



Waimate District

# Climate Resilience Strategy *Pathway*

March 2024

Summary outline of the Waimate District Council's Climate Resilience Strategy pathway - why and how we're doing it.



# Climate change context and our response

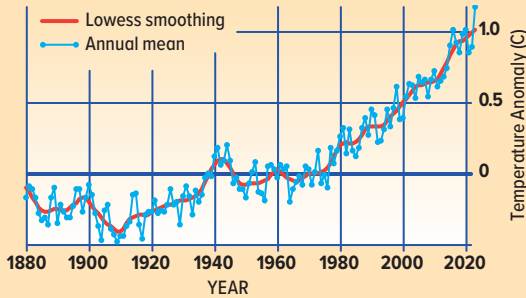
## GLOBAL CONTEXT

Our climate is changing. It is unequivocal that human-induced greenhouse gas emissions are warming the global climate system (IPCC, 2019).

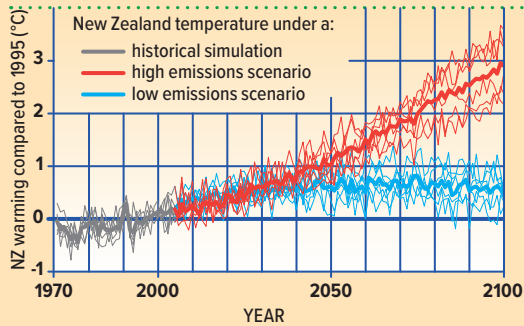
While the Earth's climate has changed throughout its history, the current warming is happening at a rate not seen in the past 10,000 years.

Eighteen of the 19 warmest years since 1951 have all occurred since 2001 (NASA).

Source: <https://climate.nasa.gov/vital-signs/global-temperature>



## NATIONAL CONTEXT



Climate change is already affecting New Zealand. Over the past century, temperatures have increased, glaciers have melted, and sea levels have risen. Such changes will continue and their impacts will increase. This will

have far-reaching consequences for people, the natural and built environment, the economy and governance.

Source: MfE National Climate Change Risk Assessment for New Zealand

Even under a global low emissions scenario, the temperature will increase in New Zealand and the sea level will rise.

Under the Paris Agreement, New Zealand has set a Nationally Determined Contribution (NDC) of reducing net emissions by 50 per cent below gross 2005 levels for the period 2021–30.

Source: <https://environment.govt.nz/assets/Publications/Files/climate-projections-snapshot.pdf>

## CANTERBURY CONTEXT

### Future high impact weather in Canterbury

Key: ☀️ 10 days 🌾 5 days ☁️ 10% ❄️ 10 days 🌊 0.1m

	Hot weather	Dry days	Increased winter rainfall	Cold days (frosts)	Sea level rise
<b>2100 RCP8.5</b>	+ 1.5 to 3.5°C 20 to 60 more hot days	-15 to 20 additional dry days	15 to 40% rainfall increase (eastern, western and southern parts of the region)	up to 70 fewer frost days	0.8m MSL increase
<b>2100 RCP4.5</b>	+ 0.5 to 2°C 10 to 20 more hot days	-10 to 15 additional dry days	up to 25% rainfall increase	up to 50 fewer frost days	0.5m MSL increase
<b>2050 RCP8.5</b>	+ 0.5 to 1.5°C 10 to 40 more hot days	-5 to 10 additional dry days	up to 15% rainfall increase	up to 20 fewer frost days	0.3m MSL increase
<b>PRESENT DAY</b>	10 to 14°C 10 to 30 more hot days (above 25°C)	up to 300 dry days Canterbury average	mean winter rainfall varies from 50 to 1000mm	50 to 150 frost days per annum (minimum temperature 0°C or lower)	represented by mean high water spring tide 10%

Source: Summary of climate hazards in the Canterbury Region (Macara et al., 2020)

### Summary of climate change projections for Canterbury by 2100



The sea level is projected to rise by about 0.8m above present day levels.



Drought potential is likely to increase across most of Canterbury.



Wind is likely to increase in speed, and winter and spring are likely to be windier.



Wildfires will become more likely as hotter, drier summers occur. Rural areas will be more highly exposed.



Hot days are those over 25°C. It is projected that there will be between 20 and 60 more hot days annually by 2100.



An increase in winter rainfall of 15-40% is expected in the eastern, western, and southern parts of the region. Winter rainfall has the potential to be more strongly associated with storm events.



Extreme weather events (e.g., severe storms) are likely to happen more often.



As temperatures rise, there will be less snow days across the region.



Summer rainfall is projected to increase up to 20% in the inland Canterbury Plains. It is projected to gradually reduce towards coastal areas, with a decrease of 5-15% in the area around Christchurch.



It is projected that there will be 20-50 fewer cold days per year, where the temperature is at or below 0°C.



Our annual mean temperature is set to rise by 1.5-3.5°C. Overall, our maximum daytime temperatures will be up 2-5°C. Canterbury's alpine and subalpine areas could be 5-6° warmer.

Source: Canterbury-Climate-Change-Risk-Assessment-Summary-Report-2022.pdf



[waimatedc.govt.nz/climate](https://waimatedc.govt.nz/climate)



**Waimate**  
District Council

## WAIMATE DISTRICT CONTEXT

### Potential impacts for our district

- Agriculture/horticulture will be different.
- Coastal erosion.
- Contamination of soil.
- Damage to the transport network and infrastructure.
- Drought potential is likely to increase.
- Extreme weather events (e.g., severe storms) are likely to happen more often.
- Increased sedimentation.
- Slips and floods.
- Threat of new agricultural pests.
- Threat of vector diseases.
- Water supply inconsistency.
- Wildfires will become more likely.
- Winter rainfall has the potential to be more strongly associated with storm events.

### Significant risks to the community

- Burden of rates for the district in meeting both infrastructural and statutory requirements.
- Increasing risk of fire.
- More civil defence emergencies.
- Public health risks.
- Risks to the district's economy.

### Significant risks for Council

- Affordability of adapting to climate change.
- Cost to protect/shift/future-proof infrastructure and assets.
- Increasing insurance costs and potential inability to insure some key assets.
- Large/long term financial risks.
- Reputational risks.
- Vulnerable infrastructure.
- Vulnerable parks and reserves.

## Waimate District Council's statutory obligations

Council has obligations and responsibilities under the Resource Management Act, the Local Government Act, the Civil Defence Act, Soil Conservation and Rivers Control Act, Building Act and particularly the Zero Carbon Amendment Act 2019.

Our policies must be consistent with Canterbury Regional Council's Regional Policy Statement relating to hazards and biodiversity, water quantity and quality.

### WAIMATE DISTRICT COUNCIL RESPONSE TO DATE

Council has acknowledged in their Long Term Plan (LTP) that Climate change is one of the biggest challenges of our time.

We have begun a community consultation process to develop a district wide strategy written by the community, for the community which is embedded in robust climate science and policy.

An initial Green House Gas emission profile for council was completed for 2018/19.

### DEVELOPING THIS STRATEGY

Work to date includes:

Appointing a part-time Climate Change Officer to oversee the development of this strategy.

An online district wide survey in December 2023.

Hosting two climate change information evenings in March 2024 focusing on Climate Science, youth, cultural and economic perspectives.

Establishing seven Action Plan workshops for community engagement throughout 2024.

Creating a Climate Change tab on our council website.

Creating education materials/links.

Working and collaborating with our neighbouring councils (Waitaki / Mackenzie and Timaru) and schools.

Being an active participant in the Canterbury Climate Partnership Plan reference and working groups.

Completing our second council carbon footprint assessment for 2022/23.

## Potential legal considerations

Lenders and insurers are making financial decisions based on climate-related financial disclosures.

In New Zealand the government has made climate-related financial disclosure mandatory for some large financial market participants. The requirement applies to large publicly listed companies, insurers, banks, non-bank deposit takers and investment managers.

This information is being used by financial institutions such as banks and insurance companies to inform their decisions.

Potentially we could face legal challenges to our response to climate change – for example, challenges relating to the zoning of land or management of our assets.

We must be clear in identifying and documenting the climate change assumptions that we adopt. The actual and potential impacts we identify may need to stand up in court.



## Objectives and guiding principles of our strategy

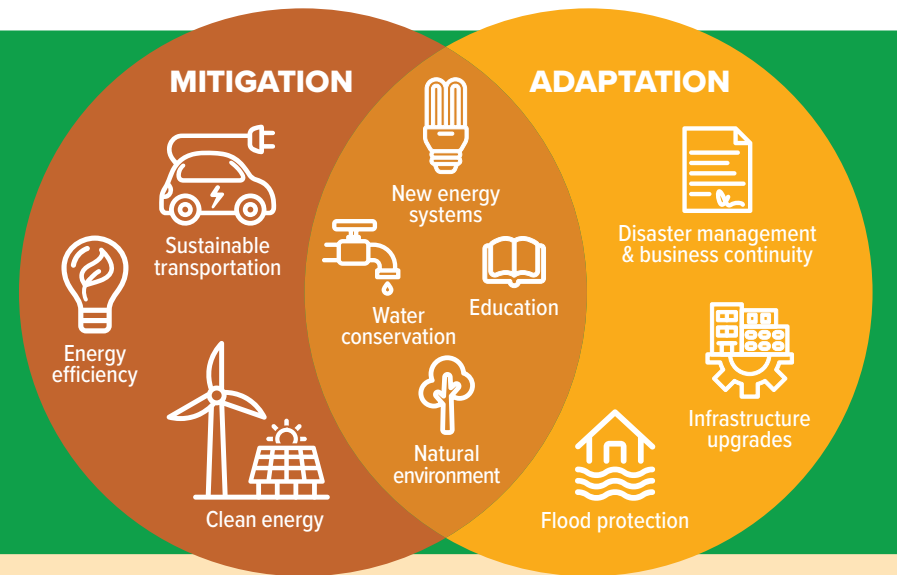
### OBJECTIVES

1. **Net zero emissions** for the district.
2. Build **climate resilience** through a just and equitable intergenerational approach to planning and preparing for the impacts of climate change.
3. We factor in **intergenerational sustainability** of our natural environment, economy, society and cultural wellbeing.

### WAIMATE DISTRICT COUNCIL CLIMATE RESPONSE STRATEGY DRAFT PRINCIPLES

1. **Be proactive:** we will model strong leadership to address climate challenges and opportunities for the district.
2. **Think intergenerational:** we will take an intergenerational perspective that is inclusive of short, medium and long term planning that spans political, and financial cycles to plan for a changing climate.
3. **Seek opportunities and maximise co-benefits:** we will choose adaption actions that achieve complementary goals while avoiding maladaptation and support positive and innovative ideas that contribute to climate solutions for the district.
4. **Promote equity and inclusiveness:** we will prioritise helping people, places and infrastructure that are most vulnerable to climate impacts, while building adaptive capacity for the whole district.
5. **Be collaborative:** we will work in partnership with the local Runanga, the agriculture sector, community groups, businesses, households, youth; local, regional and central government organisations to build on existing knowledge to develop and implement actions.
6. **Climate change adaption, mitigation and transition:** we will embed climate resilience as a core consideration in all decision making.
7. **Make well-informed decisions:** we will base our climate change actions on a foundation of sound evidence including science, data, local knowledge and matauranga Maori.
8. **Kaitiakitanga and working with nature:** we will uphold the principle and duty of kaitiakitanga (guardianship). Our policies, planning and regulation should protect, enhance, and restore nature, and any impacts on nature should be mitigated as much as possible.
9. **Be transparent:** we will be open about what we are doing and how we are tracking to help people shape and understand our decisions.
10. **Promote well-being:** our climate actions will improve environmental, social, economic and cultural well-being.

### The two types of response to climate change



### MITIGATION Reducing or preventing the emission of greenhouse gases

The target Paris Agreement target is to limit global temperature increase this century to between 1.5 - 2C above pre-industrial levels (circa 1880). Global temperatures are already between 0.8-1.0 C above this level, so the window to respond is narrowing rapidly.

In line with the Paris agreement, the Climate Change Response (Zero Carbon) Amendment Act 2019 (ZCA) sets targets for New Zealand:

To reduce emissions of greenhouse gases (except biogenic methane) to zero by 2050 and to reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030 (six years' time ahead of 2024).

### ADAPTATION Adapting to climate change

Climate change poses many adverse threats however these also provide positive opportunities. Our challenge is to adapt to these changes. The purpose of this strategy is to operationalise climate change adaptation so it becomes 'business as usual' through our plans and strategies including the Long Term Plan, the District Plan, our Infrastructure Strategy, Asset Plans and the Financial Plan etc.

### Adaptation and mitigation activity can be linked.

Our actions to adapt to climate change can be linked to climate change mitigation. For example, planting trees on marginal land to help reduce erosion will also assist mitigation through increased carbon sequestration. Conversely, some major adaptation projects may mean an increase in Council's carbon footprint, so this will need to be considered in our decision making where we will be expected to reduce this footprint.





## Working together – our four key focus areas

### Responding to climate change

	Mitigation	Adaptation
Council	<p>'Walking the talk'. Council reduces its carbon emissions.</p>	<p>'Being Proactive' by modelling strong leadership to address climate challenges and opportunities for the district.</p>
Community	<p>'Reducing our carbon emissions together' as we work towards a district wide carbon zero by 2050.</p>	<p>'Developing district wide resilience' by assisting our community to prepare and adapt to the impacts and opportunities of climate change.</p>

*"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make"*

Dame Jane Morris Goodall

*"Climate change is sometimes misunderstood as being about changes in the weather. In reality, it is about changes in our very way of life"*

Paul Polman  
Former CEO Unilever

*"Sometimes the riskiest decision you can make is to do nothing"*

Richard Branson

## Our seven action plans – based on our draft aims and guiding principles with some potential sub-action points

### TRANSPORT

1. Reduce reliance on cars and support people to walk, cycle and use public transport.
2. Rapidly adopt low emissions vehicles.
3. Begin work now to decarbonise heavy transport and freight.

### WATER MANAGEMENT

1. Reduce the vulnerability of assets exposed to climate change.
2. Ensure all new infrastructure is fit for a changing climate.
3. Use renewal programmes to improve adaptive capacity.

### LAND USE & THE BUILT ENVIRONMENT

1. Land use activities are resilient to anticipated climate change impacts.
2. Improve the resilience of community infrastructure.
3. Reduce greenhouse gas emissions as a result of land use and building activities.

*"We have a single mission: to protect and hand on the planet to the next generation"*

François Hollande  
Former president of France

### CARBON SEQUESTRATION AND NATURAL RESTORATION

1. Support the right mix, level and location of afforestation.
2. Encourage native forests as long-term carbon sinks.
3. Maintain existing forests.
4. Grow the forestry and wood processing industry to deliver more value from low carbon products.
5. Improve fire-management planning.
6. Support working with nature to build resilience.

### WASTE & CIRCULAR ECONOMY

1. Enable households and businesses to reduce organic waste.
2. Increase the amount of organic waste diverted from landfill.
3. Reduce and divert construction and demolition waste to beneficial uses.
4. Explore bans or limits to divert more organic waste from landfill.
5. Increase the capture of gas from landfills.
6. Improve waste data and prioritise a national waste licensing scheme.
7. Commence a Circular Economy and Bioeconomy Strategy.

### EDUCATION & EMPOWERMENT

1. Build the Council's organisational knowledge about climate change, mitigation, and adaptation.
2. Collaborate with stakeholders, partners, and the community, for a unified approach to the climate crisis.
3. Build community awareness about matters relating to climate change, including the Council's response.

### LEADERSHIP & COLLABORATION

1. Align the Council's culture, key documents and decisions with our climate change principles.
2. Seek out co-benefits through collaboration with district wide entities.

*"When it comes to climate change we are in the beautiful position of knowing what our choices are. We can feel a real sense of opportunity about the future - what role our science can play, and how people can contribute"*

Dr Sam Dean  
Principal Scientist, NIWA



## Aligning this strategy with other key documents, plans and timetables

### ZERO CARBON ACT



Climate Commission reports on progress and Government must respond. Commission delivers advice on next emissions budget and reduction plan

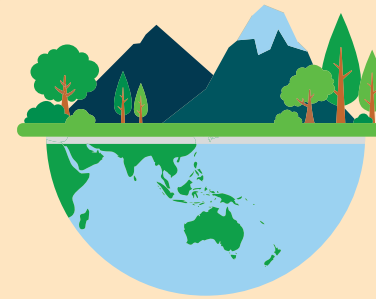
Commission delivers second national climate change risk assessment

### CANTERBURY CLIMATE PARTNERSHIP PLAN PROJECT TIMELINE 2024

When	What
February 2024	Finalise actions
March/early April 2024	Drafting and designing the plan
March/April 2024	Canterbury councils are briefed and have the opportunity to provide feedback on actions by end of April
Early June 2024	Reference Group meeting to endorse plan
June 2024	Canterbury councils are briefed and provided opportunity to feedback on the draft Plan by end of June
July/August 2024	Final CCPP endorsement
29 July 2024	CEF endorsed the Plan
30 August 2024	CMF endorsed the Plan
August/September 2024	CCPP launch, implementation of comms plan, another round of council briefings for information (?) + implementation

### References

- National Adaption Plan:** <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/adapting-to-climate-change/national-adaptation-plan/>
- Emission Reduction Plan:** <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan>
- Canterbury Climate Risk Assessment:** <https://www.canterburymayors.org.nz/canterbury-climate-change-risk-assessment-feb-2022/>
- Mandatory climate-related disclosures:** <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/>



## Waimate District Climate Resilience Strategy

### Action Plan Workshops

Waimate Event Centre, Paul Street, Waimate | 6pm

Transport	Tuesday 2 April 2024
Water Management	Tuesday 14 May 2024
Land Use and the Built Environment	Tuesday 25 June 2024
Carbon Sequestration and Natural Restoration	Tuesday 6 August 2024
Waste and Circular Economy	Tuesday 17 September 2024
Education and Empowerment	Tuesday 29 October 2024
Leadership and Collaboration	Tuesday 10 December 2024

Mid 2025 Draft Strategy ready for Council consideration and eventual integration into LTP



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