



## Policy

# Climate Change – ~~Net Zero by~~ 2030 Management

Version 1.0

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## Table of Contents

<b>Purpose</b>	<b>4</b>
<b>Context</b>	<b>4</b>
<b>Climate change - physical effects on Tweed Shire</b>	<b>5</b>
<b>Climate change - socio-economic and environmental impacts on Tweed Shire</b>	<b>6</b>
<b>Greenhouse gas emissions' sources</b>	<b>6</b>
<b>Guiding principles</b>	<b>8</b>
<b>Goals</b>	<b>9</b>
<b>Emissions Reduction Target</b>	<b>9</b>
<b>Key priorities for Council</b>	<b>9</b>
<b>Key definitions</b>	<b>11</b>
<b>Key legislation</b>	<b>11</b>
<b>Related Council and other documentation</b>	<b>11</b>
<b>Review period</b>	<b>12</b>
<b>Version control</b>	<b>12</b>

## Purpose

The purpose of this ~~draft~~ Climate Change Management Policy ~~— Net Zero by 2030~~ is to acknowledge that our global climate is changing, and that in the Tweed the effects will impact Council operations, our community, the economy and our environment.

This Policy aims to communicate Council's principles, objectives, targets, ~~objectives~~ and priorities in addressing climate change, and establishes a framework to build resilience within the organisation, the community and landscape.

## Context

In 1997 Tweed Shire Council joined the Cities for Climate Protection Program, a voluntary initiative that assists local governments around the world to reduce greenhouse gas emissions in their municipality.

In 2015, 195 countries signed the Paris Agreement, an accord within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions, mitigation, adaptation and finance. The aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping a global temperature rise, this century, to well below 2°C above pre-industrial levels, and to pursue efforts to keep warming below 1.5°C above pre-industrial levels.

In 2016, the Australian Government confirmed it would commit to the Paris Agreement. The current targets for Australia are to reduce emissions by 26-28% below 2005 levels, by 2030.

In 2016, the NSW Government described its plan to contribute to Australia's commitment to the Paris Agreement through implementation of the NSW Climate Change Policy Framework. The NSW Climate Change Policy Framework outlines long-term objectives to achieve net-zero emissions by 2050 and to make New South Wales more resilient to a changing climate.

Tweed Shire Council's Community Strategic Plan 2017-2027 outlines Council's goals in relation to climate change, that being, for climate change considerations to underpin the decision making of Council. Directly relevant actions in Community Strategic Plan 2017-2027 are to:

- Decrease the carbon footprint of the Tweed Shire and progress toward 100% self-sufficiency in renewable energy.
- Prepare for climate change through adaptation and mitigation.

On 19 September 2019 Council declared that we are in a state of climate emergency that requires urgent action by all levels of government, including local councils.

Council has a range of policies, strategies and programs that form the basis of Council's response to climate change:

Climate change adaptation:  
- Risk management

- [Emergency management](#)
- [Flood management](#)
- [Asset management](#)
- [Protecting Tweed's drinking water source](#)
- [Biodiversity conservation and enhancement](#)
- [Coastal protection](#)
- [Waterways management](#)
- [Vertebrate and invertebrate pest management](#)
- [Strategic land use and transport planning and infrastructure](#)
- [Development assessment](#)
- [Building and environmental health](#)
- [Parks and open space](#)
- [Community services and community development](#)

**Emissions reduction and carbon sequestration:**

- [Smart building and subdivision design](#)
- [Smart asset and infrastructure design](#)
- [Energy efficiency](#)
- [Use of renewable energy](#)
- [Resource recovery and waste reduction](#)
- [Transport fuel efficiency](#)
- [Active and public transport](#)
- [Wastewater treatment emissions management](#)
- [Landfill emissions management](#)
- [Estuary health and waterway management](#)
- [Tree planting and ecosystem health](#)
- [Sustainable agriculture and enhancing soil health](#)

## Climate change - physical effects on Tweed Shire

1. Hotter temperatures, including increased daytime temperatures, more hot days and fewer cold nights. Heatwaves will be hotter, and last longer.
2. Increased frequency and intensity of bushfires.
3. Increased risk of drought, and decreased predictability and reliability of rainfall, resulting in reduced water supply security and lower stream flows.
4. Change in rainfall seasonality. Dry seasons (winter and spring) will become drier on average, while wet seasons (summer and autumn) will become wetter on average, and become dominated by more intense rainfall events.
5. Sea levels are predicted to rise by 0.4m by 2050 and 0.9m by 2100 (above 1990 mean sea levels).
6. Increased frequency and depth of tidal inundation of low lying lands, and poor drainage in low lying areas.
7. Increased frequency and intensity of severe storms, including floods.

**Reference:** Integrated Regional Vulnerability Assessment: North Coast of New South Wales Volume 1: Assessment report 2016 State of NSW, Office of Environment and Heritage.

## **Climate change - socio-economic and environmental impacts on Tweed Shire**

1. Greater demand on health and allied services due to an increase in the number of extreme climatic events such as drought or heatwaves, and potential changes to disease transmission, for example through increases in mosquito breeding habitat.
2. Increased pressure of drought and bushfires on wildlife and the natural environment, compounding the impacts of other threats such as riverbank erosion, loss of bushland, weeds, human disturbance and feral animals.
3. Increasing heat, soil erosion and drought will impact upon agricultural systems, affecting crop yields and livestock health, farm productivity and the rural economy.
4. Increased flooding and tidal inundation leading to potential impacts on sugar cane production area.
5. Increased demand on emergency preparedness, response and recovery services.
6. Impacts on both Council and private sector business continuity, affecting infrastructure and service provision, with significant financial implications for Council in asset management.
7. More frequent disruption to economic activity, including tourism and retail services, due to an increased number of extreme weather events.
8. More frequent disruption to transport networks due to an increased number of extreme weather events.

### **Greenhouse gas emissions' sources**

Greenhouse gas emissions from Council's operations include:

- Scope 1<sup>1</sup> direct, such as wastewater processing and combustion of fuels in Council vehicles.
- Scope 2 indirect as a result of purchased electricity consumed by Council
- Scope 3 indirect as a result of activities not controlled by Council such as the extraction and production of purchased material.

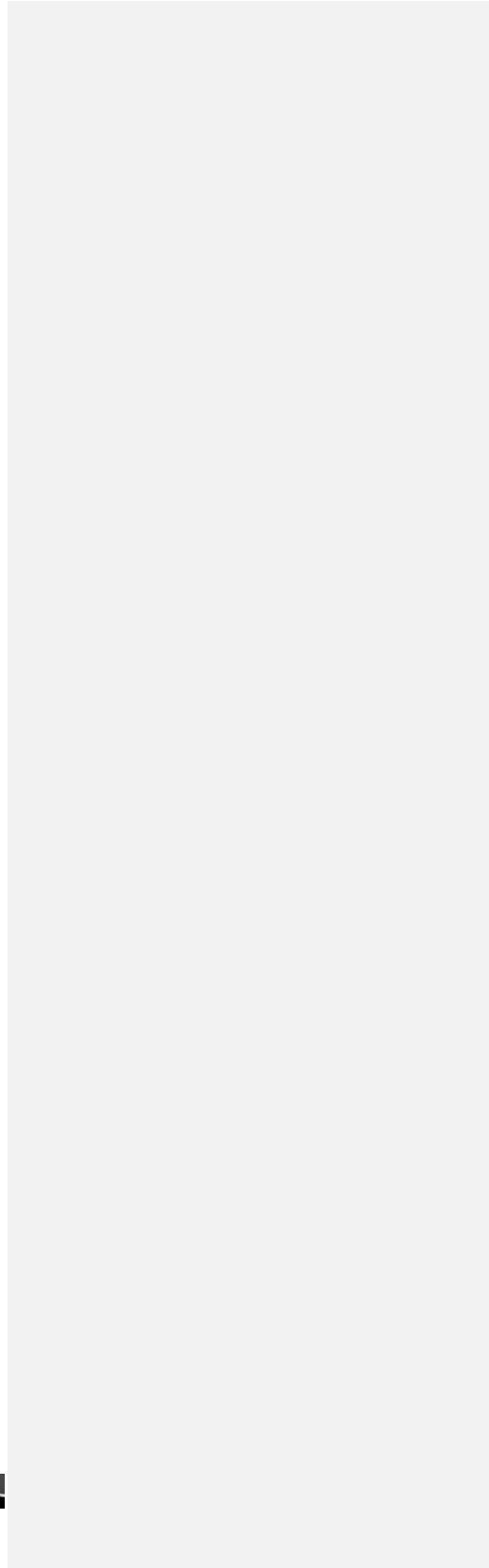
Details about Council's greenhouse gas emissions are available on Council's website.

Community emissions calculations are based on state level data for greenhouse gases emitted and the different sources of these emissions based on the Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC).

Details about the Tweed community's greenhouse gas emissions are available on Council's website.

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<sup>1</sup> The Greenhouse Gas Protocol (World Business Council for Sustainable Development/World Resources Institute) requires greenhouse gas emissions to be categorised as direct, indirect electricity or other indirect to avoid double counting



## Guiding principles

The following principles underpin Council's Policy:

1. There is a community expectation, legislative requirement, and moral obligation for Council to work immediately, effectively and comprehensively to address climate change.
2. Council will work holistically to build resilience to the effects of climate change in a manner that sustainably balances economic, social and environmental outcomes. Council will provide comparative costs where identify beneficial opportunities for mitigation of, and adaptation to climate change that will provide beneficial economic, social and ecological enhancement outcomes.
3. A precautionary approach must be applied in planning for and mitigating climate change. The intensity of impacts and their timing are uncertain, and could be worse or occur sooner than indicated by current projections.
4. Council has a key role to play in reducing its own emissions. It must also ensure that the natural and built assets and services it is responsible for are resilient to the predicted impacts of climate change.
5. In reducing its emissions, Council will strive to preferentially:
  - (i) reduce energy use
  - (ii) generate renewable energy
  - (iii) source energy from low emission sources
  - (iv) offset the greenhouse gasses released through energy use in accordance with best management practice and accredited schemes.
6. Council will provide practical assistance to the community to reduce emissions, and guide grassroots adaptation actions to improve people's resilience to the impacts of climate change.

Council will share information with the community to:

  - (i) educate the community about climate change impacts and risks
  - (ii) highlight the importance of reducing emissions and adapting
  - (iii) report on investment, trade-offs, actions and outcomes in efforts to mitigate and adapt to climate change.
7. The environment of the Tweed Shire is of international significance and particularly vulnerable to climate change. Special attention needs to be given to the many species that will struggle to tolerate more extreme climatic conditions. Governments at all levels have an obligation to protect and enhance this global asset.
8. Council alone does not have the influence, control or resources required to reduce emissions and comprehensively adapt the Tweed Shire to climate change. Council will partner with other government agencies, industry, business and communities on climate change mitigation and adaptation actions.
9. Council will implement an effective and progressive response to climate change using reputable scientific knowledge and technologies. Risk assessment, monitoring, evaluation and reporting will inform our progressive implementation.



## ObjectivesGoals

The ~~goals~~ objectives of this Policy are to:

1. Set Council's targets for emissions reduction.
2. Ensure that Council's response to the impacts of climate change are identified, prioritised and communicated clearly.
3. Guide adaptation of Council's services and infrastructure to the impacts of climate change.
4. Commit to working with our community, business sector and other government agencies to build awareness of, and resilience to, the impacts of climate change.

## Emissions Reduction Target

Council will strive to reach net zero emissions from its operations by 2030, and will support community efforts to reach net zero emissions over the same period.

## Key priorities for Council

1. Reduce Council's contribution to climate change by reducing greenhouse gas emissions from transport, electricity use, resource consumption and waste management- including an independent review of Council's emissions sources, analysis and costed options to meet net zero emissions from Council's operations by 2030.
- 4.2. Demonstrates sustainability to the broader community through Council's own development/construction/maintenance activities.
- 2.3. Secure the Tweed Shire drinking water supply for the near term and future generations.
- 3.4. Embed climate change-related risks within Council's Integrated Planning and Reporting Framework.
- 4.5. Establish a Climate Change Action Plan that outlines a net zero emissions mitigation and adaptation management strategies for all Council services the Tweed Shire, inviting input from all stakeholder groups needed to achieve the strategy.-
- ~~5. Develop a Council operations and community wide net zero emissions strategy for the Tweed Shire, including analysis and cost options to meet net zero emissions from Council's operations by 2030.~~
6. Use projections of the impact of climate change on tidal inundation and coastal erosion to undertake asset vulnerability assessments and plan for predicted coastal hazard impacts on development and infrastructure.
7. Utilise the land-use planning and development assessment system to identify options for mitigation of climate change, and adaptation to hazards such as heat and tidal inundation.
8. Support systems for emergency preparedness, communication, response and recovery activities, including rapid assessment and restoration of key public assets following natural disasters.

9. Undertake a comprehensive climate change risk assessment process to identify and assess the risks that climate change poses to council assets, operations and services and prioritise risks that require further action as a basis for decision-making and planning.
10. Manage climate change-related risks and opportunities in the life-cycle analysis of all new and existing assets and services.
11. Work with other agencies to support and advocate for initiatives that acknowledge and act on climate change-related threats to public health and the systems that enhance health as a state of physical, mental and social wellbeing of our community, as well as limiting exposure to diseases and environmental hazards (contaminated water, viruses, heat, chemicals and dust).
12. Reduce community waste to landfill by supporting beneficial waste avoidance, resource reuse, reduced consumptioning less, and by processing and diverting material for recovery and reuse.
13. Assess and address the impacts of climate change in biodiversity conservation by increasing native vegetation cover and wildlife habitat connectivity, and improving ecosystem health across the Tweed Shire.
14. Support initiatives and education programs to enhance the Tweed community's understanding of and resilience to climate change-related risks; and provide directions for sustainable climate change mitigation and adaptation activities.
15. Advocate to the NSW and Federal Government for improved legislation and funding to address climate change and investigate additional or alternate revenue sources to assist councils in climate change adaptation.
16. Investment of Council surplus funds in response to climate change is addressed in Councils Investment Policy.

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## Key definitions

**Adaptation:** Actions to prepare for the impacts of climate change.

**Carbon sequestration:** a natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form.

**Climate change:** A change of climate over an extended period, typically decades or longer, which is caused by human activity or natural climate variability, and has direct and indirect impact on the environment, community, economy and Council operations.

**Council:** Tweed Shire Council

**Emissions:** The release of greenhouse gases and/or their precursors into the atmosphere.

**Greenhouse gases:** Gases in the atmosphere, both natural and those caused by human activity, that absorb and re-emit infrared radiation.

**Mitigation:** Actions to reduce levels of greenhouse gas emissions, or increase sequestration of atmospheric carbon.

**Net-zero emissions:** Also known as 'carbon neutrality' or 'climate neutrality'. Occurs when the level of greenhouse gases emitted into the atmosphere from human activities equals the level 'removed' from the atmosphere. We become carbon neutral or reach net-zero emissions by reaching an equal balance between the greenhouse gases emitted and the greenhouse gases removed.

**Resilience:** Where individuals, communities, organisations, businesses and systems survive, adapt and grow, even in the face of acute shocks such as heat waves, floods and chronic stresses such as climate change.

## Key legislation

Biodiversity Conservation Act 2016

Coastal Management Act 2016

Clean Energy Act 2011

Environmental Planning and Assessment Act 1979

Environmental Protection and Biodiversity Conservation Act 1999

Local Government Act 1993

National Greenhouse and Energy Reporting Act 2007

## Related Council and other documentation

Tweed Shire Council Local Environmental Plan 2012

Tweed Shire Council Local Environmental Plan 2014

Tweed Shire Council Community Strategic Plan 2017-2027

Tweed Shire Council Renewable Energy Action Plan 2017

New South Wales Office of Environment and Heritage North Coast Enabling Regional Adaptation 2019

New South Wales Climate Change Policy Framework 2016

New South Wales Net Zero Plan Stage 1: 2020 - 2030

### Review period

This policy will be reviewed, at a minimum, within 12 months of each local government election period.

### Version control

Version History		
Version #	Summary of changes made	Date changes made
1	<i>Adopted by Council</i>	<i>dd/mm/yyyy</i>