

## Te Mahere Mahi mō te Huringa Āhuarangi

## Climate Change Action Plan

2024-26

Kia manawatoa a Te Moana-o-Toitehuatahi
Working towards a climate resilient Bay of Plenty



### Kōrero whakataki

Ko te huringa āhuarangi tētahi take taiao, pāpori, ahurea me te ōhanga. He tino whānui, he tino nui hoki tōna pānga – kāore i te mōhiotia te rahinga, whānuitanga hoki.

### Introduction

Climate change is an established environmental, social, cultural and economic issue. Its impact is at the same time far reaching and significant – and uncertain in terms of its scale and extent.

Climate change is a key priority for Council but, as with many organisations, the complexity, scale and significance of the issue means finding responses to the challenge is not easy. Local government has the added challenge that it is an organisation (itself) but has responsibilities and obligations to the community (others).



#### Me whakatūtuki te huringa āhuarangi e pā ana ki te:

- whakangāwari te whakaheke i ngā hau kati kōtuhi kei te hau takiwā; me te
- urutaunga e urupare ana ki ngā huringa kei te kite tātau ināianei, ā, ka pā mai tonu ahakoa ka heke haere pea ngā tukunga ā muri ake.

#### Action on climate change is needed both in terms of:

- *mitigation* reducing greenhouse gases in the atmosphere; and
- adaptation responding to the changes we are already seeing and will continue to encounter, even with a global reduction in future emissions.



# Tīaroaro Rautaki **Strategic Alignment**

Climate change is a priority for Toi Moana Bay of Plenty Regional Council as reflected through the enhanced focus on climate change in the new community outcomes and the establishment of a 'Climate Change Activity' for the Long Term Plan 2024-2034.

In 2017, we signed the New Zealand Local Government Leaders' Climate Change Declaration. This committed us to develop and implement ambitious action plans to reduce greenhouse gas emissions and support resilience within Council and for our local communities.

In 2019, we declared a climate emergency, committing to work with the community on transitioning to a low emissions future and adapting to a changing climate. We also adopted our first Climate Change Action Plan this same year.

This is now the third iteration of the Action Plan, with a revised climate change statement to reflect Council's new strategic direction, alongside an updated list of specific climate change workstreams and focus areas.

Under our Climate Change Activity, our work on climate change is co-ordinated through a dedicated programme, which brings together projects with a specific focus on climate change. These projects sit alongside the range of work we do across our Council services that has climate change implications, but where climate change is not the primary focus.

# Te Aronga Rautaki Strategic Direction

## The Council's new strategic direction is focused around five community outcomes:

- **1.** A healthy environment **2.** Future ready communities
- **3.** Connected and enabled communities **4.** Sustainable development
- 5. The pursuit of excellence

Our climate change work connects with a range of work across all five outcomes, but is primarily aligned with community outcomes 2 and 4 and their associated goals:

#### **Community outcome 2 - Future ready communities:**

- **Goal 5.** Communities are aware of and prepared for the impact of natural hazards and climate change.
- **Goal 6.** We will empower communities to make sustainable choices and transition towards a low emissions economy.
- **Goal 7.** We seek to provide nature based solutions as appropriate to enhance the environment and protect our communities.

#### **Community outcome 4 - Sustainable development:**

- **Goal 12.** We support development and growth that takes into account the four wellbeings of people and communities, the need to maintain and enhance the quality of the environment, and the reasonably foreseeable needs of future generations.
- **Goal 13.** Enable and advocate for climate resilient spatial plans that take a sustainable development approach.
- **Goal 14.** Regional infrastructure is resilient, efficient and integrated.







# Te whakatau whakatika āhuarangi Our climate change statement

Toi Moana Bay of Plenty Regional Council recognises the significant implications that climate change will have for the Bay of Plenty and the need for mitigation and adaptation actions locally and region-wide.

Following our declaration of a climate emergency in June 2019, we committed to working with our sectors and communities on transitioning to a low emissions future and preparing ourselves for the changing climate. Our Climate Change Action Plan and Work Programme guides our work in this area.

This Climate Change Statement outlines Toi Moana Bay of Plenty Regional Council's view of what needs to occur in our region. The Statement will inform and guide how we can work in partnership with Māori and support conversations around the regional climate change challenges.

#### **Our vision**

Bay of Plenty Regional Council strengthens the long-term resilience and sustainability of the BOP region through climate change action and awareness.

#### **Our objectives**

- **1.** Risks from climate change related impacts are managed and resilience is increased through consistent adaptation planning based on best scientific information;
- **2.** Community awareness of climate change mitigation and adaptation solutions increases, and organisations and individuals know what they can do to improve the long term resilience and sustainability of the region; and
- **3.** Bay of Plenty Regional Council greenhouse gas emissions reduce across all areas of influence, including its own operations, helping to create the conditions for a just transition to a smart, innovative, low emissions regional economy.



#### How we work:

- Show leadership in climate change response and take a regional approach where appropriate.
- Consider climate change in our decision making.
- Act proactively to address climate change risks and advocate for climate resilient and sustainable development.
- Raise awareness of climate change and its anticipated impacts, and empower communities to take action.
- Identify opportunities for nature-based solutions and enhancing biodiversity.
- Work innovatively, collaboratively and add value regionally.
- Put science based evidence front and centre.
- Value mātauranga and te ao Māori in our approach.

### **Our goals**



**1.** Bay of Plenty Regional Council is net zero emissions by 2050



**4.** Our BOP community is aware, engaged and resilient



**2.** Reducing regional greenhouse gas emissions



**5.** Economic transition is enabled



**3.** As a region we understand, are preparing for and adapting to a changing climate

## Ngā whainga **Our goals**

These goals guide our specific climate change actions. Their impact stretches across all five of our community outcomes, as set in our Long Term Plan.

E whakarārangi ana tā tātau Mahere Mahi mō te Huringa Āhuarangi i tā tātau urupare ki te huringa āhuarangi e pā ana ki ngā mahi mō te whakangāwari me te urutaunga.

> **Our Climate Change Action Plan outlines our** response to climate change in terms of actions around both mitigation and adaptation.





Goal 1

#### **Bay of Plenty Regional Council is net zero emissions by 2050**

- We identify and implement deliberate mitigation and insetting actions we can take as an organisation.
- Net zero emissions means that we will balance our organisational emissions (scope 1 and 2) with those removed from the atmosphere through sequestration activities, e.g. planting on Council-owned land.
- Our interim target of a 25% reduction in gross emissions by 2026-27 (relative to 2022-2023) supports us on our pathway to net zero.



#### Our Bay of Plenty community is aware, engaged and resilient

• People who are aware of climate change and its implications are more likely to engage in reducing emissions (mitigation) and planning to deal with the impacts of climate change (adaptation). To improve the long term resilience and sustainability of the region we have a role to play in taking the BOP on this journey.



Goal 2

#### **Reducing regional** greenhouse gas emissions

- We support a just transition to a smart, innovative, low emissions regional economy.
- We work with iwi, businesses and our communities to identify actions they can take to reduce emissions.
- We influence emissions across the region through provision of public transport and in spatial planning decisions.



Goal

• We support land use change innovation and adaptation along with waste and circular economy initiatives.

**Economic transition is enabled** 



#### As a region we understand, are preparing for and adapting to a changing climate

- We work to understand the risks climate change presents for our region and our communities.
- We support adaptation conversations across the region to help iwi, businesses and communities plan to adapt and protect what they value most.
- We look for opportunities for complimentary biodiversity and climate change actions.



## Ngā mātāpono arataki Guiding principles

The following guiding principles are used to help inform and enable consideration of climate change in our work across Council – both in terms of the impact climate change has on our work and the impact of our work on the climate.

#### Resilience

Resilience is about anticipating, preparing for, and adapting to climate change, strengthening the way people and systems cope with immediate climate impacts, as well as building capacity for learning and systematic change to prepare for the future.

#### What this means in practice<sup>1</sup>:

- Assess and understand the current and future risks by using two climate change scenarios at a minimum: the middle-of-the-road scenario (SSP2-4.5 or RCP4.5) and the fossil-fuel intensive development scenario (SSP5-8.5 or RCP8.5).
- For developments with a long timeframe (more than 100 years), use the upper-range fossil-fuel intensive development scenario (SSP5-8.5 or RCP8.5+). This is particularly important for longer-term coastal impacts.

#### **Climate resilient development**

This is about ensuring new development, redevelopment and investments result in reduced exposure and vulnerability to climate hazards, reduced emissions and integrate biodiversity conservation.

#### What this means in practice:

• Restricting new development, redevelopment or changes in land use in at-risk areas.

- Embed low emissions in both the construction (e.g. buildings, roading infrastructure) and operation (e.g. building energy use, transport emissions) of spatial planning options.
- Integrate biodiversity and nature-based solutions into developments where nature can reduce flood impacts and/or sequester carbon.

#### **Nature based solutions**

These are actions to protect, sustainably manage, or restore natural and modified ecosystems, that address climate change while simultaneously providing human well-being and biodiversity co-benefits. These solutions often have co-benefits such as increasing carbon sequestration, reduced flood intensity or enhancing landscape aesthetics.

#### What this means in practice:

 Prioritise solutions that restore, mimic, or support nature to improve ecosystem health to address climate change resilience and/or carbon sequestration through ecosystem functions.

#### Low emissions transition

As part of the transition to a low emissions economy, we need to understand how council decisions and activities impact greenhouse gas emissions. This includes emissions directly resulting from our day to day operations, purchasing of goods and services (procurement), infrastructure and investment decisions.

#### What this means in practice:

- Reduce our organisational emissions in line with our organisational targets.
- Factor carbon footprints into purchasing and investment decisions.
- Support, promote and implement circular economy initiatives that design out waste, keeping resources in use for as long as possible.
- Support renewable energy transition initiatives for the region.





<sup>&</sup>lt;sup>1</sup> Follow the latest MfE guidance relevant to the operating context. These recommendations are from the 2022 RMA guidance.

## Whakaekengia tēnei waka Join our journey



## **Bay of Plenty Regional Council is net zero emissions by 2050**

- Established monthly monitoring and reporting of our organisational fuel and electricity emissions.
- Implemented our Staff Travel Plan with more than 50 uptakes of different incentives.
- Increased the electrification of our passenger fleet to 13% of vehicles out of our fleet of 160, with plans to increase further.



# Roal 2

## Reducing regional greenhouse gas emissions

- Identified a potential 4000ha of land for coastal wetland restoration or rehabilitation with ongoing work to establish the potential contribution to sequestration and blue carbon storage in the region.
- The Sustainable Homes Scheme has provided grants to 175 homes.
- Our support for the Tourism Bay of Plenty low emissions circular economy programme has enabled 55 businesses to complete the Green Room course.

This section reflects on our journey so far and highlights key achievements from the 2021-23 action plan.



# Goal 3

## As a region we understand, are preparing for and adapting to a changing climate

- Completed the Bay of Plenty Regional Risk Assessment which provides a common foundation for all to use to raise community awareness of risk and support subsequent local or sector specific risk assessments.
- Facilitated a regional approach to climate adaptation planning with our territorial authority partners.
- Through our community and iwi led adaptation fund, we have supported seven projects across the region, from Ōhiwa Harbour to Waihī Beach, enabling flax roots climate change adaptation planning directly by communities, at their scale.



# Goal 4

## Our Bay of Plenty community is aware, engaged and resilient

- We updated the regional carbon footprint providing a baseline of information for all to use as a basis to focus emissions reductions.
- We launched the first regional pilot of the Future Fit carbon footprint tool, in collaboration with the city and district councils. By end of July, over 1800 people have used the calculator.
- We developed climate change story maps for the region, to provide an interactive and accessible platform for people to engage with the climate impacts we are likely to experience in the Bay.

# *Ngā kōrero o te rangahau* **What the research says**

## International and national analysis says the following about climate change:

- Multiple lines of evidence show climate change is happening and urgent action is needed.
- Emissions of greenhouse gases from human activities are responsible for approximately 1.2°C of warming above pre-industrial levels.
- The levels of carbon dioxide and methane in the atmosphere are increasing.
- The Earth's temperature is changing at a rate unprecedented in recent history.
- It is extremely likely that humans are the cause of recent global warming.
- Limiting climate change will require substantial reduction of greenhouse gas emissions.
- The effects of climate change will continue even after emissions are reduced.
- The climate system is very complex and whilst it is clear the climate is changing, there are uncertainties about the scale of future changes.



Climate change will affect all of New Zealand but this impact will vary across different areas of New Zealand.



These impacts will present many challenges but also opportunities. The effects of these impacts will vary depending on how different sectors, such as horticulture, agriculture and tourism, respond to changing climate conditions.

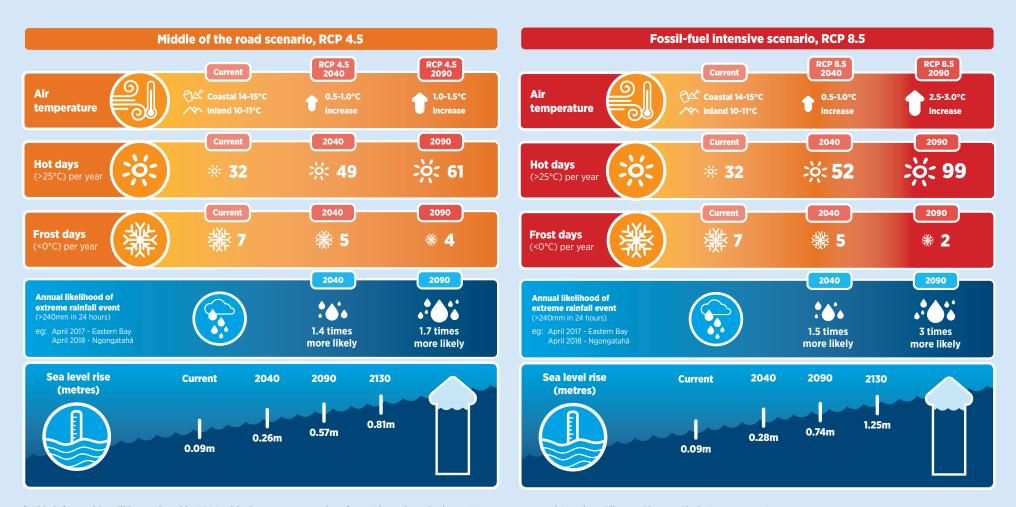
Climate change is a complex issue where responses and allocation of resources need to be carefully considered. A key challenge is identifying where Council has the most ability to influence management of the issue when set against the backdrop of Central Government action - what is the best role we can play in building and supporting community resilience in the face of a changing climate?







# Ngā pānga pea o te huringa āhuarangi ki te rohe Likely climate change impacts for the Bay of Plenty²



<sup>&</sup>lt;sup>2</sup> This infographic will be updated in 2025 with the most recent data for NZ based on the latest Intergovernmental Panel on Climate Change Sixth Assessment Report.



<sup>&</sup>quot;Middle of the road scenario, RCP 4.5" reflects moderate emissions and implementation of current global emissions reduction policy settings "Fossil-fuel intensive scenario, RCP 8.5" reflects high emissions, limited mitigation measures and no global emissions reduction policy setting

## Ngā tukunga haurehu kati mahana i te rohe

## **Greenhouse gas emissions** in the Bay of Plenty

In 2021, we collaborated with the region's local authorities to update the Bay of Plenty Community Carbon Footprint. By establishing this emissions baseline, we are able to understand the key areas where we need to focus action to reduce emissions.

During 2020/21, greenhouse gas emissions in the Bay of Plenty were 5.54 MtCO<sub>2</sub>e (excluding forestry), with agriculture and transport emissions being the largest contributors. Net emissions (including forestry) were 7.16 MtCO<sub>2</sub>e. Over this period, forestry was a net emitter of greenhouse gases due to the emissions associated with harvesting of trees.

Looking back to our previous community carbon footprint in 2015/16, our total gross emissions were 4.94 MtCO<sub>2</sub>e, so regional emissions have increased by 12% over the last five years. The biggest areas of increase are in stationary energy (up by 30%) and transport (up by 28%).

Over this time the regional population has increased by 17%, so there has actually been a 5% decrease in gross emissions per person, from 17.0 to 16.2 tCO<sub>2</sub>e per person per year between 2015/16 and 2020/21.

### **Bay of Plenty Region Greenhouse** Gas Emissions 2020/21



#### TRANSPORTATION

Top Sector Contributors



Marine Freight







Sector Contributors



Closed Landfill







Top Sector Contributors



= Enteric Fermentation



Manure from Animals on Pasture 10%



Manure Management 6%



Top Sector Contributors



Refrigerants 94%



Aerosols & MDI





**Electricity Consumption** 



Natural Gas 30%

STATIONARY ENERGY





Sector Contributors



Harvest Emissions 8,963,108 tCO,e



-6,891,223 tCO<sub>2</sub>e



Net Forestry Emissions 1,624,983 tCO<sub>2</sub>e

**Total Gross Emissions** (excluding Forestry): 5,538,003 tCO\_e **Total Net Emissions** (including Forestry): 7,162,986 tCO<sub>2</sub>e

\*IPPU = Industrial Processes and Product Use





## **Aronga** $\bar{a}$ -motu **National direction**

Climate change continues to be a key focus in Central Government policy development, both as direct climate policy and in other areas such as the implementation of National Policy Statements for Freshwater Management and Urban Development.

The Climate Change Response (Zero Carbon) Amendment Act 2019 (the Act) came into force in November 2019 and provides New Zealand with a framework towards reducing emissions by 2050 and achieving a climate resilient future.

## The Act includes the following national targets for the reduction of greenhouse gas emissions:

- Reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050; and
- Reduce emissions of biogenic methane to 24–47% below 2017 levels by 2050, including to 10% below 2017 levels by 2030.

As required by the Act, Central Government published its first Emissions Reduction Plan (ERP) and National Adaptation Plan (NAP) in 2022.

The ERP, released in May 2022, sets out the country's first three carbon budgets to 2035 and presents various strategies to meet the first national emissions budget for the period 2022-2025 of 290 Metric tons of carbon dioxide equivalent (MtCO<sub>2</sub>e); a 4% reduction over the current

emissions trajectory. The key sectors of focus are transport, energy, industry, building and construction, agriculture and waste. The second ERP, covering the emission budget for the years 2026 to 2030, will be published before the end of 2024.

The NAP is Central Government's response to the first national climate change risk assessment. The plan was released in August 2022. It takes the form of a six-year work programme with four priorities: enabling better risk-informed decisions, driving climate-resilient development in the right places, laying the foundations for a range of adaptation options including managed retreat, and embedding climate resilience across Government policy.

Under the Resource Management Amendment Act 2020, local government must have regard to the NAP and ERP when making and amending regional policy statements, regional plans, and district plans.





## Te Mahere Mahi o ngā ara mahi Action Plan workstreams

The following table outlines specific climate change focused workstreams that we will be working on over the next three years.

No	Workstream	Focus Areas	Teams	Action Plan Goal
1	Corporate emissions reduction	<ul> <li>Ongoing screening and monitoring of corporate emissions (direct and indirect)</li> <li>Implementation of corporate emissions reduction plan to achieve organisational net and gross emission reduction targets</li> <li>Investigation of carbon sequestration/ insetting opportunities</li> <li>Ongoing implementation of the Staff Travel Plan to support low emissions travel</li> <li>Pilot a circular economy initiative across selected council teams</li> </ul>	Property, Finance, Commercial, Corporate Performance, Integrated Catchments, Climate Change	1
2	Spatial planning and transport	<ul> <li>Integration of climate resilience into spatial plans</li> <li>Leading emissions reduction through public transport network provision</li> <li>Develop a metric to estimate and report on greenhouse gas emissions saved through the provision of public transport</li> </ul>	Transport, Spatial Planning	2 & 4
3	Regional emissions transition	<ul> <li>Working with sectors on decarbonisation initiatives</li> <li>Supporting and promoting circular economy initiatives</li> <li>Supporting renewable energy transition initiatives within the region</li> <li>Regional emissions modelling in collaboration with territorial authorities</li> <li>Facilitate development of a regional waste strategy</li> <li>Supporting NIWA Future Coasts project (Lower Kaituna case study)</li> </ul>	Climate Change, Regional Economic Development	2 & 5
4	Nature-based solutions	<ul> <li>Implementing nature-based solutions through integrated catchment management to address climate change through ecosystem functions</li> <li>Exploring options for a framework for private investment in nature</li> <li>Investigating the potential for coastal wetland rehabilitation to contribute to blue carbon storage in the region</li> </ul>	Integrated Catchments, Science, Regional Economic Development	2, 3 & 5
5	Facilitating regional adaptation actions	<ul> <li>Facilitating the regional technical working group</li> <li>Supporting territorial authorities with district risk assessments</li> <li>Supporting sector based responses to climate risks</li> <li>River Scheme Sustainability project - leading adaptation planning through our management of flood protection schemes</li> <li>Other Bay of Plenty Regional Council led responses to climate risks based on the regional climate change risk assessment</li> <li>Develop land use innovation case studies</li> </ul>	Climate Change, Rivers & Drainage, Engineering, Integrated Catchments, Strategy and Planning, Natural Resources Policy, Natural Hazards, Biosecurity, Civil Defence Emergency Managment	3, 4 & 5

No	Workstream	Focus Areas	Teams	Action Plan Goal
6	Supporting local adaptation planning	<ul> <li>Funding for flax roots community-led and iwi-led adaptation projects</li> <li>Local Dynamic Adaptive Pathways Planning support</li> </ul>	Climate Change	3 & 4
7	Climate change information and monitoring	<ul> <li>Updating regional climate change projections</li> <li>Identifying key climate change monitoring indicators</li> <li>Supporting citizen science initiatives</li> <li>Developing tools to support community understanding</li> </ul>	Science, Data Services, Climate Change, Natural Hazards, Geospatial	3 & 4
8	Community engagement and awareness	<ul> <li>Raising public awareness and providing education outreach through climate change communications campaign and promotion of educational resources</li> <li>Continuing support for climate change degree scholarships</li> </ul>	Communications, Community Engagement, Civil Defence Emergency Management, Climate Change, Te Amorangi	4
9	Programme co-ordination and networks	<ul> <li>Managing and co-ordinating the Climate Change Programme</li> <li>Participating in national networks and policy discussions</li> <li>Building relationships within the region and nationally across councils, government departments, crown entities, private sector and research organisations</li> <li>Facilitating regional collaboration and partnerships</li> </ul>	Climate Change	2 & 3







www.boprc.govt.nz/climate-change