performance audits on all Council-owned buildings | Form prioritised upgrade list and implement upgrades where necessary | SEE in collaboration with CCS |
| A6 | Liaise with regional LGAs to collaborate and develop local energy projects, e.g. local energy purchasing | Attend quarterly Sustain Energy meetings. Collaborate on the development of regional energy projects. | SEE |

OBJECTIVE B – Fuel***Optimise fuel efficiency and transition to renewable fuel sources***

Fuel consumed by Council fleet vehicles accounts for 6.5% of operational emissions, equivalent to over 1000 tCO₂e- per year. Vehicle usage, particularly heavy fleet, is necessary in order to fulfil Council's commitment to maintaining vital infrastructure for the community, such as roads, open spaces, and utilities.

Analysis of Council's performance in fuel efficiency represents a clear opportunity for improvement in this sector, including operational logistics and reduction in overall fuel usage. Although once considered an idea of the future, the transition to electric vehicles is becoming more attainable with the constantly evolving technology in this space. As such, Council has set ambitious goals to optimise its operational fuel efficiency and transition to renewable fuel sources:

- Reduce fuel use by 2.5% per annum
- Transition passenger vehicle fleet to electric vehicles
- Pursue alternative renewable fuel sources for equipment and fleet
- Support the uptake of electric vehicles in Byron Shire

It is important to acknowledge the main challenge in this objective will be to manage a decrease in total fuel emissions as Council operations naturally grow with Byron Shire's population.

| Action | | Measure | Leading Directorate/s |
|---------------------------------|---|---|------------------------------|
| <i>Projects Underway</i> | | | |
| B1 | Investigate new bulk fuel storage and monitoring system to minimise manual data entry | Report investigation | IS |
| B2 | Develop and deliver Electric Vehicle Charging Station Policy and Procedure | Policy and Procedure adopted by Council | SEE in collaboration with IS |
| B3 | Investigate potential to utilise car sharing services for Council pool cars | Report investigation | SEE in collaboration with IS |
| B4 | Investigate and transition from fuel to electric tools and equipment | Generate cost/benefit analysis of comparative electric alternatives Using the "Better Byron" team as a model, transition outdoor teams to using electric tools and equipment | SEE in collaboration with IS |
| B5 | Explore partnerships with electric vehicle providers for fleet transition | Investigate and report on membership with electric vehicle providers and software platforms Regularly review State and Federal grant opportunities | IS |
| <i>Future Projects</i> | | | |
| B6 | Review Council's passenger vehicle policies and procedures | Generate cost/benefit analysis and business case for passenger fleet | SEE in collaboration with IS |

| | | | |
|-----------|---|---|-------------------------------|
| | to encourage Hybrid and Electric Vehicle ownership | transition | |
| B7 | Review fuel efficiency of heavy vehicle fleet | Report review findings. | IS |
| B8 | Investigate operational logistics to maximise fuel efficiency | Internal educational communications developed for staff intranet. Operational logistics of travelling staff and outdoor crew reviewed and optimised for fuel efficiency. Implement internal staff car pooling education campaign. | SEE in collaboration with IS |
| B9 | Investigate options for decentralised workforce | Review Scope 3 emissions boundary to include working from home arrangements. | SEE in collaboration with P&C |

OBJECTIVE C – Waste, Water, and Sewer
Reduce waste and improve water efficiency

Fugitive emissions from landfill account for over half of Council's carbon emissions, totalling nearly 10,000 tCO₂e- year. An additional 1,100 tCO₂e- is also released by Council's Sewage Treatment Plants (STP) each year, equating to approximately 6.5% of total emissions. These figures represent a significant opportunity for improvement, and Council have already made important operational changes in recognition of the impact of these sectors.

As part of the Byron Resource Recovery Centre Master Plan (2017), the decision was made to close landfill in the Shire and to investigate the potential closure of the Ocean Shores STP. These actions alone will offer substantial reductions in Council's emissions. The implementation of the Towards Zero - Byron Shire's Integrated Waste and Resource Recovery Strategy 2019-2029 will also help facilitate waste reduction and infrastructure optimisation in the future.

Managing water usage is a key component in the improvement of Council's wastewater system. In light of recent drought events and subsequent water restrictions in the Shire, using the Integrated Water Cycle Management Plan, Council will ensure water is being managed as efficiently as possible. The following goals aim to address these issues:

- Support a landfill free shire through best practice in waste avoidance, recovery and management
- Reduce inflow and infiltration to the wastewater system
- Maximise water efficiency in Byron Shire

| Action | | Measure | Leading Directorate/s |
|--------------------------|---|---|------------------------------|
| <i>Projects Underway</i> | | | |
| C1 | Implement the Zero Waste Strategy (years 1-5) | Successful expansion of FOGO into commercial sector | IS |
| C2 | Progress the Brunswick Valley Sustainability Centre Management Plan | Complete the Project Charter initiative Initiate and continue native bush regeneration on site Investigate feasibility of Community Solar on the property | IS in collaboration with SEE |
| C3 | Progress the closure and rehabilitation of the Southern Expansion landfill cell at the Byron Resource Recovery Centre | Complete approved Landfill Closure and Rehabilitation Plan and design for the Southern Expansion Undertake landfill capping and closure civil works of the Southern Expansion, and commence rehabilitation as outlined in the Byron Resource Recovery Centre Master Plan | IS |
| C4 | Increase efficiency of STPs and pump infrastructure | Pump station energy efficiency upgrades completed in accordance with the Council's 30 Year Capital Works Program. | IS |

| | | | |
|-------------------------------|--|---|------------------------------|
| C5 | Improve water efficiency within the Shire and maximise use of recycled water and alternative water sources | <p>Review pilot program for smart meter installation, with the view to roll out Council wide smart metering.</p> <p>Reduced reliance on centralised potable water sources and enhanced water and water-related energy efficiency.</p> | IS |
| C6 | Review operation of gas flare at Byron Resource Recovery Centre | <p>Review the Myocum Landfill Gas Flare and report on its efficiency.</p> <p>Prepare business case on the Capture and Combustion of Landfill Gas at Myocum Landfill and the associated offsets project under the <i>Carbon Credits (Carbon Farming Initiative Act) 2011</i>.</p> <p>Prepare business case for the renewal of the Capture and Combustion of Landfill Gas Project at Myocum Landfill post-2022.</p> <p>Complete cost benefit analysis of, again, participating in the Emissions Reduction Fund.</p> | SEE in collaboration with IS |
| <i>Future Projects</i> | | | |
| C7 | Review potential closure of Ocean Shores STP | Complete feasibility assessment for closure of Ocean Shores STP | IS |
| C8 | Encourage events in Byron Shire to utilise the Event Guide for sustainable events and emissions reduction | Distribute Event Guide and run information session | SEE |

OBJECTIVE D – Governance

Disclose and improve emissions reporting and invest in high quality carbon offsets

In 2019, Council resolved to become officially 'carbon neutral' by 2025 under the Federal Governments' *Climate Active* certification requirements. This is a standard bound by rigorous reporting, which represents the highest level of commitment to reaching Net Zero Emissions for Council operations.

Emissions monitoring and reporting has been a Council deliverable since 2004 , however in order to meet this newly adopted standard by 2025 it is essential that all staff understand how the Net Zero Emissions Action Plan will influence future decision making within their teams. The following goals aim to educate and empower Council staff as these changes occur:

- Prepare Council for meeting 'Climate Active' certification requirements
- Develop staff training and tools for emissions reduction and reporting
- Incorporate carbon offsetting across Council operations
- Provide planning policies that support emissions reduction in Byron Shire

| Action | | Measure | Leading Directorate/s |
|---------------------------------|--|--|-----------------------|
| <i>Projects Underway</i> | | | |
| D1 | Embed emission reduction into procurement policies and procedures | Review Sustainable Procurement Guidelines and templates | CCS and SEE |
| <i>Future Projects</i> | | | |
| D2 | Conduct Councillor and staff education on carbon monitoring and offsets | Carbon offset workshop for staff and Councillors completed Carbon offset factsheet for Council staff developed | SEE |
| D3 | Develop and implement a carbon offset policy for Council | Carbon Offset policy and procedure adopted by Council | SEE |
| D4 | Support the development of a local carbon offsetting industry | Support local community groups, including Zero Emissions Byron | SEE |
| D5 | Develop an emissions disclosure framework for Council staff | Incorporate emissions disclosure and risk assessment into Pulse Develop risk assessment profile to use for all Council projects Define Council's emissions boundary in accordance with the Climate Active guidelines | SEE and IS |
| D6 | Incorporate carbon neutral criteria into leasing and licencing of Council assets | Generic lease and licence clauses developed to incorporate into all Council agreements and briefs | SEE and GM |
| D7 | Investigate an internal emissions reporting dashboard for Council Operations | Review and investigate capability of developing an in-house dashboard to automatically collate all required emissions data | SEE and CCS |

OBJECTIVE E – Community Infrastructure***Minimise emissions from the construction of community infrastructure***

Byron Bay is the fourth most visited town in NSW among international visitors and the 11th most visited town overall in NSW. Although tourism is the main driver of economic activity with over two million visitors annually, it also takes its toll on community infrastructure vital for the daily undertakings of Byron Shire residents.

Although construction and maintenance of community infrastructure produces emissions from a variety of sources already addressed, including electricity, fuel, waste, and water, this Objective sits alongside the implementation of the following strategies: *Integrated Transport Management Strategy; Sustainable Visitation Strategy 2020-2030* and the *Byron Shire 10 Year Bike Plan 2019*. The goals below aim to ensure that construction of community infrastructure is enabling for future sustainable development whilst ensuring emissions are accounted for in the process:

- Assess and improve the emissions footprint of Council's infrastructure projects
- Support public and passive transport options in Byron Shire

| Action | | Measure | Leading Directorate/s |
|---------------------------------|--|---|-----------------------|
| <i>Projects Underway</i> | | | |
| E1 | Implement the Integrated Transport Plan and Bike Plan | Plans implemented | IS |
| E2 | Finalise the Sustainable Visitation Strategy | Implement the Strategy | SEE |
| E3 | Facilitate the development of the Byron Shire Rail Trail | Continue feasibility studies of Byron Shire Rail Trail | IS and SEE |
| <i>Future Projects</i> | | | |
| E4 | Investigate alternative materials for construction of infrastructure | Define Scope 3 emissions sources for Council Operations and develop appropriate monitoring procedures | SEE |

GLOSSARY

Australian Carbon Credit Unit (ACCU) – an emissions unit issued under the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

Carbon Certificate – represents a reduction of greenhouse gases (typically 1 tonne of CO₂) or removal of greenhouse gases from the atmosphere through storage or sequestration. The certificates are tradeable units and can be used to negate (or offset) all or part of another entity's emissions.

Carbon Dioxide Equivalence (CO₂-e) – a standard measure that takes account of the global warming potential of different greenhouse gases and expresses the effect in a common unit.

Carbon Footprint – the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation, or community.

Carbon Neutral – (see also **Net Zero Emissions**) refers to when the net emissions associated with an activity are equal to zero because emissions have been reduced and/or offset to fully account for all emissions. Usually offsets are created through purchasing carbon credits to make up the difference. The best practice approach is to reduce, or avoid, carbon emissions first, then offset any unavoidable emissions.

Climate Active (Carbon Neutral Standard) – a standard for making carbon neutral claims; maintained by Australian Government Department of the Environment and Energy; sets rules for measuring, reducing, validating and reporting emissions. The standard is available for organisations, products and service, buildings, precincts and events. (Previously National Carbon Offset Standard)

Emissions Boundary (See also, Scope 1, Scope 2, and Scope 3) – An emissions boundary is the extent to which an organisation or entity defines the scope of emissions within their inventory. It can include sources of emissions resulting either directly or indirectly from the operations or facilities within the organisation or entity, and is categorised into Scope 1, Scope 2 or Scope 3 emissions.

Energy Efficiency – using less energy to achieve the same output.

FOGO – abbreviation for 'food organics and garden organics'

Greenhouse Gases (GHG) – the atmospheric gases responsible for causing global warming and climate change. The Kyoto Protocol lists six greenhouse gases – carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur-hexafluoride (SF₆) – with the addition of nitrogen trifluoride (NF₃) from the beginning of the protocol's second commitment period.

Landfill Capping – refers to a containment technology that involves placing a cover over contaminated material, such as landfill waste, thereby shielding humans and the environment from the harmful effects of its contents.

Local carbon offsetting industry – refers to certified carbon offsetting or sequestration activities and projects within the Byron Shire or wider Northern Rivers area, used to offset the community's total emissions whilst simultaneously stimulating the local economy.

Mitigate – in relation to climate change, refers to efforts to reduce or prevent emission of greenhouse gases.

Net zero emissions – (see also **Carbon Neutral**) refers to when the net emissions associated with an activity are equal to zero because emissions have been reduced and/or offset to fully account for all emissions.

Usually offsets are created through purchasing carbon credits to make up the difference. The best practice approach is to reduce, or avoid, carbon emissions first, then offset any unavoidable emissions.

Offsetting – the activity of cancelling offset units/carbon credits, where an entity has directly exchanged the value of their emissions for an equivalent value of carbon sequestered from the atmosphere.

Offset Unit – (see also **Carbon Certificate**) represents a reduction of greenhouse gases (typically 1 tonne of CO₂) or removal of greenhouse gases from the atmosphere through storage or sequestration. They are tradeable units and can be used to negate (or offset) all or part of another entity's emissions.

Renewable Energy – energy from resources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

Scope – refers to the categorisation of emissions sources into direct and indirect sources.

Scope 1 Emissions – the release of greenhouse gases into the atmosphere as a direct result of activities occurring within a responsible entity's control (or geographic boundary).

Scope 2 Emissions – The release of greenhouse gases into the atmosphere from the consumption of electricity, heating, cooling or steam that is generated outside of a responsible entity's control (or geographic boundary).

Scope 3 Emissions – Greenhouse gases emitted as a consequence of a responsible entity's activities but emitted outside the responsible entity's control (or geographic boundary).

Smart Meter – a device that digitally measures your energy use, such as when and how much water is used on a premises.

Water Efficiency – refers to using less water to achieve the same output.

Report No. 4.3 Updates from Zero Emissions Byron and COREM

Directorate: Sustainable Environment and Economy

Report Author: Kimberley Rogers, Environment Support Officer

File No: I2020/1719

5 **Theme:** Sustainable Environment and Economy
 Planning Policy and Natural Environment

10 **Summary:**

At this Sustainability and Emissions Reduction Advisory Committee (SERAC) meeting, representatives from Zero Emissions Byron and COREM will provide an update to SERAC from their organisations.

15

RECOMMENDATION:

That the Sustainability and Emissions Reduction Advisory Committee note the updates from Zero Emissions Byron and COREM.

20

Report

Representatives from the groups outlined below will provide verbal updates to the committee from their respective organisations.

5

1. Zero Emissions Byron; and
2. COREM

STRATEGIC CONSIDERATIONS

10

Community Strategic Plan and Operational Plan

| CSP Objective | L2 | CSP Strategy | L3 | DP Action | L4 | OP Activity |
|---|-----|--|-------|---|---------|---|
| Community Objective 3: We protect and enhance our natural environment | 3.2 | Strive to become a sustainable community | 3.2.2 | Support community environmental and sustainability projects | 3.2.2.2 | Encourage and support environmental and sustainable community activities and groups |

15 ***Legal/Statutory/Policy Considerations***

Nil

Financial Considerations

Nil

20

Consultation and Engagement

N/A