

POLICY NAME: Climate Change Policy (Draft)
POLICY REF:
MEETING ADOPTED: Resolution No.
POLICY HISTORY:



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1 OBJECTIVES

The objectives of this policy are to:

- Identify Council's approach to measurable and achievable organisational greenhouse gas emissions reduction and renewable electricity targets.
- Identify Council's approach to risk assessment and adaptation planning to identify and manage the organisation's risks from climate change, and to support adaptation and resilience strategies for the community.
- Identify Council's approach to working collaboratively with community, agencies, industry, businesses, and all levels of government to seek and advocate for local, regional, state, and national climate change mitigation and adaptation solutions that are informed by the current knowledge and best available science.
- Provide a framework to guide the preparation and implementation of plans to achieve the targets set out in this policy.

2 POLICY

2.1 Council's Role in Climate Change Action

Climate change is a global challenge that requires collaborative action and shared responsibility. All governments, industry, business, communities, and individuals have a role in responding to climate change.

As a key asset owner, service provider, and decision maker, Council has an important role to continually improve its understanding of the risks and impacts from climate change in our region.

Council is one of the largest organisations in the Ballina Shire and operation of Council assets and provision of services generates a significant amount of greenhouse gas emissions per annum. Council has the ability to directly influence and reduce its contribution to climate change with a decisive and well planned focus on operational emissions reduction.

Council also has an important role in protecting and enhancing our natural and community owned assets, and in supporting shire wide climate change strategies. Many of Council's activities assist the community to manage and adapt to climate change. Areas where Council has important climate change influence include:

- Council's organisational greenhouse gas emissions, risks, and adaption strategies.
- Developing and implementing land use planning policy frameworks and controls for climate mitigation, adaptation, and resilience.
- Providing infrastructure and services that facilitate community climate mitigation, adaptation, and resilience.
- Improving access to climate change research and information for decision making.
- Strengthening local and regional partnerships to take collaborative action on climate change.
- Encouraging community ownership of and participation in climate change action.
- Providing leadership on climate change action.

Australia has committed to climate change action by its pledge to the Paris Agreement and adopted the United Nations Sustainable Development Goals (SDG's). These commitments impart a responsibility on all levels of government to take action on climate change. The NSW Government responded to these commitments with a net zero emissions target that aligns with the international Paris Agreement.

2.2 Guiding Principles

- a) Council declares we are in a state of climate emergency that requires urgent action by all levels of government.
- b) Ballina Shire is likely to be affected by predicted climate impacts, particularly those relating to sea level rise, bushfires, drought and floods.
- c) It is part of Council's role to reduce its organisational contributions to climate change, to identify and manage the impacts and risks to its operations, to facilitate the advancement of community climate change mitigation, adaptation, and resilience, and to support the State and Federal government's climate change commitments.
- d) Council recognises that it alone does not have the resources, influence, or control to address the predicted climate change impacts as they relate to Ballina Shire and that collaboration with all levels of government, industry, and the community is required to deliver long term effective action.
- e) Integration of policy and existing and new climate change related activities into the Integrated Planning and Reporting (IP&R) framework is fundamental to ensure climate change considerations are incorporated into all Council's processes and decision making.

2.3 Policy Statements

Council will aim to achieve the objectives of this policy through the following:

- a) Council will reduce its organisational greenhouse gas emissions to net-zero emissions by 2030.
- b) Council will utilise 100% renewable electricity for its operations by 2030.
- c) Council will meet its targets by developing and implementing detailed emissions action plans and strategies that set out the short, medium, and long term pathway to reach the targets.
- d) Council will undertake a Corporate Climate Change Risk Assessment process to identify, assess, and prioritise climate change risks, and the organisation's ability to manage, mitigate, and adapt to climate change risks.
- e) Climate change related targets and plans will be integrated into the IP&R framework.
- f) Council will progressively develop and implement internal strategies to ensure that the Climate Change Policy and associated plans are required to be considered in corporate processes across various levels of decision making.
- g) Council will base its decision making regarding climate change responses on internationally recognised scientific data and continually review its understanding of the risks and impacts of climate change to Council operations and the community.

- h) Council will be guided by the Sustainable Development Goals (SDGs) to help improve and facilitate climate change mitigation, adaptation, and preparedness across the community through best practice sustainable development principles.
- i) Council will apply resources to implement the Policy and preparation of associated plans will be progressed through the Delivery Program and Operational Plan processes.
- j) Council will track, monitor, and report on the progress towards the organisational targets and make accessible Council's emissions profiles and progress reports.
- k) Council will collaborate with community, industry, agencies, and all levels of government, to build knowledge, develop partnerships, and advocate to find approaches to a changing climate that are informed by the current knowledge and best available science.

3 BACKGROUND

3.1 History

Council has a long history of taking action on climate change. In 2004 Council joined the Cities for Climate Protection program and commenced its journey in implementing emissions reduction and energy efficiency strategies and programs.

In 2010 Council engaged with the community to develop the 2012-2020 Climate Action Strategy (CAS) and Environmental Action Plan (EAP). The CAS and EAP provided direction for Council to integrate identified organisational and community climate change activities into the Community Strategic Plan.

Activities include floodplain management, coastal zone management, infrastructure management, water cycle management, emergency risk management, biodiversity and environmental management.

A number of successful emissions reduction initiatives were implemented including the organic waste collection service, energy efficient lighting projects, recycled water program, and solar PV installations.

Council resolved at the 23 May 2019 Ordinary meeting to review the 2012-20 Climate Action Strategy. Through this process it was identified that Council's ongoing response to Climate Change should:

- Provide strong action on climate change.
- Be a mix of mitigation and adaptation activities
- Be responsive to changes regarding climate science and government policy.
- Be subject to ongoing and timely review.
- Align with and inform other Council plans and documents.

Council resolved at the 28 November 2019 Ordinary meeting to declare a state of climate emergency, which requires taking urgent climate change action.

This policy responds to Council's climate change resolutions and provides a structured approach of climate change action through setting of measurable targets and policy to develop comprehensive plans with routine monitoring and reporting. This will support Council's ability to achieve practical results in climate change action, and enable review and communication of progress.

3.2 Strategic Alignment

Council's activities and operations are guided and directed by State and Federal Government policy. The Integrated Planning and Reporting (IP&R) framework provides the broader strategic direction for Council to develop the Community Strategic Plan (CSP) and Local Strategic Planning Statement (LSPS).

These Plans translate the community's future goals, aspirations, and strategic land use planning priorities into the key outcomes that the Council, other agencies, and the community will be working to achieve.

Through the Integrated Planning and Reporting (IP&R) framework Council works with the community to understand what they value, and to prioritise the issues and actions relevant to them. A strong recurring theme from Council's community engagement is the health and preservation of our natural environment.

The CSP and LSPS and associated strategies are Council's commitment to working in partnership with our residents, community groups and Governments to realise our vision: "The Ballina Shire is safe, with a connected community, a healthy environment and a thriving economy".

The policy has been prepared in line with the Delivery Program and Operational Plan 2020 - 2024 strategies, specifically the following:

Direction three: healthy environment

CSP OUTCOME HE1.1 WE UNDERSTAND THE ENVIRONMENT
<i>HE1.1 Our planning considers past and predicted changes to the environment</i>
<i>HE2.2 Use our scarce resources wisely</i>
<i>HE2.3 Reduce resource use through innovation</i>

The Climate Change policy also relates to implementation of the following Delivery Program and Operational Plan strategies:

Direction one: connected community

CC1. WE FEEL SAFE
<i>CC1.3 Ensure adequate plans are in place for natural disasters and environmental changes</i>

Direction four: engaged leadership

HE1.1 OUR COUNCIL WORKS WITH THE COMMUNITY
<i>EL1.3 Actively advocate community issues to other levels of government.</i>
<i>EL2.1 Proactively pursue revenue opportunities, costs savings and/or efficiencies.</i>

Direction three: healthy environment

HE1.1 WE UNDERSTAND THE ENVIRONMENT
<i>HE3.1 Implement plans that balance the built environment with the natural environment.</i>
<i>HE3.2 Minimise negative impacts on the natural environment.</i>
<i>HE3.3 Match infrastructure with development to mitigate any impacts on the environment.</i>

3.3 International and National Context

The Paris Agreement, the Intergovernmental Panel on Climate Change, and the United Nations Sustainable Development Goals have been established to urge collaborative global action on climate change.

3.3.1 The Paris Agreement

The Paris Agreement is a global response to climate change with almost 200 government signatories worldwide.

The Agreement aims keep a global temperature rise well below 2 degrees higher than pre-industrial levels, and to pursue limiting this increase even further to only 1.5 degrees.

To achieve this, global carbon emissions should be Net Zero by 2050

3.3.2 The Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) is the leading world body for assessing the science related to climate change, its impacts and potential future risks, and possible response options.

As part of the decision to adopt the Paris Agreement the IPCC produced a Special Report in 2018 on global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways.

The IPCC reported that the current global commitments may not be enough to reach the 1.5°C goal.

The report indicates that prospects of succeeding will require emissions to reduce rapidly in the short term, and adaptation measures at all levels including resilience through technology, as well as changing behaviour and policy.

3.3.3 The United Nations Sustainable Development Goals

In 2015 all United Nations (UN) Member States including Australia adopted The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDG's).

The SDG's are an urgent call for action for peace and prosperity for people and the planet, now and into the future.

The SDG's are a globally accepted framework for sustainable development that recognise the co-dependence of society, the economy and the environment.

The goals include strategies that improve health and education, reduce inequality, promote economic growth while developing ways to manage climate change.

The link between sustainable development and limiting global warming to the 1.5°C goal by 2050 is recognised by the goal 13 for climate action (SDG 13).

3.3.4 Australian and State Government Commitments

In 2015 Australia pledged to the Paris Agreement and adopted the UN Sustainable Development Goals.

The Australian government has committed to a staged emissions reduction approach with a target of 26–28% reduction of emissions below 2005 levels by 2030. This target will be reviewed within the first period of the policy. Australia has yet to set a 2050 target.

All of Australian States and territories have now emissions reduction targets. Most remain aspirational and are in line with the Paris Agreement, but some are even more ambitious in line with the IPCC recommendation of rapidly reducing emissions to aim to reduce warming to only 1.5°C.

The NSW Government Climate Change Policy Framework commits the State to the objective of achieving net zero emissions by 2050 which is more ambitious than the Federal Government's target.

The NSW Stage 1 Plan sets out a staged approach of a 35% reduction in emissions compared to 2005 levels by 2030. The Stage 1 Plan supports a fast-track of action and seeks to establish NSW as a renewable energy superpower. This will strengthen investment certainty in renewable technologies and give confidence to organisations and communities to commit to renewable energy goals.

NSW Governments Sustainability Advantage program drives the support for NSW organisations to integrate the SDG's into corporate strategies.

A growing number of councils across Australia are incorporating the SDG's into their strategies and plans as a common language and guide to sustainable development practices.

3.3.5 Local Government Commitments

Local Governments across Australia are leading the way in acting on climate change. There are a wide range of commitments from targets that align State and Territory Government commitments, to more ambitious targets which align with the lower Paris Agreement aim of limiting warming to only 1.5°C.

3.4 Climate Emergency Declaration

Council has declared that we are in a state of climate emergency and that urgent action is required by all levels of government.

Council has acknowledged that Ballina Shire is likely to be substantially affected by climate impacts, particularly those relating to sea level rise, bushfires, drought and floods. A changing climate will have impacts on Council's delivery of services and management of natural and built assets.

In the declaration Council called upon the State and Federal Governments to drive emergency action to meet the lower of the Paris Agreement aims, of maximum 1.5 degree warming.

The Intergovernmental Panel on Climate Change (IPCC) reports that achieving this target is unlikely without a rapid reduction in emissions in the short term.

The targets set within the policy align with Council's climate change declaration.

3.5 Climate Change Predictions for the North Coast

The NSW Government's Integrated Regional Vulnerability Assessment: North Coast of New South Wales reports that the North Coast region is projected to continue to warm compared to recent years (1990–2009).

Maximum temperatures are projected to increase in the near future (2020–39) by 0.4-1.0°C, and up to 2.4°C in the far future (2060–79).

This will increase the number of hot days and decrease the cold nights. Rainfall patterns will change with less rain in winter and more rain in autumn and spring.

Average and severe fire weather is projected to increase in summer and spring.

The changes in climate will pose risks and vulnerabilities to all local systems (social, natural, and economic).

Sea level rise is expected to have impacts on estuarine and foreshore ecosystems, and will pose an increased risk of flooding and inundation of coastal plains threatening property and infrastructure. Increased chances of fire, heavy rainfall, and drought will impact land and freshwater ecosystems.

The projected warming trend in the North Coast is of a similar scale to the rate of warming projected for other regions of NSW, although it is considered large compared to the natural variability in temperature in the region.

3.6 Ballina Shire Council Climate Change Framework

The policy framework enables Council to fulfil its role in responding to climate change through targets that will reduce Council's operational contributions to climate change, and strategies to ensure that climate change considerations are part of all Council's activities and decision making.

The framework enables planning for adaptation and resilience of Council's assets and service delivery, and improving the community's preparedness for a changing climate.

The targets are considered reasonable and achievable, relative to available resources, and are in line with many other local government climate change commitments.

3.6.1 Mitigation - Organisational Emissions Reduction Targets

To align with Council's climate emergency declaration, and to support the NSW Government targets, it is considered reasonable that Council's targets are in support of the lower of the Paris Agreements aims of limiting warming to only 1.5°C, and the IPCC's recommendation to achieve this with rapid short-term emissions reduction as well as a range of adaptation strategies.

The targets will be achieved through developing and implementing a comprehensive plan which sets out the detailed short, medium, and long term pathway to reach the targets.

The focus will be on energy efficiencies to reduce electricity and fuel consumption, generation of renewable energy on council sites, low emission fleet options, sourcing of renewable energy from mid-scale plants, Power Purchase Agreements (PPA), sustainable procurement, and accredited carbon offsetting for remaining emissions.

3.6.2 Climate Change Risk Assessment, Adaptation, and Resilience

Climate change adaptation and resilience is fundamental to managing the impacts of climate change. It can help to identify and manage risks, adjust economic activity, and reduce vulnerability, and can also improve long term business certainty.

Council completed a Climate Change Risk Assessment in 2009. The key risks identified were extreme heat, drought and water scarcity, sea level rise, and extreme storm and flash flood. Climate change projections show that the occurrence of these events will increase, as well as the intensity.

A changing climate has the potential to increase Council's maintenance costs for infrastructure, cause inundation of Council-owned assets due to sea level rise, lead to more frequent disruption of transport and communication services due to more frequent extreme storm events, and increase risk of coastal erosion.

Council's existing strategic plans list a range of strategies relevant to climate change risks and adaptation. For example, ensuring plans are in place for natural disasters and environmental changes, increasing resilience of our economy, ensuring planning considers changes to the environment, wise use of resources, and risk management.

This policy provides the framework for Council to review its climate change risks and integrate risk assessment, adaptation, and resilience planning into all Council's strategic plans.

4 DEFINITIONS

Adaptation: The process of adjustments and actions in ecological, social, or economic systems to actual or expected climate and its effects.

Carbon offsetting: An activity or process which reduces carbon from the atmosphere, typically by putting funds towards organisations that support emissions reduction projects such as renewable energy and forestry projects.

Greenhouse gas emissions: a gas that contributes to the greenhouse effect by trapping heat in the atmosphere. The four main gases are Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), fluorinated gases. Typically reported as equivalent CO₂ emissions (CO₂e).

Net zero emissions: Achieving a balance between emissions produced, and emissions taken out of the atmosphere ie by sequestration (tree planting).

Mitigation: Actions to reduce greenhouse gas emissions and limit global warming and related effects.

Power Purchase Agreement: An agreement to purchase electricity from a renewable energy project at a fixed price and term.

Resilience: The capacity for a socio-ecological system to recover and maintain function.

Sequestration: A process of capturing and storing atmospheric carbon dioxide directly or indirectly with the goal of reducing global climate change.

5 SCOPE OF POLICY

This policy applies to all sections of Council.

6 RELATED DOCUMENTATION

Legislation, policy, and plans that relate to Council's climate change responses include:

International

The Paris Agreement
United Nations Sustainable Development Goals

Federal Government

Australia's Renewable Energy Target (RET) Policy
Australia's Technology Investment Roadmap
Australia's National Hydrogen Strategy

NSW State Government

Adapt NSW North Coast Enabling Regional Adaptation North Coast region report
Biodiversity Conservation Act 2016
Coastal Management Act 2016
Energy and Utilities Administration Act 1987
Environmental Planning and Assessment Regulation 2000
Climate Change Policy Framework
State Government Net Zero Plan Stage 1:2020-2030 and associated frameworks
Integrated Planning and Reporting Framework
Integrated Regional Vulnerability Assessments: North Coast of New South Wales
Local Government Act 1993
Water Management Act 2000

Regional

North Coast Regional Plan 2036
Northern Rivers Joint Organisation of Councils – Regional Priorities 2020- 2022

Council

Community Strategic Plan 2017 – 2027 Our Community Our Future
Ballina Local Strategic Planning Statement 2020
Ballina Shire Council Development Control Plan
Ballina Local Environmental Plan 2012
Ballina Shire Local Emergency Management Plan – 2019
Ballina Shire Council Delivery Program (4 year) and Operational Plan (1 Year)
Coastal Zone Management Plans and Related Documents
Delivery Program an Operational Plan (4 year)
Economic Development Plan
Environmental Strategies
Land Use Controls
Place-Based Strategic Plans
Plans of Management and Master Plans
Structure and Master Plans
Tourism and other Strategies

7 REVIEW

The Climate Change Policy is to be reviewed every four years.

Submission 1

Ballina Search Feedback

Submitted At

2021-05-21 14:00:34

Your Name

Colin Peckham

Your email?

colinpeckham7@gmail.com

Your phone number

(04)28806692

What are you searching for?

Renewable Electricity

Your Message

Why are we planning to use 100% renewable electricity for THE WHOLE REGION region by 2030.

Submission ID

60a7306243e3385f484f513a

Submission 2

Feedback for Documents on Exhibition

Submitted At

2021-05-21 16:18:59

Name of exhibited document you want to make comment on.

Climate Change Policy

Your Name

Kiri Dicker

Phone Number

+61406862464

Your email?

kiri.dicker@gmail.com

Having read the document, is it easy to read and understand?

Yes

Please provide any suggestions for improvement.

Include at least one interim target for emissions reduction and renewable energy - ideally 2020, to ensure progress is on track.

Do you support the overall objectives and content of the document?

Yes

I agree to Ballina Shire Council collecting my Name, Email, and Phone Number

I agree

Submission ID

60a750d3c9a135746d738078

Submission 3

Feedback for Documents on Exhibition

Submitted At

2021-05-22 21:13:49

Name of exhibited document you want to make comment on.

Climate Change Policy

Your Name

Gus Moncrieff

Phone Number

0431048596

Your email?

a.moncrieff.10@hotmail.com

Having read the document, is it easy to read and understand?

Yes

Please provide any suggestions for improvement.

Roughly half of the document (9/19 pages) refers to transitioning back to in-person Council meetings - how much of this is truly relevant within the broader scope of the document?

The use of visual guides/figures to provide illustrative examples of how the policy's objectives may be met would provide better engagement.

Additionally, more ambitious action (e.g., 100% renewables for operations by 2025) should be proposed to engage with the economic opportunity most mitigation options present for our region (see 2.3, 3.6 and 3.6.1 of the document).

Do you support the overall objectives and content of the document?

Yes

Please provide further comments if you wish.

More detail around which mitigation options are being pursued (see 3.6.1 of the policy document) would have been beneficial.

I agree to Ballina Shire Council collecting my Name, Email, and Phone Number

I agree

Submission ID

60a8e76d1397dc387b7197fd

Submission 4

Thu 27/05/2021 8:36 PM

billkittson@hotmail.com

[EXTERNAL SENDER] "Climate change action" by council 27/5/21

Dear climate alarmist councillors,

Please refrain from this ridiculous virtue-signalling "net-zero" nonsense. We do not want to live like primitive nations. CO2 is not our enemy. This theory was based on flawed IPCC computer models (hockey stick scandal) & none of their predictions have eventuated. Considering this council hasn't managed the budget well and has admitted it won't be in surplus for 10 years, it's astounding you are engaging in activities outside your remit. Councils have a charter. Climate change isn't part of it. Stick to your core business. We left Melbourne recently for similar Leftwing lunacy.

Yours faithfully

Margaret Kittson

West Ballina

Submission 5

Feedback for Documents on Exhibition

Submitted At

2021-05-28 08:00:42

Name of exhibited document you want to make comment on.

Climate Change Policy

Your Name

stephen mcillhatton

Phone Number

+61434146508

Your email?

smcillhatton@gmail.com

Having read the document, is it easy to read and understand?

Yes

Please provide any suggestions for improvement.

Why is the "Transitioning back to Meetings" directive from the OLG included in this Draft? What is the connection????

Do you support the overall objectives and content of the document?

Yes

Please provide further comments if you wish.

Remove crisis language.

I agree to Ballina Shire Council collecting my Name, Email, and Phone Number

I agree

Submission ID

60b0168a61ddfd7d162ea035

Submission 6

From: Bill Kittson <billkittson@hotmail.com>
Sent: Friday, 28 May 2021 11:28 PM
To: Ballina Shire Council <BallinaShireCouncil@ballina.nsw.gov.au>
Subject: [EXTERNAL SENDER] "Climate change action" by Ballina council

Ballina councillors - I am opposed to your "climate change action" This is not why you are paid as councillors. Rate-payers expect you to ensure rubbish is collected, roads have potholes filled etc Please stick to your job.

Bill Kittson

Submission 7

Feedback for Documents on Exhibition

Submitted At

2021-05-30 15:24:50

Name of exhibited document you want to make comment on.

Climate Change Policy

Your Name

Bruce Syme

Phone Number

0416043068

Your email?

basyme@live.com.au

Having read the document, is it easy to read and understand?

Yes

Do you support the overall objectives and content of the document?

Yes

Please provide further comments if you wish.

could you please supply a list of achievements already instigated. Has the council installed solar panels to power council buildings?

I agree to Ballina Shire Council collecting my Name, Email, and Phone Number

I agree

Submission ID

60b321a25d2ead0ce538eb8b

Submission 8

From: Judy Allen <gumnut@westnet.com.au>
Sent: Wednesday, 9 June 2021 10:38 PM
To: Sharyn Hunnisett <Sharyn.Hunnisett@ballina.nsw.gov.au>
Subject: [EXTERNAL SENDER] Re: COMMUNITY ANNOUNCEMENT: Have Your Say on Climate Change in Ballina Shire

Evenin', Sharyn

I tried to fill out your survey, but couldn't progress further than Question 4: the survey went into a loop back to Question 1.

If the survey was designed by those advertising, I'm certainly not buying in!

But I agree with all that council is doing as far as mitigating climate change is concerned. Everything up to Question 4 is important. Dunno what comes after that.

Judy Allen

Submission 9



View | Reply | Reply All

Sarah King <sarahbsept@gmail.com>

[EXTERNAL SENDER] BES Submission in Response to Climate Policy

To: Councilors; Paul Hickey

Cc: bes-committee-2020@gov.iegroups.com

BES Submission in Support of Climate Policy.pdf pdf File	Message from NSCEE Member Ian Dunlop 8-2-21.pdf .pdf File
ITD - CRC 2020 Summary January 2021 (1).pdf .pdf File	

CYBER SECURITY WARNING - This message is from an external sender - be cautious, particularly with links embedded within the message and/or attachments.

Dear Councilors and Council Staff,

Thank you for the opportunity to provide feedback on your draft Climate Change Policy.

Ballina Environment Society supports the great work you have done to update your policy.

We hope that this important Policy will provide clear direction to all Council Staff by ensuring that the true holistic long term costs of action, or inaction, are considered as part of all cost benefit analysis with the focus on people and planet as well as financial constraints.

We note the extreme urgency of the need to act to prevent the worst impacts of Climate Change in this Climate Emergency and encourage urgent and meaningful action at this critical moment in history. Please find attached the following documents for your consideration:

1. BES Submission in Support of Climate Policy
2. Message from NSCEE Member Ian Dunlop
3. ITD - CRC 2020 Summary January 2021

Best Regards,

Sarah King and Graham Shaw on behalf of the Ballina Environment Society

Submission 9 Attachment 1:

Ballina Environment Society Submission in Support of Climate Policy

Introduction

The Ballina Environment Society (BES) supports Council's proposed New Climate Policy. The new policy is clearly targeted and is a rational approach to a renewed and rejuvenated Climate change practice. Furthermore, the Policy logically facilitates the processing of actions through Council's planning mechanisms of Delivery Programme and Operational Plan.

BES understand why the Policy is informed by external standards of:

- the UN Sustainable Development Goals (SDGs)
- the lower of the Paris agreement targets of limiting warming by 1.5 degrees by achieving net zero emissions by 2050
- the NSW Government Climate Change Policy which advocates fast track action by achieving 35% reduction in emissions by 2030 compared to 2005 standards

However, these targets are based upon political agreements which are already known to be totally inadequate to prevent catastrophic global warming. ¹

Standards and Targets

Council's Standards of net zero greenhouse gas emissions by 2030 and 100% renewable electricity by the same date is supportive of these external drivers and commit council to action commensurate with its Climate Emergency Statement of November 2019, but BES recommend:

- that the Policy be even more ambitious, particularly in urgency of the timeframe to achieve targets.
- The scope is expanded to fully consider urgent protection and expansion of carbon absorbing wilderness habitats such as mangroves, salt marshes and rainforest in the shire.
- A communication campaign providing transparent and accessible data to educate the community is also prioritised. Reporting should identify both Council & the Communities'

¹ Extract from: Message from NSCEE Member Ian Dunlop.

Ian Dunlop is the Chair, Advisory Board, Breakthrough National Centre for Climate Restoration

- *"Hothouse Earth", non-linear, irreversible, self-sustaining warming may be triggered between 1.5 – 2.0oC. There is a risk that climate system tipping points may have already moved beyond our influence.*
- *Current global warming, 1.3oC in 2020, is already dangerous. 2 oC would be extremely dangerous. 3oC would be catastrophic. It is now impossible to limit temperature increases to 1.5oC. Also to 2oC unless global leaders accelerate action on climate change to an emergency footing, akin to wartime.*
- *In this context, the current fashion for achieving NZE 2050 is totally inadequate. That outcome globally is required as soon as possible, ideally by 2030 (NZE 2030)."*

...

Any government's first priority should be the security and prosperity of its people. Climate change, Covid notwithstanding, has long since been the greatest threat to that security and prosperity, and Australia is far more exposed to climate risk than most. Historic inaction means that threat has become immediate, no longer years ahead.

Climate impacts in Australia will be noticeably higher than global statistics imply – Australia's average temperature in 2020 was already 1.44oC above 1910 levels, roughly 1.5oC above pre-industrial levels in a non-El Nino year. El Nino conditions will be extremely dangerous.

achievements and challenges, and clearly identify how Ballina Shire is contributing to mitigate national/global climate change.

BES have the following specific comments on the document:

"2.3 a) Council will reduce its organisational greenhouse gas emissions to net-zero emissions by 2030."

BES recommend this is revised to "Council will reduce its organisational greenhouse gas emissions to net-zero emissions **as soon as possible, and no later than 2030.**" Many changes can be implemented straight away and giving scope to delay until 2030, could slow progress unnecessarily.

"2.3 b) Council will utilise 100% renewable electricity for its operations by 2030."

Revise to "Council will utilise 100% renewable electricity for its operations **before 2022**".

It is possible to purchase 100% renewable energy now through green power purchase agreements. Council should take every possible step to transfer existing power procurement contracts across urgently.

"3.2 Strategic Alignment"

As raised in BES's submission relating to the Delivery Program and Operations Plan 2020 – 2024, BES asserts that there is a risk in separating out Environment, and Leadership. It would be better to be fully integrated across the other areas, to ensure that the focus is always on how decisions and actions will impact the environment.

"3.3.1 The Paris Agreement"

Recommend updating or adding another section to reflect that current scientific advice is that the world should be aiming for net zero emissions by 2030 at the very latest.

"3.3.5 Local Government Commitments" and "3.6 Ballina Shire Council Climate Change Framework"

BES urges Council to set their targets on a par with the most aspirational LGA targets and remove any language which softens this commitment.

A Rationale

The policy clearly discerns the differentiation between Corporate and Community Climate Change approaches. Council is in full control of its corporate response to Climate Change action but accepts that a fully embracive and collaborative approach will be required to influence community climate change processes and achieve positive community outcomes. BES would most certainly be readily available to advocate and promote council initiatives on climate change into the community and would seek to be involved in dialogue with council on involvement in community climate change development.

Finally, the Report recognises that unless Policy Statement and Action Plans are subject to robust Risk Analysis, Adaption flexibility and continuous Resilience Planning that Climate Change targets and standards could be frustrated.

Dynamic Policy

Thus, the Policy is envisaged as a 'Living Document' constantly reviewing and updating as circumstances advance. The Glasgow Climate Change conference in the next couple of months is one such outstanding instance foreshadowing the need for this flexible approach. This dynamic approach to climate change action is critical if we are attempting to mitigate our beautiful but fragile coastal environment from increasingly extreme weather events.

The question of Resourcing and Drive to Implementation

BES considers that there is an of stress relating to the resourcing of the responsibility for motivating and implementing the Climate Change programme. Change is most optimally effected with a champion driving the process and generating the collaboration of the whole of staff. In addition to a champion driving the process, the programme of climate change needs to be enthusiastically and responsibly endorsed and clearly supported from the top down so that a whole of council approach is engaged. The Council needs to adopt action related to an 'emergency crisis' as recognised in the 2019 motion.

Community Implementation

BES is concerned that the entire range of community initiatives sustaining climate change and the new climate policy will require extensive community activity and drive. BES would also advocate that in community action a full range of climate change requirements to meet the targets are implemented. BES believes that a fragmented approach would constitute 'death by a thousand cuts' and a protracted process of introduction would strain tensions in the community and create confusion. Council needs to lay out the full and integrated programme of change so that the community can thoroughly appreciate the extensive nature of the modifications required. Thereafter BES believes that a fully embracive community conditioning programme requires urgent implementation. The programme outline which BES supports is as follows:

- Water Security with strong emphasis on demand management and conservation. Water Tank inducement in already built areas.
- Greening the Shire and softening the urban environment. Tree planting, verge planting, vertical gardens, permeable materials, water features to cool the environment.
- Implementing conservation actions identified in the Coastal Management Plan with urgency and acquiring necessary funding.
- Domestic Sustainable Development Programme incorporating encouragement of reduction of power usage, solar adoption, minimisation of fossil fuels and use of permeable materials rather than concrete driveways wherever possible.

- Adapting the built environment so that it is climate supportive. Use of climate supportive design, passive climate techniques, breezeways, full use of wide eaves, restrict building on flood plain and strengthen building requirements to impose these standards in new LEPs.
- Rewilding plan to restore and expand natural habitats in our mangroves, saltmarshes, littoral and subtropical rainforest for increased biodiversity and carbon sequestration.
- Enhanced capacities for early warning and disaster mitigation. (The World Bank estimates that money invested in this will be returned tenfold.)

BES also recommends that all planning and approval processes be streamlined to ensure adequate oversight is maintained, whilst expediting the time to implementation for those wishing to take positive action to reduce their impact on the environment.

The Process of Community Consultation

This programme will require full community consultation with a clear rationale concerning the imperatives of these initiatives. Just as internally Council requires champions strongly espousing these activities so also community champions and drivers of influence are necessary in the community. BES is fully committed to be absorbed in this drive with other interested parties and requests to be involved and to participate comprehensively in the compilation and execution of the Community Climate Change Policy and Programme.

Conclusion

BES fully acknowledges the positive intentions and objectives of the Climate Policy. However, implementation success and achievement of goals depends on conviction and desire for adoption. BES is fully supportive of the policy and appeals to all councillors to enthusiastically endorse a programme of policy action which enables Ballina Shire to prevent temperature increase of more than 1.5% by 2030.

BES stands ready to support the Council in its endeavours in promoting a climate change action programme in the community.

Graham Shaw and Sarah King for the Ballina Environmental Society

Submission 9 Attachment 2

Dear NSCEE members,

You may have found my comments on climate change in the discussion with Minister Kean this afternoon somewhat extreme. Perhaps I could explain, because understanding these implications is fundamental to the future of not just this country, but to human civilisation as we know it.

For the last fifteen years I have worked with colleagues at the *Breakthrough - National Centre for Climate Restoration* which focuses on understanding and communicating the real risk implications of climate change. As I indicated in my letter, in our view these risks are still badly underestimated officially by organisations such as the Intergovernmental Panel on Climate Change (IPCC) and Australia equivalents, for reasons we have explored in some depth: <https://www.breakthroughonline.org.au/whatliesbeneath>

We have recently completed an update of our earlier work, based upon the latest science - Climate Reality Check 2020 – which only reinforces the urgency for far faster action on climate change. The full presentation is at: <https://www.climaterealitycheck.net>, but I attach a summary for your information.

(An earlier version was circulated to NSCEE members who participated in the November 2020 meeting)

The scientific conclusions are as follows:

- 1.5°C global average temperature increase, relative to pre-industrial conditions, will occur around 2030, irrespective of any action taken in the interim, a decade ahead of IPCC projections. This is the lower limit of the Paris Climate Agreement.
- The upper limit, 2°C, is now likely prior to 2050, even with actions better than the current Paris commitments. 3°C is likely early-to-midway through the 2nd half 21C.
- Even rapid emission reductions will have no significant impact on the warming trend over the next 25 years due to the offsetting effect of reducing aerosols from fossil fuel consumption, which have been cooling the planet thus far.
- “Hothouse Earth”, non-linear, irreversible, self-sustaining warming may be triggered between 1.5 – 2.0°C. There is a risk that climate system tipping points may have already moved beyond our influence.
- Current global warming, 1.3°C in 2020, is already dangerous. 2°C would be extremely dangerous. 3°C would be catastrophic.

The practical and policy implications are as follows:

- It is now impossible to limit temperature increases to 1.5°C. Also to 2°C unless global leaders accelerate action on climate change to an emergency footing, akin to wartime.

- In this context, the current fashion for achieving NZE 2050 is totally inadequate. That outcome globally is required as soon as possible, ideally by 2030 (NZE 2030). A massive task, far greater than anything thus far contemplated officially.
- Any government's first priority should be the security and prosperity of its people. Climate change, Covid notwithstanding, has long since been the greatest threat to that security and prosperity, and Australia is far more exposed to climate risk than most. Historic inaction means that threat has become immediate, no longer years ahead.
- Climate impacts in Australia will be noticeably higher than global statistics imply – Australia's average temperature in 2020 was already 1.44°C above 1910 levels, roughly 1.5°C above pre-industrial levels in a non-El Nino year. El Nino conditions will be extremely dangerous.
- Inertia in the global climate system means that the impacts of increasing atmospheric carbon concentrations do not manifest themselves for years ahead. Today's impacts are the result of emissions from past decades. Further, irrespective of action taken today or in the immediate future, we cannot avoid some, probably severe, escalating climate impact because of those past emissions.
- Hence carbon emissions must be reduced as fast as possible, locally and globally, by cutting fossil fuel use. This means the big emitters, countries or companies, must take the brunt of the cuts. Other initiatives, from technology, communities, agriculture ocean and reforestation sequestration, etc are important, but will not achieve the required reductions in the limited time available.
- The immediate challenge is to prevent matters becoming even worse, in particular by expanding the use of fossil fuels. A "gas-led recovery", with domestic and export expansion, is utterly irresponsible in these circumstances. Likewise the expansion of coal mining and consumption.
- In addition to rapid emission reduction, atmospheric carbon concentrations must be drawn down from the present level of 416 ppm CO₂, toward a more stable level of below 350 ppm CO₂. At present the technology to achieve that drawdown is in its infancy, further compounding the risks we face.
- We may well have to resort to geoengineering to buy time, by cooling areas of the planet, before other initiatives take effect.
- An emergency implies acting early rather than later, otherwise mitigation becomes secondary to adaptation as incumbencies throw their resources at managing symptoms, the climate impacts, rather than paying adequate attention to the underlying climate change cause. This would lead into a "death spiral", toward societal collapse, as climate impacts escalate unconstrained. The beginnings of this are already seen in responses around the world, not least in our bushfires last year, and in California, both of which entered uncharted territory.

Obviously we are a long way from having any global commitment to NZE 2030, but that is what an objective assessment of the science and evidence tells us is required.

This is not alarmism, but an objective risk assessment of the current climate reality, which is essential if we are to avoid catastrophic outcomes. Unfortunately history has repeatedly demonstrated that climate change is accelerating far faster than acknowledged officially.

Three decades of inaction by governments of all persuasions, and business, has placed the global community in extreme jeopardy, to the point that climate change now represents an immediate threat to civilization as we know it, an outcome we are locking-in today.

We urgently need a complete reframing of our climate and energy policies. The action required if the target is NZE2030 is obviously vastly different from that required if the target is NZE2050. Technology is important, but it has to be specifically focused to achieve the emission reduction target. And far more is involved, particularly societal and political change.

Quite apart from the climate science, it is surely common sense that, in the face of escalating climate disasters and their economic cost, having spent the last three decades achieving precisely nothing in terms of emission reductions, which continue to increase in line with worst case scenarios, we do not have time to just kick the can down the road for a further three decades if we are to have sustainable societies and economies at the end of the transformation process.

The initiatives Minister Kean is taking in NSW are hugely important, both in breaking the climate denialist mould nationally and in driving toward realistic solutions. But they will have to be ramped up dramatically to address the challenge we face, including precautionary measures to prevent tipping points being triggered, and immediate cessation of any fossil fuel expansion.

I appreciate this is a difficult area politically, but it must be addressed before matters deteriorate further.

Such talk in Australia is routinely dismissed as extremism, but we have discussed these conclusions with leading climate scientists in Australia and globally. None thus far disagree with our conclusions.

A case in point are the presentations given last Monday in Breakthrough's 2021 National Climate Emergency Summit. The initial Forum involved my Breakthrough co-author, David Spratt, Sarah Perkins-Kirkpatrick, an expert from the Centre for Climate Extremes at UNSW, and Sir David King, former UK Chief Scientist and one of the architects of the Paris Climate Agreement. David King last year founded the Centre for Climate Repair at Cambridge University.

The video can be seen at:

<https://www.youtube.com/watch?v=7V8pTQn Cp40&feature=youtu.be>

David King's last presentation statement is pertinent: "I believe that what we do in the next 3-4 years will determine the future of humanity".

Hence my view that the big project for 2021 is to open up an honest, apolitical, conversation across government, business and the community on developing an holistic plan, welding together the initiatives we are individually involved with, to achieve net zero emissions by 2030. And to promote similar action globally.

We have nine years to achieve the greatest transformation in human history.

I welcome your thoughts.

Best regards

Ian Dunlop
Chair, Advisory Board, Breakthrough National Centre for Climate Restoration.
Member, The Club of Rome.
Sydney.

Formerly:
Royal Dutch Shell international oil, gas & coal executive
Chair, Australian Coal Association, 1987-88
CEO, Australian Institute of Company Directors, 1997 – 2001
Chair, Howard Government Experts Group on Emissions Trading, 1998-2000

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Submission 9 Attachment 3

Climate Reality Check 2020

Responding to the Climate Emergency. Aim for net zero emissions by 2030, not 2050

SUMMARY
January 2021

Ian Dunlop
Chair, Advisory Board
Breakthrough Centre for National Climate Restoration, Australia.
Member, The Club of Rome

Climate Reality Check 2020 summarises current climate science research around the world to present 20 critical observations, insights and understandings, to guide the climate choices we now face.

The key points are discussed in this presentation. The full set of observations are at: <https://www.climatecheck.net>

Breakthrough - National Centre for Climate Restoration
Project Lead: Stuart Scahill, Ian Dunlop & Luke Taylor
Published: October 2020

CURRENT IMPACTS

Analysis & assessment of threats.

CURRENT IMPACTS
Analysis & assessment of threats

MAJOR RISKS
Understanding the urgency

CRITICAL ACTIONS
Key responses

SUMMARY
Overview & key points

2 1.5°C warming is likely by 2030, even earlier

- Many research papers project warming to reach 1.5°C around 2030, or sooner.¹
- A comparison of results from the latest generation of climate models suggest 1.5°C may be only five-to-seven years away (see #5).²
- Reaching 1.5°C by 2030 would be a decade ahead of IPCC projections.³

¹ Trend for 2021-25 estimated with a constant rate of 0.2°C per decade, as per IPCC special report.
² Jan per average of 24 climate models for the IPCC's scenario (RCP2.6) assessment, cited.
³ Source: Nature #14, p. 41

3 Reducing emissions alone will have no significant impact on warming trend over the next two decades

- A by-product of burning fossil fuels are sulfate aerosols, which have a strong cooling impact, but are short-lived in the atmosphere. Aerosols have been "masking" some of the warming so far.¹
- Declining coal use and clean air policies reduce the aerosol impact.²
- As fossil fuel use declines so does the aerosol cooling, so that for the next two decades lower emissions will have little impact on the warming trend.

This is our "Faustian bargain".³

5 On current path, 2°C well before 2050

- The emissions path has little impact on timing of the 1.5°C threshold -2030.
- 2°C reached before 2050 for both the high and central emission scenarios.
- With high emissions scenario, 3°C may be reached -2060 and 5°C before 2100.

Source: Stan Peters chart from GCP, CSIRO

7 1.5°C is not safe

- The Great Barrier Reef is in a death spiral: at current level of warming it will bleach on average about once every three-to-four years,¹ whereas recovery takes a decade or more.
- West Antarctic glaciers have passed a tipping point.² Paris Agreement temperature target of 1.5°C is sufficient to drive runaway retreat of West Antarctic Ice Sheet.³
- Parts of East Antarctica might be similarly unstable.⁴
- Three-quarters by volume of summer Arctic sea-ice has already been lost.⁵
- One-quarter of the Himalayan & Tien Shan ice sheets already lost.⁶
- Forest system oscillating to non-forest ecosystems in eastern, southern & central Amazonia.⁷

Melting Antarctic ice will raise sea level by 2.5 metres – even if Paris climate goals are met, study finds

The Guardian 24 September 2023

8 2°C is very dangerous

- Further tipping points could be triggered at low levels of global warming. A cluster of abrupt shifts could occur between 1.5°C and 2°C (#10).¹
- These include the Greenland Ice Sheet, which is close to a tipping point,² previously estimated to be around 1.6°C;³ and the Amazon rainforest.⁴
- It is a big mistake to think we can “peek” the Earth System at any given temperature rise – say 2°C – and expect it to stay there. 2°C may not be a point of system stability.⁵
- Former NASA climate chief Prof. James Hansen said that it is “well understood by the scientific community” that goals to limit human-made warming to 2°C are “prescriptions for disaster”.⁶

9 The world is on a 3–5°C warming path by 2100

- Global temperatures are on track for 3–5°C of warming by 2100.¹
- The temperature increase is still on the high-emissions RCP8.5 path, which is also the best match to mid-century under current and stated policies.²
- Prof. Kevin Anderson says that “a 4°C future is incompatible with an organised global community, is likely to be beyond ‘adaptation’, is devastating to the majority of ecosystems and has a high probability of not being stable”.³
- Prof. Johan Rockström says that at 4°C: “It’s difficult to see how we could accommodate eight billion people or maybe even half of that.”⁴

Global temperatures on track for 3-5 degree rise by 2100: U.N.

U.N. Climate Change Secretariat 2023

10 2°C may trigger a “Hothouse Earth” scenario of self-reinforcing warming

- The “Hothouse Earth” scenario is one in which system feedbacks and their mutual interaction drive the Earth System climate to a “point of no return”, whereby further warming would become self-sustaining (without further human perturbations).¹
- This planetary threshold could exist at a temperature rise as low as 2°C, possibly even in the 1.5°C–2°C range.²
- Similarly, Prof. James Hansen warned in 2007 that: “Recent greenhouse gas emissions place the Earth perilously close to dramatic climate change that could run out of our control.”³

Hothouse Earth paper impactful climate research article & German word of the year 2019

Climate Tipping Points

2030 scenario:
 Arctic Ocean free of sea-ice in summer
 Greenland tipping point
 Greenland ice mass loss further slows Atlantic circulation
 Amazon tipping point
 Arctic amplification and albedo changes accelerate permafrost loss

Adapted from PNAS 115:1078–1083

MAJOR RISKS
 Understanding the urgency

"The evidence from tipping points alone suggests that we are in a state of planetary emergency: both the risk and urgency of the situation are acute... If damaging tipping cascades can occur and a global tipping point cannot be ruled out, then this is an existential threat to civilization."

— LENTON, ROCKSTRÖM, GAFFNEY, BARNSTORF, RICHARDSON, STEFFEN & SCHELLINGHUBER 'CLIMATE TIPPING POINTS – TOO RISKY TO BET AGAINST'

i5 **Sensible risk-management requires special attention be given to high-end possibilities.**

- An emergency exists if the world is approaching a global cascade of tipping points that leads to a "hothouse" climate state. "Cascading effects" might be common... examples are starting to be observed.¹⁵
- Calculating *probabilities* makes little sense in the most critical instances. Rather, we should identify and focus on the very large climate impact, high-end "fat tail" *possibilities*,¹⁶ and precautionary action to avoid them at all costs.
- Climate change is an existential risk.¹⁷

Prof. Hans Joachim Schellnhuber: "When the issue is the survival of civilization is at stake, conventional means of (scientific) analysis may become useless."

CRITICAL ACTIONS
Key responses for protection

i6 **Zero emissions at emergency speed: 2030 — not 2050 — is the crucial time frame**

- It is already too hot, and we are dangerously close to the "Hothouse Earth" scenario
- We must build capacity for emergency action and large scale emissions reduction, to minimise the rate and magnitude of warming.
- Mobilising for zero emissions by 2030 is critical. A 2050 timeframe will not prevent catastrophic outcomes.

Long-term targets are an excuse for procrastination. That has been the history of international climate policy-making.

i7 **The earth is already too hot: large-scale carbon drawdown is vital**

- Stabilisation (at current climate) would require carbon drawdown of 60 ppm (back to ~350 ppm) to stop further warming of ~0.7°C. Lowering current warming would require more drawdown.
- CO₂ may be drawn out of the atmosphere by natural cycles on land (by reforestation, for example) and in oceans, by rock weathering and by storage in soils.²
- These processes can be enhanced, and new technologies are being developed. Large-scale research & deployment is crucial.
- Drawdown is slow process: will not provide cooling until drawdown annually > emissions annually.
- We should be wary of relying on claims that in the distant future bio-energy with carbon capture and storage (BECCS) is a panacea.³

i8 **A safe means of immediate cooling is critical to protect people & nature**

- Zero emissions, even in a decade, coupled with large-scale drawdown, is not sufficient to negate the existential risk (#13).
- Solar radiation management (SRM), such as deployment of cooling aerosols in upper atmosphere, can have a strong, immediate cooling effect.
- There is no current evidence that SRM would demonstrate a net environmental and social benefit, but if proven it may be considered an interim cooling measure whilst longer-acting solutions are deployed and take effect.⁵
- There are global SRM governance issues and risks to navigate in order to prevent unilateral deployment by national actors and misuse.⁶

Societal collapse is on the agenda: what actions are needed to avoid it?

"As scientists and scholars from around the world, we call on policymakers to engage with the risk of disruption and even collapse of societies. Only if policymakers begin to discuss this threat of societal collapse might we begin to reduce its likelihood, speed, severity, harm to the most vulnerable – and to nature.

"People who care about environmental and humanitarian issues should not be discouraged from discussing the risks of societal disruption or collapse. It is time to have these difficult conversations..."



The Guardian, 7 December 2020

Summary: Actions

Societies that are successfully overcoming the Covid pandemic threat are doing so by making it the highest priority of politics and economics, based upon acceptance of the best available science. Climate is a much bigger threat, that requires the same approach.

1. Assess the real risks with brutal honesty.
2. Recognise that climate disruption requires an emergency response and plan.
3. Act fast for zero emissions by 2030.
4. Build capacity to draw down carbon.
5. Understand what role solar radiation management may play.

Making action on climate disruption the highest priority of government is the key to protecting people, society and nature.

20 Collapse of civilization is not inevitable, but emergency-level action right now is critical

- Human & Earth systems are increasingly fragile.
- The end of civilisation due to climate disruption – the generalised collapse of contemporary societies – is not certain or inevitable.
- But it is likely unless dramatic global action is taken to make climate the number one priority of economics and politics in an emergency response.
- Large-scale disruption is inevitable, either by failing to act fast enough, or because the scale of action now required is far beyond a gradualist approach.

The short term is crucial: what we do now and before 2030 matters, not aspirations about 2050.



breakthroughonline.org.au
climateactioncheck.net

Summary: Science

1. 1.5°C temperature around or before 2030, irrespective of actions taken in the interim, and a decade ahead of IPCC projections.
2. 2°C is likely prior to 2050, even with actions better than the current Paris Agreement commitments, 3°C in the early-to-mid second half of the century on current emissions trajectory, with 5°C possible before 2100.
3. Even substantial emission reductions will have no significant impact on the warming trend over the next 20-25 years, due to the offsetting effect of aerosols.
4. The current 1.2°C of warming is already dangerous; 2°C would be extremely dangerous; 3°C catastrophic; and 4°C unlivable for most people.
5. A "Hothouse Earth", non-linear, irreversible, self-sustaining warming may be triggered between 1.5-2°C. There is a risk that we have already lost the ability to prevent accelerating warming.

8.4 Policy (New) - Climate Change

Submission 10

Submitted At

2021-06-15 21:06:37

Name of exhibited document you want to make comment on.

Climate Change Policy

Your Name

Andrew Playford

Phone Number

0408166419

Your email?

playfordis@gmail.com

Having read the document, is it easy to read and understand?

Yes

Please provide any suggestions for improvement.

Make some specific targets. ie all council vehicles will be electric by 2030
Maybe utilise the methane from the waste management area.

Do you support the overall objectives and content of the document?

Yes

Please provide further comments if you wish.

Wonderful that my local council are not climate change deniers.
Already leaders in waste water management.
Keep up the good work.

I agree to Ballina Shire Council collecting my Name, Email, and Phone Number

Ballina Shire Council Community Climate Change Survey Report - July 2021



Ballina Shire Council Community Climate Change Survey Report

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 Q2. Which climate change impacts are you most concerned about?..... 4

 Q3. What are the most important actions that the community can do to reduce greenhouse gas emissions in the Ballina Shire? (Tick your top 4) 6

 Q4. What activities do you already do to reduce your greenhouse gas emissions? (Tick all that apply) 8

 Q5. What motivates you to reduce greenhouse gas emissions? (Rank 1 to 6) 10

 Q6. What barriers have you experienced in taking action to reduce greenhouse gas emissions? (Tick all that apply) 12

 Q7. What is your position on the following statement. Ballina Shire should commit to a community-wide emissions reduction target. 14

 Q8. Some communities have voluntarily developed their own community-wide emission reduction plans, and a growing number of councils are assisting their communities to set targets and develop plans. What level of involvement should Ballina Shire Council have in a community-wide emissions reduction target? 16

 Q9. If Ballina Shire Council was to prepare a comprehensive community- wide emissions reduction action plan it would need to be funded. Typically \$40,000 is required to prepare a Community Action Plan. Which would be your preferred funding source? 18

 Q10. How much would you be willing to contribute annually to support a Ballina Shire community-wide emissions reduction target? For example, if the community was the key driver you may like to contribute voluntarily to a community fund, if led by the Council this could be through annual rates. 20

 Q11. What actions can Council take to support the community to respond to climate change? (Choose your top 4 actions) 22

 Q12. Tell us about your connection to the Ballina Shire..... 24

 Q13. If you are a Ballina Shire resident where do you live?..... 26

 Q14. What is your age? 28

 Q15. Do you have any other feedback or suggestions? 29

 Q16. If you would like to be kept up to date about Council’s climate change action please provide you name and address below. (Optional) 30

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Executive summary

Ballina Shire Council conducted a community survey from 19 May to the 16 June 2021. The survey was in response to a Council resolution in March 2021 to include community engagement about addressing broader community-wide emissions in conjunction with the public exhibition of Councils draft Climate Change Policy.

The purpose of the survey was to seek community feedback on whether a community-wide emissions reduction target is needed, if so what should that be, how could it be funded, and what level of involvement should Council have. Participants were also given the opportunity to share their views about their level of concern about climate change and potential impacts, actions that the community and council could do and what respondents already do, and what barriers to action they have experienced if any.

The invitation to participate was widely communicated in line with Councils Communication Policy which included community announcements by radio and social media, electronic mail out to Council's database of community groups, Council's website, Ward committees, and Community Connect publication.

There were 173 survey participants with the majority living within the Ballina Shire. The respondents were aged mostly between 35 years and 65 + years.

The majority of respondents expressed a high level of concern about climate change impacts, with most concern for loss of biodiversity.

A small portion of the respondents answered that they were not concerned about climate change or potential impacts.

The majority of respondents do some sort of emissions reduction activities themselves, and protecting the environment for future generations was ranked as the most important motivator for climate change action.

Respondents thought that the Ballina Shire should have a community-wide emissions target with Council as the key driver through grant funding and general revenue. There was willingness by most respondents to contribute funds annually to support a community-wide emissions target.

Respondents view Council can best support the community to take action through land use planning and controls, demonstrating leadership, and provision of community infrastructure such as cycleways, footpaths, and urban parks and tree planting. Council leading by example was a highly rated action.

A small portion of the survey respondents think the Shire and or Council should not pursue climate change action, or set a community target, or provide funding for community-wide climate change action.

Based on the results of the survey Council could consider seeking grant funding for further community-wide emissions reduction planning.

The Respondents Summary

There were 173 online participants to the survey with an 88% completion rate. The two most skipped questions were Question 15 - Providing further feedback and Question 16 – Contact details.

Of the 173 participants 153 told us about their connection to Ballina Shire. The majority of participants are local residents who live within the Shire.

The majority of survey participants lived within the Ballina Shire with the age of respondents being mostly between 35 years and 65 + years.

Survey Results

Q1. How concerned are you about climate change issues?

Participants were asked to rate their concern about climate change issues on a 5 level scale from “extremely concerned” to “not concerned”.

This question was answered by all 173 respondents (n=173).

A significant amount of respondents, 154 (89%), expressed a level of concern about climate change (Table 1).

Almost three quarters of all respondents, 122 (71%), answered “extremely concerned”. The remaining concerned respondents answered “very concerned” 19 (11%), “moderately concerned” 8 (5%), and 5 (3%) selected “slightly concerned”.

Over the entire sample group 19 (11%) of respondents expressed that they were “not concerned” about climate change.

Responses to this question suggests that the majority of survey respondents are extremely concerned about climate change issues (Figure 1).

How concerned are you about climate change issues?

Answered: 173 Skipped: 0

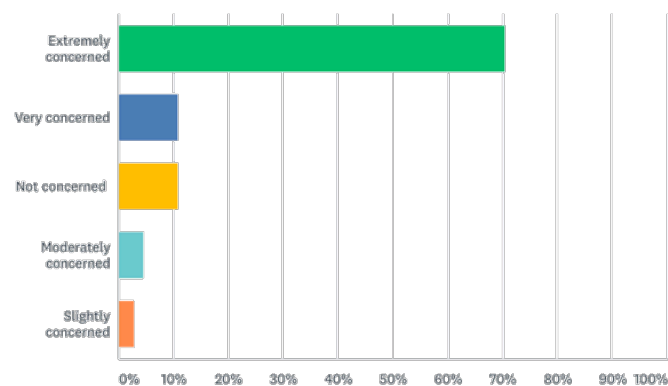


Figure 1: How concerned are you about climate change issues?

8.4 **Policy (New) - Climate Change**

Table 1: How concerned are you about climate change issues?

ANSWER CHOICES	RESPONSES	
Extremely concerned	70.52%	122
Very concerned	10.98%	19
Not concerned	10.98%	19
Moderately concerned	4.62%	8
Slightly concerned	2.89%	5
TOTAL		173

Q2. Which climate change impacts are you most concerned about?

All survey participants provided a response to this question (n=173).

Participants were asked to rank their level of concern about a list of five possible climate change impacts (Table 2) on a five level scale from “extremely concerned” to “not concerned”.

Table 2: Which climate change impacts are you most concerned about?

	EXTREMELY CONCERNED (1)	VERY CONCERNED (2)	MODERATELY CONCERNED (3)	SLIGHTLY CONCERNED (4)	NOT CONCERNED (5)	TOTAL	WEIGHTED AVERAGE
Loss of biodiversity	64.71% 110	18.24% 31	4.12% 7	2.94% 5	10.00% 17	170	4.25
More frequent and extreme weather events	57.31% 98	23.39% 40	1.75% 3	5.26% 9	12.28% 21	171	4.08
Water security	48.82% 83	30.00% 51	8.24% 14	4.71% 8	8.24% 14	170	4.06
Coastal erosion	49.71% 86	25.43% 44	9.83% 17	4.62% 8	10.40% 18	173	3.99
Food security	33.14% 56	35.50% 60	14.20% 24	4.73% 8	12.43% 21	169	3.72
Increased hot days	33.33% 56	35.71% 60	11.90% 20	5.36% 9	13.69% 23	168	3.70

Of the 173 respondents 143 people ticked that they had some of level of concern about the listed climate change impacts between “extremely concerned” to “slightly concerned”.

There were 21 respondents who answered with mixed levels of concern including “not concerned” about some impacts to “very concerned” about others.

Of the 173 respondents 9 ticked that they were “not concerned” about any of the listed impacts. The average ratings, with 5 being “extremely concerned” and 1 being “not concerned”, for each climate change impact are provided in Table 1. The average rating suggests that the majority of survey participants are “extremely concerned” or “very concerned” about the listed climate change impacts with the highest concern being for “loss of biodiversity”.

The following graph gives a visual representation of the percentage of responses across all impacts which further illustrates that “extremely concerned” and “very concerned” are by far the top two levels of concern across all impacts.

Overall the responses indicates there is a very high level of concern about all listed climate change impacts among the survey participants.

Which climate change impacts are you most concerned about occurring in the Ballina Shire? (Tick all that apply)

Answered: 173 Skipped: 0

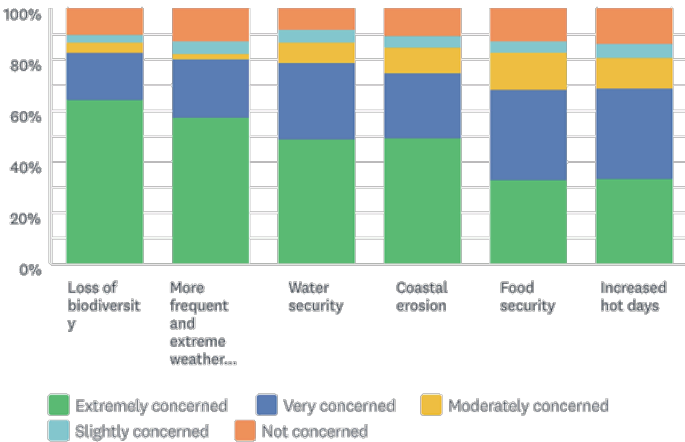


Figure 2: Which climate change impacts are you most concerned about?*

*Note: Long graph labels have been compressed to fit; see Table 2 for extended labels.

Q3. What are the most important actions that the community can do to reduce greenhouse gas emissions in the Ballina Shire? (Tick your top 4)

All participants answered this question (n=173).

Participants could choose their top four options from the list of ten actions which included an option of “Other” to enable a specific response.

All of the listed actions received responses which indicates that all actions were important to some respondents at some level.

Table 3: What are the most important actions that the community can do to reduce greenhouse gas emissions in the Ballina Shire?

ANSWER CHOICES	RESPONSES	
Renewable energy - solar PV systems and battery storage for homes/businesses	65.90%	114
Sustainable land use practices, carbon sequestration ie tree planting, soil capture of carbon	59.54%	103
Local/regional mid to large scale renewable energy projects ie solar farms, bioenergy projects	54.34%	94
Energy efficiency - lights, appliances, building design	45.66%	79
Waste avoidance and recycling	45.66%	79
Active transport - walking, cycling, public transport, carpooling, e-riding (electric bikes/scooters)	33.53%	58
Low emission and electric vehicles	32.37%	56
Community-led lobbying of State and Federal Government for climate action	26.59%	46
Leading by example and raising awareness in your community	21.39%	37
Other (please specify)	15.03%	26
Total Respondents: 173		

The top four chosen actions, with a tied fourth, are:

1. "Renewable energy – Solar and batteries"
2. "Sustainable Land use practices – tree planting, soil capture"
3. "Local/regional mid to large scale renewable energy projects"
4. "Energy efficiency – lights, appliances, building design", with an equal "waste avoidance and recycling"

The top three actions were reasonably closely scored with between 114 (66%) and 94 (54%) of the participant's votes. The tied fourth actions "energy efficiency" and "waste avoidance" received 79 (46%) of peoples votes each.

The next most selected actions were "active transport", "low emissions and electric vehicles", "Community lobbying of government" and "Leading by example" with between 58 (34%) and 37 (21%) of votes.

There were 26 "Other" responses to this question. Of those, 18 were comments suggesting other possible actions around the topics - residential (water savings, building designs, batteries), transport, biodiversity, regeneration, education, and govt lobbying, and 8 respondents comments expressed they were not supportive of climate change action.

What are the most important actions that the community could do to reduce greenhouse gas emissions in the Ballina Shire? (Tick your top 4)

Answered: 173 Skipped: 0

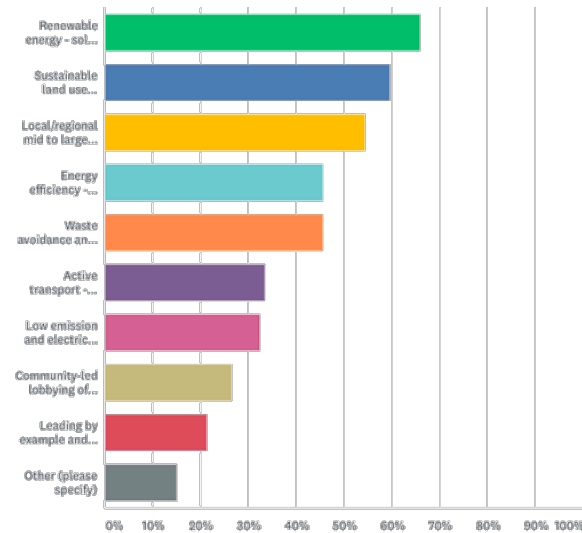


Figure 3: What are the most important actions that the community can do to reduce greenhouse gas emissions in the Ballina Shire?*

*Note: Long graph labels have been compressed to fit, see Table 3 for extended labels.

Q4. What activities do you already do to reduce your greenhouse gas emissions? (Tick all that apply)

All 173 participants provided a response to this question (n=173).

Participants were able to tick all actions that applied from a list of 11 possible activities. The list included an option of “I don’t do any particular emissions reduction activities”, people who ticked this option were able to skip to Q6.

Table 4: What activities do you already do to reduce your greenhouse gas emissions?

ANSWER CHOICES	RESPONSES	
I switched to LED lights	82.66%	143
I put all my food waste in the kerbside organics bin or home compost	80.92%	140
I am resource savvy - I shop local, recycle, upcycle, repurpose, fix, save electricity	78.61%	136
I installed solar PV on my house or business	65.90%	114
I use the cycleway and footpaths routinely to minimise car use	38.73%	67
I purchase Greenpower as a portion of my electricity	36.99%	64
I installed or am planning to install battery storage for a solar system	33.53%	58
Other (please specify)	18.50%	32
I have an electric car	8.67%	15
I use public transport routinely	6.36%	11
I don't do any particular emissions reduction activities. (Skip to question 6)	4.05%	7
Total Respondents: 173		

The top four actions selected are:

1. I switched to LED lights - 143 (83%)
2. I put all food waste in the kerbside organics bin or home compost – 140 (81%)
3. I am resource savvy – 136 (79%)
4. I installed solar PV on my house – 114 (66%)

The first three actions were close in votes with more than three quarters of participants choosing these actions 143 to 136.

The fourth most chosen action was selected by just under three quarters of the survey group, 114 (66%) of participants.

“Cycleway and footpaths”, “Greenpower”, and “solar battery” were the next most selected actions and were closely grouped in scores. These actions were selected by between 67 (39%) and 58 (34%) of participants, which is less than half of the survey group.

The option “Other” was chosen by 32 people. Of these responses 29 listed specific actions that they do in relation to building design, water savings, waste minimisation, growing your own, conscience consumption, education, bush regeneration, working from home, carbon storage/offset techniques, community energy. There were 3 “Other” responses expressing they were not supportive of community greenhouse gas emissions reduction actions.

There were 15 respondents that have an electric car, 11 that use public transport routinely, and 7 who answered “I don’t do any particular emissions reduction activities”.

The results indicate that more than 90% of respondents do some sort of emissions reduction activities, with the top four actions clearly being the most common actions.

What activities do you already do to reduce your greenhouse gas emissions?
(Tick all that apply).

Answered: 178 Skipped: 0

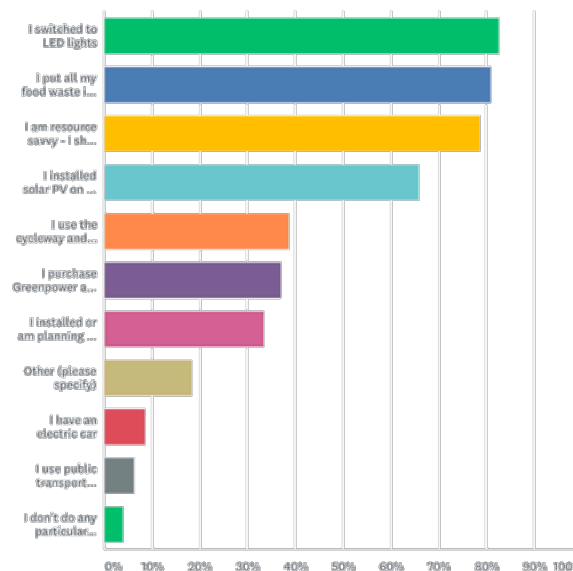


Figure 4: What activities do you already do to reduce your greenhouse gas emissions?*

*Note: Long graph labels have been compressed to fit, see Table 4 for extended labels.

Q5. What motivates you to reduce greenhouse gas emissions? (Rank 1 to 6)

Of the 173 participants 165 provided an answer to this question, 8 people elected to skip this question (n=165/173).

Participants were asked to rank 6 sentences in order of preference with 1 being the most important motivator and 6 being the least important motivator.

The average rating score for each of the listed motivators are provided in Table 2. The average rating indicates that “protecting the environment for future generations” is the most important motivator for the majority of the respondents.

“Saving money”, “leading by example” and “supporting Australian commitments” are the next three most common choices. These motivators were closely rated. “Government incentives” and “increasing property value” ranked notably lower as the least important motivators out of the list.

Table 5: What motivates you to reduce greenhouse gas emissions?

	1	2	3	4	5	6	TOTAL	SCORE
To protect the environment for future generations	74.53% 120	11.80% 19	3.11% 5	4.97% 8	4.35% 7	1.24% 2	161	5.43
To save money ie less waste, lower energy bills	16.56% 26	16.56% 26	16.56% 26	42.04% 66	5.73% 9	2.55% 4	157	3.89
To lead by example and help to educate my family/friends/community	6.21% 10	23.60% 38	40.99% 66	13.04% 21	9.32% 15	6.83% 11	161	3.84
To support Australia in reaching the global climate change commitments	1.89% 3	37.11% 59	22.64% 36	16.35% 26	8.81% 14	13.21% 21	159	3.67
To take advantage of government incentives/rebates	0.62% 1	5.59% 9	10.56% 17	14.29% 23	39.13% 63	29.81% 48	161	2.25
To improve the value of my property	1.86% 3	5.59% 9	5.59% 9	9.32% 15	31.68% 51	45.96% 74	161	1.99

The following graph gives a visual representation of the percentage of responses for “motivators”. This further illustrates that “protecting the environment” is by far the most important motivator for the majority of respondents.

Overall the responses indicate the survey participants are highly motivated by “protecting the environment for future generations”.

What motivates you to reduce greenhouse gas emissions? (With 1 being most important click and drag each sentence into your preferred order 1 to 6)

Answered: 165 Skipped: 8

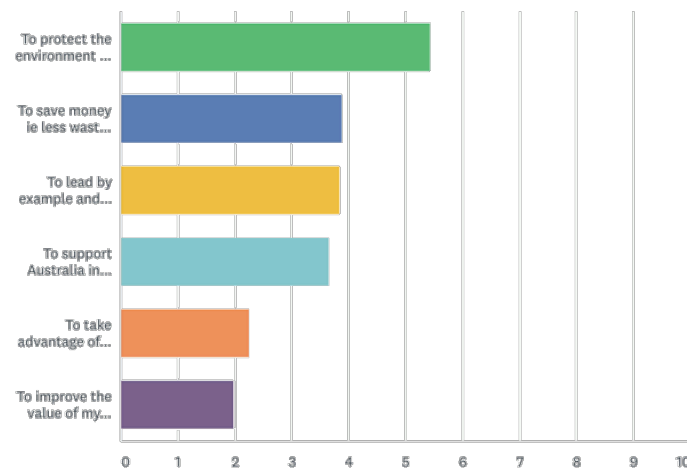


Figure 5: What motivates you to reduce greenhouse gas emissions?*

*Note: Long graph labels have been compressed to fit, see Table 5 for extended labels.

Q6. What barriers have you experienced in taking action to reduce greenhouse gas emissions? (Tick all that apply)

Out of the 173 participants 164 people provided an answer to this question (n=164/173). Respondents could tick all options that applied to them.

“The cost of installing renewable energy and energy savings measures” was the most chosen barrier with 107 out of 164 of respondents (65%) ticking this option.

Table 6: What barriers have you experienced in taking action to reduce greenhouse gas emissions?

ANSWER CHOICES	RESPONSES	
The cost of installing renewable energy and energy saving measures	65.24%	107
Lack of knowledge on Government rebates and incentives	33.54%	55
Other (please specify)	29.88%	49
Property limitations ie rental, apartments, building not suitable for installations	28.05%	46
Limited knowledge on what I can do as an individual	15.24%	25
Limited knowledge on what to do as a business, industry, or organisation	7.93%	13
Total Respondents: 164		

The proportion of respondents for the other options was considerably lower with “Lack of knowledge on Government rebates and incentives” the next choice at almost half as many respondents, 55 (34%), compared to the first choice.

The third most chosen option was “Other” with 49 (30%) respondents providing specific responses, closely followed by ‘Property limitations’ with 46 respondents.

“Limited knowledge on what I can do as an individual or business” were the least two chosen barriers at 25 and 15 respondents respectively.

Of the 49 “Other” responses 9 people commented specifically on the ‘lack of support and incentives by levels of government’. Another 9 responses were unsupportive of climate change action, and the rest of the responses (28) were around the following topics:

- Lack of public transport, electric vehicle costs, lack of cooperation by energy retailers, lack of infrastructure for business waste initiatives, lack of community support, solar recycling, overseas manufacturing, issues with strata properties, more incentives required, Council should have electric fleet, lack of EV charging stations.

Figure 6 graphically illustrates that the cost of installing renewable energy and energy savings measures was the most chosen barrier.

What barriers have you experienced in taking action to reduce greenhouse gas emissions? (Tick all that apply)

Answered: 164 Skipped: 9

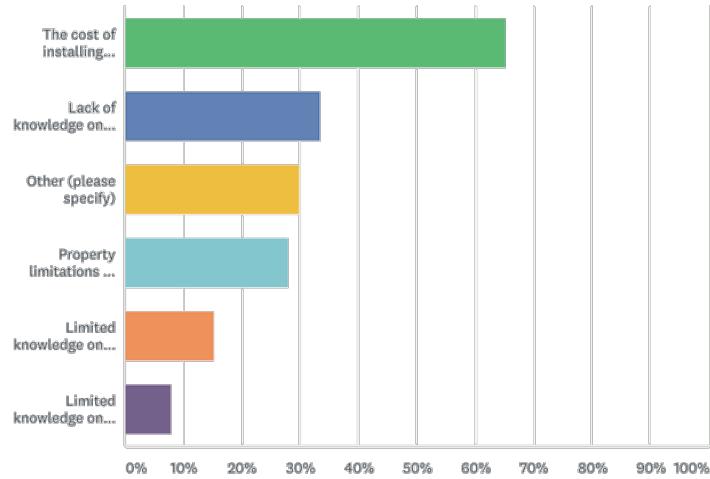


Figure 6: What barriers have you experienced in taking action to reduce greenhouse gas emissions?*

*Note: Long graph labels have been compressed to fit, see Table 6 for extended labels.

Q7. What is your position on the following statement. Ballina Shire should commit to a community-wide emissions reduction target.

Participants were asked what their position was on the statement “Ballina Shire should commit to a community-wide emissions reduction target.”

There were 168 out of 173 participants that responded to this question (n=168/173). This question was multiple choice with five choices listed in the table below. Respondents could choose from two potential targets, or express that “No, a target is not needed”, or provide a specific response through “Other”.

Table 7: What is your position on the following statement? Ballina Shire should commit to a community-wide emissions reduction target.

ANSWER CHOICES	RESPONSES
Yes - rapid emissions reduction in line with the international recommendations: 35-50% emission reduction by 2030 and net zero emissions before 2050.	70.24% 118
Yes - in line with the NSW Government targets: 35% emission reduction by 2030, net zero emissions by 2050.	10.12% 17
No, a community target is not needed	10.12% 17
Other (please specify)	7.74% 13
I'm not sure if a community-wide emissions target is needed	1.79% 3
TOTAL	168

The majority of survey participants 118 (70%), responded in the affirmative “Yes – rapid emissions reduction in line with international recommendations: 35-50% emission reduction by 2030 and net zero emissions before 2050”.

The choices “Yes- in line with the NSW Government targets: 35% emission reduction by 2030, net zero emissions by 2050”, and “No, a community target is not needed” was chosen by a significantly smaller number of respondents 17 (10%).

A small proportion of respondents 13 (8%), gave an “Other” response of which 9 were around being even more ambitious beyond the options listed including:

‘Net Zero by 2030, or 2040, as earliest as possible, that targets should cover all LGA’s in the area, and Council should implement strategies and policy to mandate action’

The remaining 4 responses to “Other” were not in support of the Shire pursuing climate change action.

Less than 2% of respondents answered “I’m not sure if a community-wide emissions target is needed” (n=3).

As 80% of participants responded with an affirmative answer to an emissions target, with 70% choosing rapid emissions reduction in line with international recommendations, and 10% choosing a target in line with the NSW Government targets this suggest that the survey respondent’s position is that Ballina Shire should have an emissions reduction target “in line with international recommendations - 35-50% emission reduction by 2030 and net zero emissions before 2050”.

Figure 7 graphically illustrates that the most common answer to this question was “Yes – rapid emissions reduction in line with international recommendations: 35-50% emission reduction by 2030 and net zero emissions before 2050”.

What is your position on the following statement? Ballina Shire should commit to a community-wide emissions reduction target? (choose 1)

Answered: 168 Skipped: 5

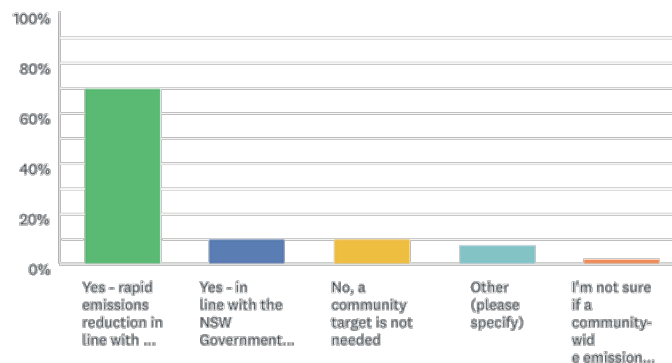


Figure 7: What is your position on the following statement. Ballina Shire should commit to a community-wide emissions reduction target.*

*Note: Long graph labels have been compressed to fit, see Table 7 for extended labels.

Q8. Some communities have voluntarily developed their own community-wide emission reduction plans, and a growing number of councils are assisting their communities to set targets and develop plans. What level of involvement should Ballina Shire Council have in a community-wide emissions reduction target?

There were 168 responses to this question (n=168/173).

Respondents were able to choose from the following options:

Table 8: What level of involvement should the Ballina Shire Council have in a community-wide emissions reduction target?

ANSWER CHOICES	RESPONSES
The key driver - adopting the target and funding development of a community action plan with community consultation (would require identifying a funding source).	67.26% 113
It's not Council's responsibility to be involved in community-wide emissions reduction.	12.50% 21
A regular contributor - supporting a voluntary community group to set a target and develop an action plan, ie attend community meetings, provide advice, assist with community led grant funding submissions.	11.90% 20
Other (please specify)	5.95% 10
An occasional contributor - support a voluntary community group to set a target, provide advice and meeting spaces, update on Council's initiatives.	2.38% 4
TOTAL	168

Of the 168 responses the majority 113 (67%) chose Council's level of involvement to be "The Key Driver – adopting the target and funding development of a community action plan with community consultation".

There were 21 people that answered "It is not Council's responsibility to be involved in community-wide emissions reduction", with an almost equal amount of people, 20, answering that Council should be a "Regular Contributor" providing support to a community-wide emissions target".

4 respondents answered that Council should be an "Occasional Contributor".

There were 10 respondents that provided an "Other" responses, 6 were supportive of Council being involved in activities including landcare, housing design, public transport, carbon capture, public meetings, education, and lobbying government, 2 commented that were unsure of Council's level of involvement, 2 responses did not support Council's involvement in climate change action.

Figure 8 illustrates that “The Key Driver – adopting the target and funding development of a community action plan with community consultation” was the most chosen option.

Some communities have voluntarily developed their own community-wide emission reduction plans, and a growing number of councils are assisting their communities to set targets and develop plans. What level of involvement should Ballina Shire Council have in a community-wide emissions reduction target? (Choose 1)

Answered: 168 Skipped: 5

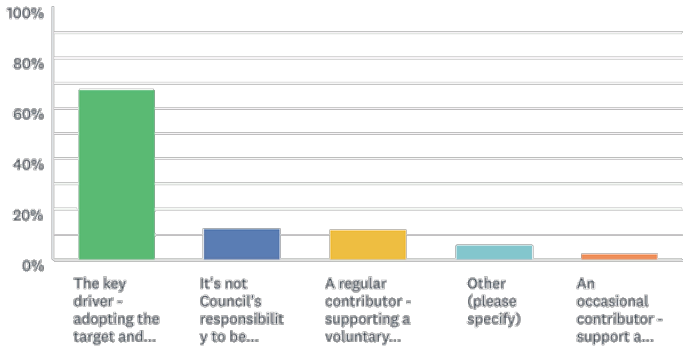


Figure 8: What level of involvement should Ballina Shire Council have in a community-wide emissions reduction target?*

*Note: Long graph labels have been compressed to fit, see Table 8 for extended labels.

Q9. If Ballina Shire Council was to prepare a comprehensive community- wide emissions reduction action plan it would need to be funded. Typically \$40,000 is required to prepare a Community Action Plan. Which would be your preferred funding source?

There were 152 responses to this question out of 173 participants (n=152/173).

Respondents were able to choose one option from the following choices:

Table 9: If Ballina Shire Council was to prepare a comprehensive community-wide emission reduction action plan it would need to be funded. Typically \$40,000 is required to prepare a Community Action Plan. Which would be your preferred funding source?

ANSWER CHOICES	RESPONSES	
A combination of grant funding and general revenue	41.45%	63
Applying for grant funding opportunities if they arise	19.74%	30
Council general revenue, by reducing expenditure or level of services in other areas	15.13%	23
No additional funding should be considered to prepare a community action plan	9.87%	15
Other (please specify)	7.24%	11
A rate increase	6.58%	10
TOTAL		152

Of the 152 responses 126 people (82%) chose one of the funding source options for the preparation of a community-wide emissions reduction action plan. The most common choice of funding was “A combination of grant funding and general revenue” 63 (41%), followed by “applying for grant funding 30 (20%), Council general revenue 23 (15%), and “a rate increase” was the least chosen funding option by 10 (7%).

There were 15 respondents (10%) who responded that “No additional funding should be considered to prepare a community action plan”.

There were 11 “Other” responses. Of those, 7 respondents were not supportive of any funding for a community-wide emissions reduction plan, 3 respondents were supportive of rate increase, grant funding, or Council putting money towards a plan.

Figure 9 graphically illustrates the distribution of the choices to question 8 with “A combination of grant funding and general revenue” as the most chosen option.

If Ballina Shire Council was to prepare a comprehensive community-wide emissions reduction action plan it would need to be funded. Typically \$40,000 is required to prepare a Community Action Plan. Which would be your preferred funding source?

Answered: 152 Skipped: 21

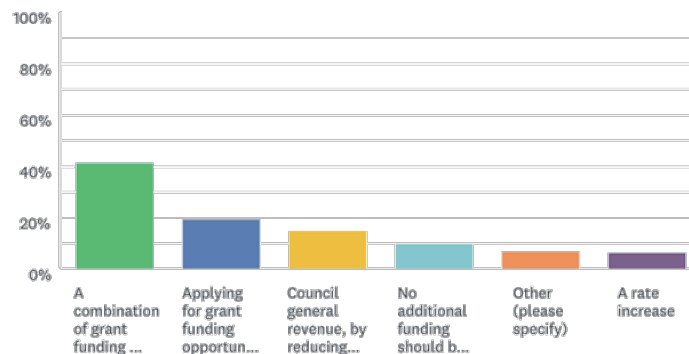


Figure 9: Typically \$40,000 is required to prepare a Community Action Plan. Which would be your preferred funding source?*

*Note: Long graph labels have been compressed to fit, see Table 9 for extended labels.

8.4 Policy (New) - Climate Change

Q10. How much would you be willing to contribute annually to support a Ballina Shire community-wide emissions reduction target? For example, if the community was the key driver you may like to contribute voluntarily to a community fund, if led by the Council this could be through annual rates.

Respondents were asked how much they would be willing to contribute annually to support a Ballina Shire community-wide emissions education action plan. This question was asked to gauge the level of interest in community members voluntarily providing funding for community emissions reduction, whether that be through the Council, if Council was to led a target, or through a community led initiative.

There were 153 responses to this question out of 173 participants, 20 chose to skip (n=153/173).

Table 10: How much would you be willing to contribute annually to support a Ballina Shire community-wide emission reduction target?

ANSWER CHOICES	RESPONSES	
\$51 to \$100	27.45%	42
More than \$100	20.26%	31
I am not willing to consider contributing funds to support a community-wide emissions reduction target.	18.30%	28
\$10 to \$25	14.38%	22
\$26 to \$50	8.50%	13
\$2 to \$10	5.88%	9
Other (please specify)	5.23%	8
TOTAL		153

There were 117 (77%) of respondents that chose one of the dollar values.

The most chosen response was “\$51 to \$100” annually which was chosen by 42 (27%) respondents, followed by “more than \$100” by 31 (20%) of respondents.

The third highest chosen response was “I am not willing to consider contributing funds to support a community-wide emissions reduction target” 18% (28).

There were 8 “other” responses from a range of topics including:

- Contributing time and expertise, concern about how money would be spent, and already making contributions through rates.

This results of this question suggest that the majority of survey respondents would be willing to contribute funds annually from \$2 to more than \$100 to support a community-wide emissions target.

Figure 10 illustrates that the most chosen response to this question was “\$51 to \$100” annually.

How much would you be willing to contribute annually to support a Ballina Shire community-wide emissions reduction target? For example, if the community was the key driver you may like to contribute voluntarily to a community fund, if led by the Council this could be through annual rates.

Answered: 153 Skipped: 20

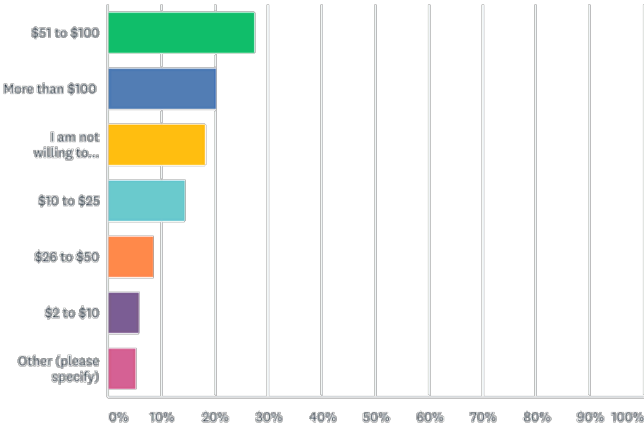


Figure 10: How much would you be willing to contribute annually to support a Ballina Shire community-wide emissions reduction target?*

*Note: Long graph labels have been compressed to fit, see Table 10 for extended labels.

Q11. What actions can Council take to support the community to respond to climate change? (Choose your top 4 actions)

Respondents were asked to choose their top four actions from the choices in the table below that Council can take to support the community respond to climate change.

There were 153 responses to this question out of 173 participants (n=153/173).

Table 11: What actions can Council take to support the community to respond to climate change? (Choose your top 4 actions)

ANSWER CHOICES	RESPONSES	
Land use planning and environmental controls - revising and amending to include climate change considerations	66.67%	102
Leading by example - reducing Council's emission, managing risks to public infrastructure and the natural environment.	64.71%	99
Provision of infrastructure - electric vehicle charging stations, cycle ways, footpaths.	54.25%	83
Urban greening programs - street trees, and parks.	51.63%	79
Advocating for more action at a State and Federal government level.	47.06%	72
Active participation in local/regional partnerships and community groups to enable local action, innovative projects, and strong advocacy to government.	44.44%	68
Provide education/workshops for business, industry, residents, schools.	37.25%	57
Promoting government incentive schemes.	23.53%	36
Other (please specify)	10.46%	16
Total Respondents: 153		

The top two actions chosen were "Land use planning and environmental controls" 102 (67%), and "Leading by example" 99 (65%).

The third and fourth most chosen actions were "Provision of Infrastructure" 83 (54%) and "Urban greening programs" 79 (52%).

Following closely was "Advocating for more action at a State and Federal Government level" with 72 (47%) of respondents, and "Active participation in local/regional partnerships and community groups..." 68 (44%).

There were 16 "Other" responses. Response topics included: biodiversity planning policies, enforcing passive building design, supporting renewable energy for businesses and low income households, electric charging stations, and a 2025 deadline for renewable.

There were 4 “Other” responses in relation to climate change action not being Council’s responsibility or that the community was not concerned, and 3 responses around climate change not existing.

The results of this question indicate that respondents view Council’s role in taking climate change action is best suited to provision of land use planning and controls that consider climate change considerations, by taking a leadership role in reducing Councils own operational emissions and risk management, provision of community infrastructure such as cycleways, footpaths, and urban parks and tree planting. Advocating for more action at a State and Federal Government level, and active participation in local/regional partnerships and community groups also featured as important actions to support the community. A small proportion of the respondents did not support Council taking climate action. The distribution of responses is graphically illustrated in Figure 11.

What actions can Council take to support the community to respond to climate change? (Choose your top 4 actions)

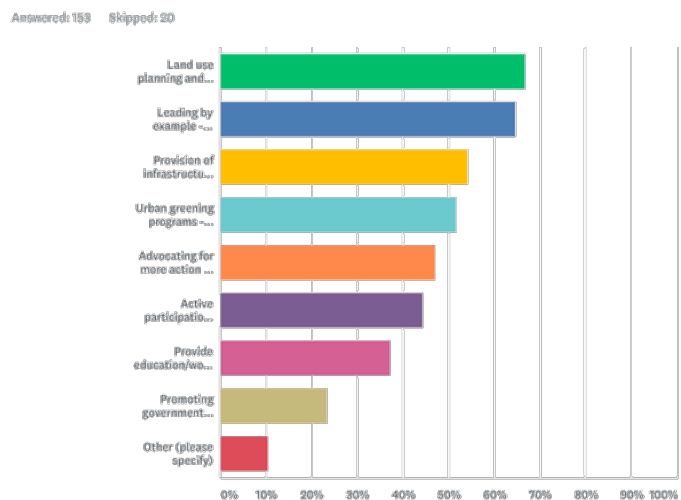


Figure 11: What actions can Council take to support the community to respond to climate change?*

*Note: Long graph labels have been compressed to fit, see Table 11 for extended labels.

Q12. Tell us about your connection to the Ballina Shire

There were 153 out of 173 respondents that told us about their connection to Ballina Shire (n=153/173).

Respondents were able to choose more than one of the options in the table below and/or specify an “Other” response.

Table 12: tell us about your connection to the Ballina Shire

ANSWER CHOICES	RESPONSES	
Local resident	88.89%	136
Work here	16.99%	26
Business owner	12.42%	19
Other (please specify)	8.50%	13
Visitor	2.61%	4
Student	1.96%	3
Total Respondents: 153		

The majority of respondents are local residents, 136 (89%).

Of the 136 respondents who chose “Local resident” 34 of them also chose another option. “Local resident and Work here” was chosen by 13 of the 34, followed by 10 choosing “Local resident and Business owner”, 5 chose “Local resident/Business owner/Work here”, and 3 chose “Local resident and Other”.

There were 3 “Work here”, 2 “Visitor”, and 1 “Business Owner” responses, and 3 people gave combined answers of Work here/Business owner/Visitor.

There were 13 respondents who chose to specify an “Other” response. Statements topics included occupations/former resident/born here/frequent visitor/neighbouring resident/shopping.

There was 1 respondent that’s answer was not in relation to a connection to Ballina Shire.

Figure 12 graphically illustrates that the majority of respondents are local residents.

Tell us about your connection to the Ballina Shire

Answered: 153 Skipped: 20

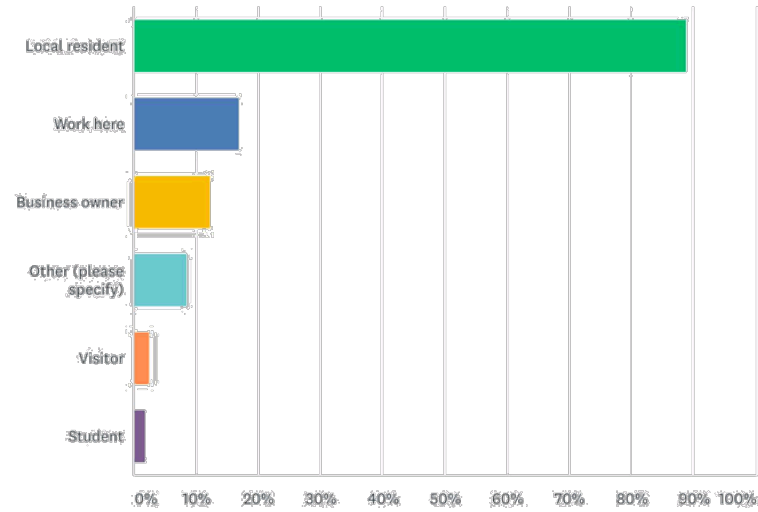


Figure 12: Tell us about your connection to the Ballina Shire

Q13. If you are a Ballina Shire resident where do you live?

Of the 173 participants 144 people responded to this question, 29 skipped (n=144/173).

Participants were asked to select a location from the list in the table below. They also had the opportunity to respond with a specific location in the “Other” section.

Table 13: If you are a Ballina Shire resident where do you live?

ANSWER CHOICES	RESPONSES	
Ballina	38.19%	55
Lennox Head	22.22%	32
Other (please specify)	9.72%	14
Cumbalum	7.64%	11
Alstonville	6.25%	9
Newrybar	4.17%	6
Skennars Head	3.47%	5
Wardell	2.78%	4
Wollongbar	2.08%	3
Rural	1.39%	2
Tintenbar	1.39%	2
South Ballina	0.69%	1
TOTAL		144

Over 95% of the respondents live within the Ballina Shire (n=138/144).

Ballina residents accounted for 39% of the respondents (55), followed by 22% from Lennox Head (32).

The next most chosen option was “Other” 10% (14) with 7 of those people specifying a location within the Ballina Shire that was unlisted ie Teven, Alstonvale, East Ballina, 4 people listed a neighboring Local Government Area, and 2 people left comments unrelated to a location.

Cumbalum residents accounted for 11 respondents (8%) with all other respondents nominating one of the listed localities within the Shire.

If you are a Ballina Shire resident where do you live?

Answered: 144 Skipped: 29

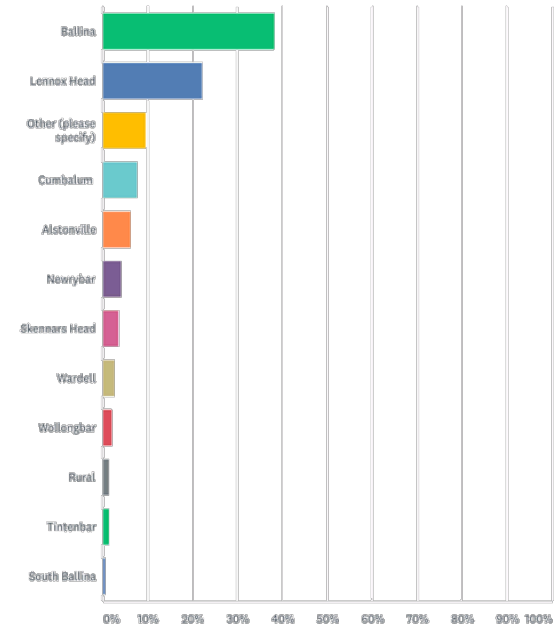


Figure 13: If you are a Ballina Shire resident where do you live?

Q14. What is your age?

Participants were asked to select an age category from the below list.

There were 153 responses to this question, 20 skipped the question (n=153/173).

Table 14: What is your age?

ANSWER CHOICES	RESPONSES	
65 +	33.33%	51
50 to 64	31.37%	48
35 to 49	28.10%	43
18 to 34	6.54%	10
Under 18	0.65%	1
TOTAL		153

The age of the respondents was reasonably evenly distributed over three main categories with most respondents, 33%, ticking the “65+ category” (n=51/153), followed by 31% in the “50 to 64” category (48), and 28% in the “35 to 49” category (43).

Out of the 153 respondents 7% were between 18 and 34 years (10), and less than 1% were under 18 (1).

What is your age?

Answered: 153 Skipped: 20

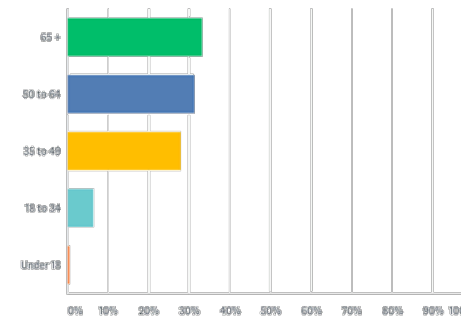


Figure 14: What is your age?

Q15. Do you have any other feedback or suggestions?

There were 106 responses to this question (n=106/173).

The responses were grouped into topic areas listed below in Table 15.

Table 15: Do you have any other feedback or suggestions?

TOPIC	COMMENTS AND NUMBER OF RESPONSES	TOTAL NUMBER OF RESPONSES
URGING COUNCIL TO:	To move ahead with action (17). To lead by example (5). Prioritise funding of the action plan (1). Faster action on renewable electricity (1).	24
TRANSPORT	Improve public transport, urban active transport, and cycleways (10). Provision of scooters in CBD (1). Electric vehicle initiatives (1).	12
PRAISE FOR COUNCIL'S CLIMATE CHANGE ACTIONS	Various range of positive and supportive comments about Councils past activities and proposed policy.	11
COLLABORATION/ENGAGE	Support community led groups (4). Encourage and support community energy projects (3). Engage with the younger generations/schools (1). Regional collaboration with other LGA's (1). Include local indigenous input in planning (1). Council should join Global Covenant of Mayors program (1).	11
BUILDING AND LAND USE PLANNING	Planning controls to encourage better building design (5). Better connectivity between developments (2). Reduce development (2). Mandate water storage for new buildings (1)	10
UNSUPPORTIVE OF COMMUNITY OR COUNCIL TAKING ACTION	Not Councils responsibility (3). Wastes money (2). Don't believe in climate change (2). No targets required (1). Unrealistic targets (1)	9
WASTE	Reducing waste to landfill, increase recycling (3). Reduce waste disposal rates (1). Improve waste collection in rural areas – add green waste (1). Reduce business costs of recycling (1). Providing storage space for recycling products (1). Improve recycling for businesses (1).	7
COMMUNITY SUPPORT:	Greater incentives for solar and energy efficiency for residents, businesses, and rentals/strata developments (4). Partnering programs for low income homes solar (1). Reduce rates don't increase (1).	6
URBAN LIVABILITY	Community gardens (2). Improve outdoor parks, seating (2). Urban fruit tree planting (1).	5
EDUCATION	Education and support for farmers (2). Educating farmers about solar/agri land sharing (1). Educate on Carbon sequestration incentives and benefits (1).	4
RENEWABLE ENERGY PROJECTS	Battery storage initiatives (2). Methane capture at waste facility (1). Solar awnings over carparks, cycleways, shelters (1).	4
COMMUNITY-WIDE ACTION	Urging Council to drive community target (1). Extend target to community-wide (1). Shire precinct areas for strategies for action (1). Include adaptation planning (1).	4
POLICY	Stop fossil fuel investment (1). Need for closed loop recycling and economic policies (1).	2
OTHER	Comment re a survey question (1). Comment unrelated to Climate Change (1).	1

The most common responses related to urging Council to move ahead with climate change action, comments included: "Go hard, it's really important!", "Lets do it!", "Lets inspire other communities and turn this shop around!", "Don't delay."

Comments relating to improving transport was the next most common response with most comments relating to improvement of public transport and cycleways.

8.4 Policy (New) - Climate Change

There were 11 comments praising Council for its climate change action, and 11 suggestions for collaborative approaches such as supporting community led groups and community energy projects.

Comments of praise included: "Thank you for getting started", "Great to see the Council being proactive on this issue", "Gratitude for your important work", "Thanks for asking the community".

There were 10 comments in relation to building and land use planning with 5 of those comments suggesting better building design standards and controls are needed around energy efficiency and sustainability.

There were 9 comments that were unsupportive of council or the community taking climate change action with topics including "it's not Council's responsibility," "waste of money", and "don't believe in climate change".

The other comments comprised of a range of other positive ideas and suggestions as listed in Table 15.

There was one comment that did not relate to climate change.

Q16. If you would like to be kept up to date about Council's climate change action please provide you name and address below. (Optional)

There were 67 of the 173 participants that left contact details (n=67/173).

Discussion

The majority of survey participants lived within the Ballina Shire with the age of respondents being mostly between 35 years and 65 + years.

Most of the participants responded that they had some level of concern about climate change, with being “extremely concerned” as the most chosen level. Only a small portion of the respondents answered “not concerned”.

The survey results indicate there is a very high level of concern about climate change impacts among the survey participants, the highest concern being for loss of biodiversity.

Participants rated the top four actions that the community could do as “Renewable energy”, “Sustainable Land use practices”, “Local/regional mid to large scale renewable energy projects”, “Energy efficiency” and “waste avoidance and recycling”.

The majority of respondents do some sort of emissions reduction activities themselves, with LED lights, waste initiatives and solar being the most common actions. “Protecting the environment” was ranked as the most important motivator for climate change action by the majority of people.

The cost of installing renewable energy and energy savings measures was the most chosen barrier to action by respondents.

When asked about their position on whether the Ballina Shire should have a community-wide emissions target the majority of participants responded with an affirmative answer, and that the target should be in line with international recommendations.

The majority of respondents thought that Council should be the key driver by adopting the target and funding development of a community action plan with community consultation. A small portion of respondents think the Shire and or Council should not pursue climate change action or set a community target.

The most common choice of funding a community-wide action plan was a combination of grant funding and general revenue.

The majority of survey respondents would be willing to contribute funds annually from \$2 to more than \$100 to support a community-wide emissions target. A considerably lower number of participants responded that they would not be willing to contribute funds to support community-wide emissions target.

Respondents view Council’s role in supporting the community to respond to climate change is best suited to provision of land use planning and controls that consider climate change considerations, by taking a leadership role in reducing Councils own operational emissions and risk management, provision of community infrastructure such as cycleways, footpaths, and urban parks and tree planting. A small portion of respondents thought that community-wide action is not Council’s responsibility.

Conclusion

The survey results indicate that the survey participants have a high level of concern about climate change and its potential impacts within the Ballina Shire. Most are taking their own emission reduction action and are motivated by protecting the environment for future generations. The most important community actions were renewable energy, sustainable land-use practices, local/regional renewable energy projects, energy efficiency and waste avoidance.

The survey provides a positive indicator that Council's current range of climate change activities and draft Climate Change Policy align with the survey group's views on how Council can support the community. Council's existing strategic plans list a range of strategies relevant to climate change mitigation and adaption. For example, land use planning controls such as environmental and biodiversity management, mosquito management and floodplain management, coastal zone management, ensuring plans are in place for natural disasters and environmental changes such as sea level rise ensuring planning considers changes to the environment, wise use of resources, and risk management.

In addition, Council supports the community reduce emissions through a range of ongoing activities including annual urban tree planting program, open space and active transport infrastructure, promotion of residential incentive programs, waste minimisation initiatives, and community education programs. Cost was rated as the key barrier to action, therefore Council should maintain a role in promotion of government incentive programs.

Council leading by example was a highly rated action which suggests that Council's actions in managing its own emissions are valued, therefore Council should ensure that activities and progress are shared with the community.

The majority of respondents thought that Ballina Shire should have a community-wide emissions target in line with international recommendations, and that Council should be the key driver funded with a combination of grant funding and general revenue. A small portion of respondents think the Shire and or Council should not pursue climate change action or set a community target.

The draft Climate Change policy principles and statements supports community collaboration, development of partnerships, and identifies that it is part of Council's role to facilitate the advancement of community climate change mitigation, adaptation, and resilience.

Based on the results of the survey Council could consider seeking grant funding for further community-wide emissions reduction planning.