



Kaipara te Orangakui • Two Oceans Two Harbours

Kaipara Ki Tua Climate Smart Strategic Framework

Manaaki whenua, Manaaki tangata,
Me haere whakamua



Mayor's foreword – Growing a better Kaipara

Our home is changing. Kaipara's climate is changing. Average temperatures are rising, both in the air and the water. Rainfall patterns are shifting, and recent-year trends show Pouto and the Oneriri Peninsula west of Kaiwaka have the lowest rainfall levels in Northland. There are increasing drought conditions, but also stronger storms and heavier rainfall in shorter amounts of time. The chemical balance in the seas and oceans are shifting and growing more acidic. Sea levels are predicted to increasingly rise, a new challenge for communities here between the two oceans and two harbours of Kaipara District.

These changes are predicted to have big impacts on the health and wellbeing of Kaipara people and on Kaipara's land and waters. Within these changes and their challenges, there are also opportunities to 'Grow a better Kaipara.'

'Growing a better Kaipara' means safeguarding the future for our children and grandchildren. Kaipara is an important part of Aotearoa New Zealand. The actions we may take now can mean the world for Kaipara's future generations. While there are many things that are still uncertain with climate change, we know enough to act. Now is the time to start.

Kaipara District Council's 2021-2031 Long Term Plan has set new community outcomes, one of which is being Climate Smart. To meet a Climate Smart outcome, Council commits to do our part in the transition to a fair, low-emissions and resilient future.

To achieve this outcome Council commits to the following:

- strategic, and cohesive decisions that lower emissions and grow Kaipara's resilience:
- understanding climate change risk and reducing its impacts through good community planning:
- climate change response and action across our work and in the services we provide:
- organisation targets and emissions reduction pathways aligned with national emissions targets.

Council will help lead the way, support our communities, and work in partnership with mana whenua here towards a Climate Smart future.

'Kaipara Ki Tua' means Kaipara into the future. Council has named this document Kaipara Ki Tua - Climate Smart Strategic Framework because it lays out Council's path towards the Climate Smart outcome. It frames how the main climate change work can meet our commitments and shows how the proposed work fits together.

Kaipara's transition to being Climate Smart, to a fair, low-emissions and resilient future, will be a journey and a learning process.

I believe that Kaipara communities have the strength, knowledge and courage to embrace the opportunities and challenges ahead. Doing this well can enhance the promise of abundant wellbeing that's in our "Kaipara te Oranganui" brand position. Together we are making a start from here.

The longest journey begins with the first step. This is ours. Kaipara Ki Tua, we're on our way.

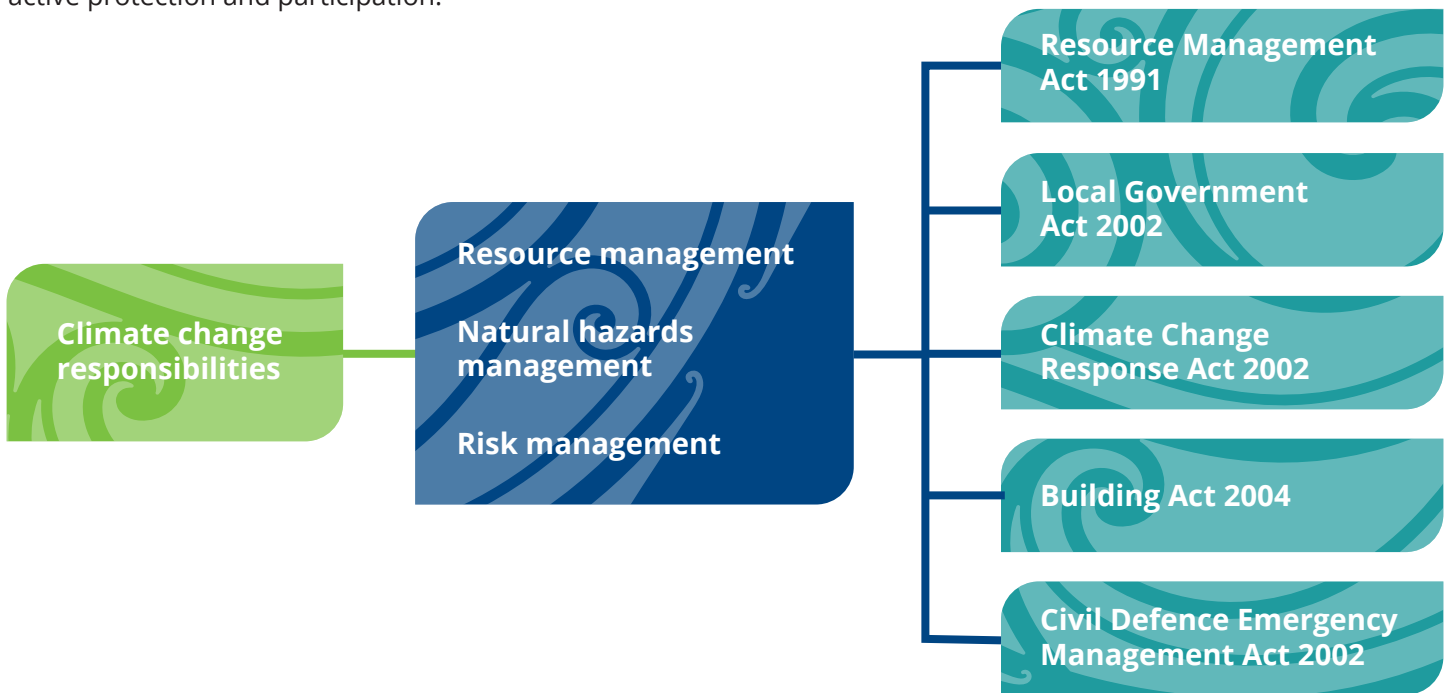
Dr Jason Smith
Mayor, Kaipara District

Background

Council's climate change responsibilities

Council has many climate change responsibilities. Our main responsibilities come from our resource management, natural hazards and risk management duties. These are woven into much of what we do and are underpinned by central government legislation.

Council also has responsibilities to Mana Whenua in the ways we carry out climate change work. Our responsibilities come from both Te Tiriti o Waitangi and the Treaty of Waitangi, recognising that there are important differences between the English Treaty and te Reo Māori Tiriti in how we understand and apply the principles of partnership, active protection and participation.



How did we get here?



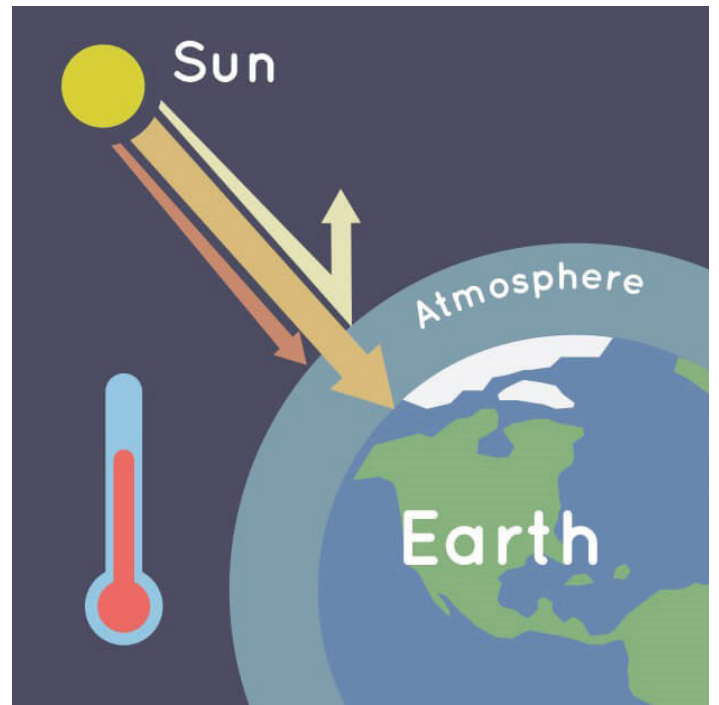
What causes climate change?

Our planet's atmosphere is made up of oxygen, nitrogen, and a small percentage of greenhouse gases (GHGs), such as carbon dioxide, methane and nitrous oxide. GHGs make life on Earth possible because they trap heat from the sun. Without them too much heat would escape, and the surface of the planet would freeze.

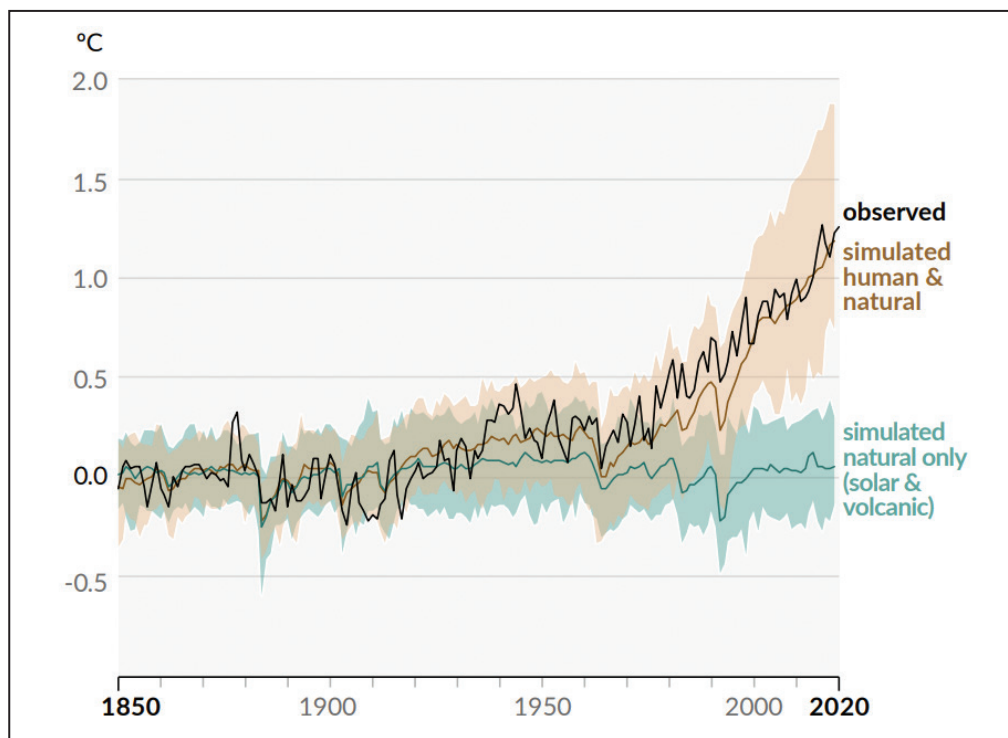
But increasing the concentration of GHGs in the atmosphere causes the Earth to heat more and temperatures to rise. This is global warming.

Decades of evidence shows that the climate is warming due to human activity. Burning fossil fuels for coal, oil and gas, farming intensification and deforestation are the main causes. The graph below shows that Earth's average temperature is rising and that temperatures are now rising faster than before.

Over the next 100 years, temperatures will continue to rise at least 1.5°C above 1880's average. Whether temperatures rise more than that is up to global action to cap and reduce GHG emission.



Source: NASA, 2021



Change in average temperature with human activity and natural factors vs change in average temperature with only natural factors (1850-2020)

Source: IPCC AR6 Climate Change 2021



While a few degrees may not sound like much, even just a 0.5°C shift can mean big changes for the climate. For perspective, there is only 4°C degrees difference between our current climate and the Ice Age.

Kaipara's changing climate

Rising temperatures do not mean nicer weather. Instead, the weather will become more extreme and more unpredictable. A changing climate affects our economies, our built environments, our cultures, our health, our lifestyles, and the ecosystems and natural world that surrounds us. We are seeing and experiencing these effects now. Generations to come will continue to feel the impacts.

For Council's work, a changing climate will impact services to our communities. Increases in extreme

weather and sea level rise (SLR) will impact our stormwater drainage schemes, our flood management systems, our roading and pathways, and our water supply schemes. It may also impact our domains, reserves, and parks.

Below are some of Kaipara's projected climate change impacts and implications.

Keep in mind that these are not all the impacts and implications. They represent what a changing climate could mean for Kaipara environment and communities.

KAIPARA'S CHANGING CLIMATE - SOME IMPACTS AND IMPLICATIONS



Permanent sea level rise

- 0.3m between 2045-2060
- Damage to houses, buildings and property.
- Risk to insurability and increase costs to insure.
- Reduced ability to develop property and restrictions on land use.
- Damage to coastal ecosystems, including dune habitats and nesting sites



Average temperature will rise

- 0.5°C to 1.5°C warmer by 2040.
- Up to 3.5°C warmer by 2090.



Cyclones

- Increase in severity (and possibly frequency) of ex-tropical cyclones reaching Northland.



More heatwave days

(≥ 3 consecutive days with max temperatures > 25°C)

- 10-20 more heatwave days by 2040.
- Risk of heat stress negatively affecting the health of people, animals and plants.
- Restrictions on water use.
- Increased risk of wildfire - longer spells of extreme fire hazard.



Extreme rainfall

- Increase in intensity of extreme, rare rainfall events.
- Increased land instability and risk of slips.
- Increased freshwater flooding.



Ocean chemistry and heating

- Ocean acidification.
- Increased sea temperatures and ocean heatwaves.
- Altered marine ecosystems, particularly affecting hard shelled species.
- Increase in marine pests.
- Impacts on aquaculture & fishing industries (i.e. oyster farming).
- Changes to the range of species, location and abundance of fish and sea birds around NZ.
- Possible decline in fisheries.



Longer dry periods

- More intense and frequent drought (regional increase in frequency by up to 10% by 2090)
- 4 - 15% decrease in rainfall by 2040

Mitigation and adaptation

Mitigation and **adaptation** are the two main kinds of climate change work.

Mitigation is reducing our greenhouse gas footprint by finding different ways of functioning as a Council and by encouraging carbon removal / sequestration. It means supporting and enabling community to do the same. For Council, this could look like reducing our office waste or providing resources to help local businesses measure their emissions.

Adaptation is increasing our resilience and ability to thrive in a changing environment. Adaptation means planning for how we grow, develop, and make decisions on how best respond to climate change. Adaptation allows us to look for opportunities to thrive as we face the challenges. For Council, this could look like using climate change projections to help make decisions on locations and designs of future infrastructure such as parks, roads, stormwater drains or community buildings.

Climate change work is diverse. Beyond Council's work, there are many ways to do mitigation and adaptation.

We encourage Kaipara residents and communities to explore these options and get involved.

Find what inspires and is best for you!



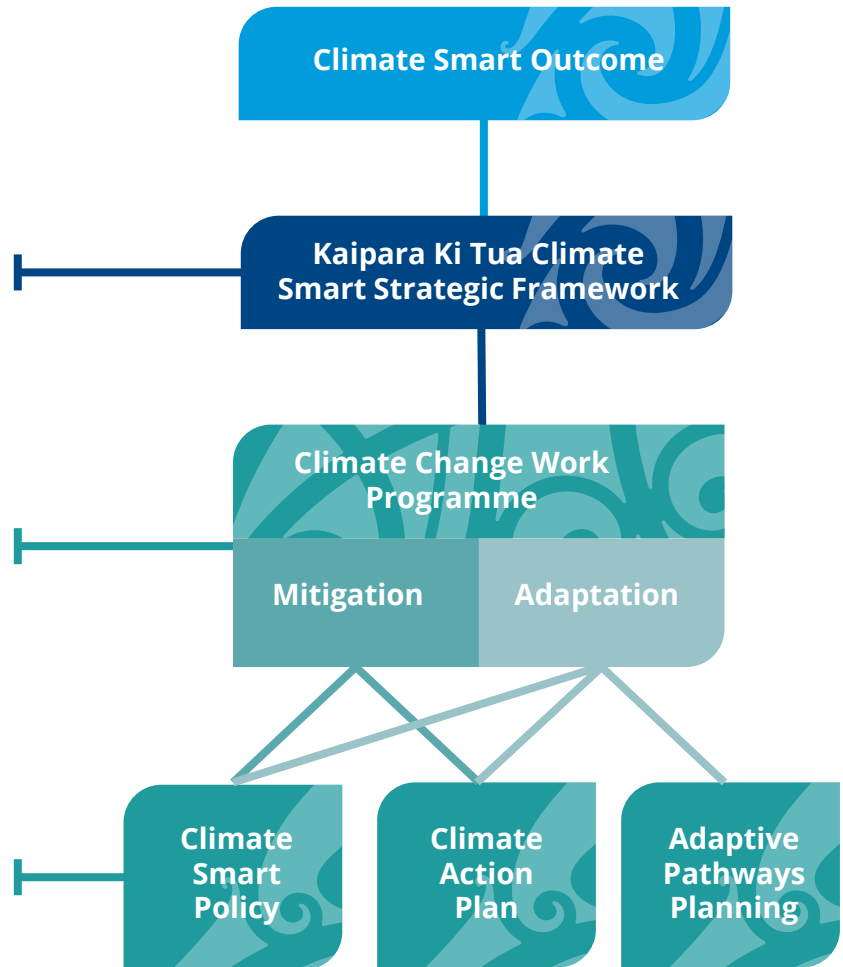
Towards Climate Smart

This is how Council organises our climate change work to achieve a Climate Smart outcome.

Kaipara Ki Tua Climate Smart Strategic Framework guides the Climate Change Work Programme.

The Climate Change Work Programme is made up of mitigation and adaptation work.

Mitigation and adaptation are covered across three distinct work streams: Climate Smart Policy, Climate Action, and Adaptive Pathways Planning.



Council Goals

Council aims to meet these goals in our climate change work.



Council works with Kaipara communities towards a collective resilient and adaptive future.



Council addresses climate change impacts and implications for our resources, assets, and services.



Council identifies, discloses, and reduces its own greenhouse gas emissions in line with the national emissions reduction target.



Council supports communities and businesses to lower their emissions.

Council Principles

These principles guide Council's climate change work.



ACTION Mahia

Council will act now. We will be part of Aotearoa New Zealand's solution. We will lead the way in our District and Region. We will take a long-term and intergenerational approach.



PARTNERSHIP Whanaungatanga

Council will honour Te Tiriti o Waitangi/Treaty of Waitangi. We will recognise our Mana Whenua partners' right to exercise rangatiratanga and kaitiakitangi in mitigation and adaptation.



INTEGRATION Whakakotahi

Everyone at Council has a role to play. We will strategically consider climate change in everything we do.



COLLABORATION Mahi Tahī

We will collaborate across Council and with other councils and stakeholders across the region and the country to make the best use of our resources and to align where possible.



EMPOWERMENT Whakamana

We will work with our communities. We will advocate for their needs. We will be transparent.



BEST-PRACTICE Mahi Tika

Council will take an evidence-based approach. We will continuously learn and develop with our communities.

The Climate Change Work Programme

GOAL
1 

GOAL
2 

GOAL
3 

GOAL
4 



Te Tiriti o Waitangi \ Treaty of Waitangi

Climate Smart Policy
Policy to set how Council understands climate change and when to consider climate change.

Climate Action Plan
Actions within Council and across the District to reduce emissions and increase resilience and sustainability.

Adaptive Pathways Planning
Working with communities to make decisions on adaptation for their places.

How will Council communicate this work?
Council wants to improve our communication around climate change.
Council wants to increase climate change tools and resources for community.
We will do this through

- Transparent reporting
- A climate change e-hub (online learning centre for climate change)
- Community engagement events (both in-person and online)
- Support community-led climate change and sustainability initiatives

Central government legislation

Climate Smart Policy

The Climate Smart Policy sets standards and guidelines for how Council understands climate change and applies climate change considerations in our work and decisions.

Key Goals



Key Principles



Who is responsible?

Design and develop:

- Policy, Strategy and Governance
- Infrastructure

Implement:

- All of Council

When will it happen?

2021-2022

- Design the policy and test with staff.
- Engagement and feedback on the policy.
- Adopt the policy.

2023-2025

- Monitor success in applying the policy.

2025+

- Review by cycle as set in policy.

How will we know it is working?

- The policy will establish monitoring and reporting requirements. These may be new requirements or integrated into existing reporting mechanisms, e.g. climate change disclosure section in the Annual Report.
- Set staff and Elected Member uptake goals.
- Survey for staff feedback on clarity and applicability.
- Seek community feedback through Customer Satisfaction Survey.

Climate Action Plan

The Climate Action Plan commits Council to short, medium- and long-term actions to reduce emissions and grow resilience. Short term actions will be operative, focused on 'getting our own house in order'. Medium-long term actions will focus on bigger changes. These actions will be identified with the wider Kaipara community, Mana Whenua partners and Tangata Whenua.

Key Goals



Key Principles



Who is responsible?

Design and develop:

- Policy Strategy and Governance
- Mana Whenua Partners and Tangata Whenua
- Kaipara residents
- Community groups
- Local businesses
- Other key stakeholders

Implement:

- All of Council
- Wider Kaipara community

When will it happen?

2021-2022

- Council to adopt emission targets.
- 'Get our own house in order': Short term actions and emissions reduction opportunities identified.
- Council approves pathways to reduce emissions and short-term actions.
- Early community engagement and targeted workshops for medium-long term actions.

2023-2025

- Short term actions underway.
- Full engagement on medium-long term actions.
- Council approves medium-long term actions.

2025+

- Implement, monitor and review.

How will we know it is working?

Council owners and supporting stakeholders meet goals set for their action and report their progress.

They may report through an existing process, like a Council Meeting report or the Annual Report, or through a new climate change disclosure report.

Yearly GHG emissions footprint reports will show a reduction in Council's total emissions and emissions by activity. Council meets its emissions targets.

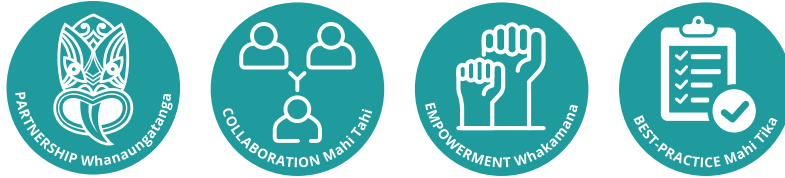
Adaptive Pathways Planning

Making decisions on adaptation with communities most at-risk to climate change impacts, particularly coastal impacts. Council will work alongside communities, Mana Whenua partners and key stakeholders to design and implement future pathways. Adaptive Pathways Planning is a part of Te Tai Tokerau Climate Adaptation Strategy.

Key Goals



Key Principles



Who is responsible?

Facilitate and resource process:

- Kaipara District Council
- Northland Regional Council

Participate and design:

- Community representatives
- Mana Whenua partners and Tangata Whenua
- Local businesses
- Additional key stakeholders

When will it happen?

2021-2022

- First priority location decided and early engagement underway.
- Pilot project underway.

2023-2025

- Pilot community adaptation plan adopted.
- Second priority location decided and project underway.

2025+

- Further communities identified.
- Community adaptation plans implemented.
- Second location Adaptive strategy / Community adaptation plan adopted.

How will we know it is working?

Two coastal areas will have community adaptation plans that show decisions supported by the wider community, Mana Whenua partners and Council.

Responsibility for strategy implementation will be clearly identified and integrated into District Plan, 2025-2035 Long Term Plan, Infrastructure Strategy, and other key planning documents.

Adaptive Pathways projects will match Te Tai Tokerau Climate Adaptation Strategy.

Moving forward together



COUNCIL

- Emissions targets adopted.
- Begin to develop Climate Action Plan.
- Adaptive pathways pilot decided.

- Climate Smart Policy adopted.
- Set Climate Action Plan goals and timeframes.
- Council approves Climate Action Plan short term actions
- E-hub online learning centre ready.

- Pilot Adaptive Pathways adopted.
- Council approves Climate Action Plan medium-long term actions.

- Full Climate Action Plan adopted.
- Short term actions monitored.
- Review climate change work programme for next LTP cycle.

- Continue adaptive pathways planning across Kaipara.
- Transition to medium and long-term actions.
- Review and monitor all aspects of work programme.

COMMUNITY

- Early feedback on climate change awareness and perceptions.
- Selected communities participate in Adaptive Pathways pilot.

- Possible feedback on Climate Smart Policy.
- Focus groups inform Climate Action Plan medium-long term actions.
- Selected communities participate and design Adaptive Pathways pilot.
- Learn about climate change at the e-hub online centre and provide feedback on the centre.

- District-wide feedback on Climate Action Plan medium-long term actions.
- Selected communities participate and design Adaptive Pathways pilot.
- Second series of communities participate in Adaptive Pathways project.

- Final, district-wide feedback on Climate Action Plan.
- Selected communities decide on Adaptive Pathways strategy.
- Second series of communities participate in Adaptive Pathways project.

- Community work towards Climate Action Plan medium-long term actions.
- Second series of communities participate in Adaptive Pathways project.

Connections and review

There is additional climate change work happening outside of the climate change work programme. This work is not directly a part of the climate change work programme, but it is connected and important. The table below summarises key work over the next three years and describes how Council will align.

Council work	Council owner	Years	How we will align
District Plan Review	District Leadership: Policy, Strategy and Governance	2021-2022	Outcomes, provisions, and rules will consider emissions and adaptation issues and consider future Adaptive Pathways decided strategies.
Flood management, stopbank and stormwater system improvements	Infrastructure	2021+	Adaptive Pathways projects will bring in flood management, stopbank and stormwater system improvements considerations. Adaptive Pathways decided strategies will actively inform future decisions on flood management, stopbank and stormwater system works.
Water supply connection improvements	Infrastructure	2021+	Business case and options analysis will follow Climate Smart Policy on climate change considerations. Adaptive Pathways decided strategies will actively inform future decisions on water connections.
Waste Minimisation Plan	Infrastructure	2021+	The Climate Action Plan will consider Waste Minimisation commitments and projects to ensure actions support and enhance Waste Minimisation.

Reviewing Kaipara Ki Tua

This is a living document. Council will adapt and adjust Kaipara Ki Tua as needed to meet evolving climate change legislation, terminology, best-practice work and scientific evidence.



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