



# Climate Change Action Plan

Te Mahere Mahi mō Te Huringa Āhuarangi

Working towards a climate resilient Bay of Plenty Kia manawatoa a Toi Moana



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#### AN ONGOING COMMITMENT - HE PAIHERENGA PŪMAU...

Our action plan contains the first set of initiatives that the Regional Council will undertake in response to the challenge of climate change. It is however only a start. We recognise the importance of our leadership and advocacy role but we are also committing to:

- Supporting new and additional community initiatives
- · Working with other local authorities as they engage with their communities
- Engaging with sectors and industry to find solutions
- Exploring ideas and opportunities with others
- Sharing our information and knowledge

Over time this will mean that Council's action plan and role will evolve and develop and we welcome community input on the content of our action plan at any time. We will also engage with the community around our role and priorities for climate change as the action plan develops. The action plan will be reported on and reviewed on an annual basis, when we will reaffirm or revise our next steps and where we are heading, with a more in-depth reset every three years as part of the Long Term Plan process. New versions will be published through these regular processes.

Ka whakaputaina ngā putanga hou ina whakahoutia te Mahere Mahi mā aua tukanga anō o te Mahere ā-Tau me te Mahere Wā Roa.

# Introduction Kōrero Whakataki

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

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.

Climate change is an acknowledged strategic issue for Council but – as with many organisations – the complexity and significance of the issue means finding responses to the challenge are not easy. Local Government has the added challenge that it is an organisation (itself) but has responsibilities and obligations to the community (others).

## 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.

#### Me whakatūtaki 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

Our aim is to be a key contributor in shaping a low carbon, resilient future for the Bay of Plenty. This Climate Change Action Plan is how we start this journey. It has two main purposes:

- 1. Identify how we, as a Council, will reduce our own greenhouse gas emissions, and encourage and support emissions reductions within the Bay of Plenty
- 2. Explore how we can support adaptation and resilience within Bay of Plenty communities

# **Scene Setting**Kōrero Whakamārama

### CLIMATE CHANGE IN THE BAY OF PLENTY

TE HURINGA ĀHUARANGI I TOI MOANA

International and national analysis says the following about climate change:

- Multiple lines of evidence show climate change is happening
- 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 there are uncertainties about future changes
- In summary, climate change will affect all of New Zealand but this impact will vary across different areas of New Zealand.
- For the Bay of Plenty, the overall impacts are likely to be less severe than other parts of New Zealand and are illustrated in the following diagram.

#### LIKELY CLIMATE CHANGE IMPACTS FOR THE BAY OF PLENTY



Temperature

Up to 1.1°C increase by 2040s\*

0.7°C to 3.1°C warmer by 2090s, depending on the level of greenhouse gas concentration in the



## More hot days above 25°C

atmosphere

Autumn and winter warm slightly more

than spring and summer



## Frosts rare by 2090s

\*an average for 2031–2050, compared to 1986-2005 average

#### Rainfall



### Rainfall will vary locally within the region

Little change in mean annual rainfall, but **change in seasonal pattern**:

- Drier spring
- More variable rain in summer/autumn



# Ex-tropical cyclones will likely be stronger and bring heavy rainfall



## Increased flooding risks

#### Potential sea level rise



Increased coastal erosion and flooding



Projection based on the 'potential' sea-level in the 2017 NIWA report "Tauranga Harbour extreme sea level analysis" These impacts will present many challenges but also opportunities. Some impacts are also at present uncertain as to what effect they will have – for example, how 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?

#### NATIONAL DIRECTION - ARONGA Ā-MOTU

Climate change continues to be a key input into Central Government policy development, both as direct climate policy and in other areas such as the development of National Policy Statements for Freshwater Management and Urban Development. The release of the Carbon Change Response (Zero Carbon) Amendment Bill in May 2019 provides a stronger framework around the national response on mitigation and adaptation to guide our regional response. The Bill includes the following national targets for the reduction of greenhouse gas emissions:

- reduce all greenhouse gases (except biogenic methane) to net zero by 2050
- reduce emissions of biogenic methane within the range of 24–47 per cent below 2017 levels by 2050 including to 10 percent below 2017 levels by 2030

Our organisational goals – and the goals for the Bay of Plenty – need to align with this national vision. As a first step towards this, we are focusing on our direct organisational carbon emissions by setting an internal emissions target (page 8). We also intend to initiate conversations with the various sectors and communities in our region around the setting of an emissions target for the region as a whole.

#### **REGIONAL ACTION** - NGĀ MAHI Ā-ROHE

We are part of the **Local Government Leaders Climate Change Declaration**, which is looking at how we address climate change as a region. As a signatory to the Declaration, we have committed to:

- 1. Develop and implement ambitious action plans that reduce greenhouse gas emissions and support resilience within our own councils and for our local communities. These plans will:
  - (a) promote walking, cycling, public transport and other low carbon transport options;
  - (b) work to improve the resource efficiency and health of homes, businesses and infrastructure in our district; and
  - (c) support the use of renewable energy and uptake of electric vehicles
- 2. Work with our communities to understand, prepare for and respond to the physical impacts of climate change
- 3. Work with Central Government to deliver on national emission reduction targets and support resilience in our communities

Our work will be guided by the seven principles outlined in the Declaration, which also align with principles developed by the Ministry for the Environment's Climate Change Adaptation Technical Working Group:

- 1. **Precaution Whakatūpato:** act now to maximise co-benefits, reducing future risks and costs associated with climate change and minimise actions which hinder adaptation
- 2. **Stewardship Kaitiakitanga:** flexible action and climate policies that enable all to do their bit to reduce emissions and enhance resilience
- 3. **Equity / justice Tika / Tōkeke:** prioritise action to the most vulnerable communities and sectors
- 4. **Anticipation Tirohanga whakamua:** anticipate change and take a long-term perspective, with a clear and consistent pathway to a low carbon and resilient future
- 5. **Understanding Māramatanga:** grow understanding around the potential impacts of climate change and use the best available information and evidence, including science, data, community knowledge and participation, Mātauranga Māori
- 6. **Cooperation Mahi Ngātahi:** act together in partnership (ara whakamua) and build relationships across countries, communities, cultures and organisations
- 7. **Resilience Manwaroa:** enhance the resilience and readiness of communities and businesses so they can thrive in the face of change

#### BAY OF PLENTY CARBON FOOTPRINT - PĀNGA WARO O TOI MOANA

In 2017, we collaborated with the region's local authorities on a technical report outlining the Bay of Plenty Community 2015/16 Carbon Footprint. Key findings of this work are:

- Per capita carbon emissions across the region are below the national average
- Carbon emissions in 2015/16 were higher than average for some rural districts, mainly due to forest harvest timing. The overall carbon balance of the Bay of Plenty forestry sector is expected to be relatively neutral over a 50-100 year planting and harvest cycle
- Local emissions sources are generally proportional to the settlement patterns and economic
  activities that currently support local jobs and livelihoods. For example, farming and forestry in
  rural areas such as Ōpōtiki and Western Bay of Plenty. For urban areas such as Tauranga City,
  transportation and energy consumption associated with urban living, industrial activities and port
  traffic are key sources

This study provides an emissions baseline for the region as a whole, to which our organisational emissions contribute. By identifying ways in which we will tackle our own carbon footprint, we can be proactive and innovative, demonstrating leadership in this area and helping to inform mitigation actions at a regional level.

#### **CURRENT ACTIONS** - NGĀ MAHI ONĀIANEI

As part of understanding where we need to take action on climate change, we have undertaken a stocktake of all the work we do across Council. This highlighted the wide range of activities where we already engage in climate change adaptation or greenhouse gas mitigation. For many of these projects, climate change was not the primary focus of the work; for example, the aim of our incentive scheme in Lake Rotorua is to improve water quality but the land use change may also result in reductions in agricultural emissions through the conversion of pastoral land to forest or the lowering of pastoral farming intensity.

Our funding decisions and the design of new infrastructure incorporate the expected impacts of climate change: our infrastructure strategy looks ahead to the next 30 years to plan what flood protection and control structures will be needed in our region, as a vital part of our adaptation response. We are introducing electric buses into our public transport service and will be looking to extend this further in future.

Much of our current work as a Council makes a contribution towards meeting the climate change challenge, but we need to do more, taking deliberate actions in terms of both mitigation and adaption: these form the basis of our action plan.

# Our Climate Change Action Plan

## Tā Tātau Mahere Mahi mō Te Huringa Āhuarangi

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

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.

#### INTERNAL EMISSIONS TARGET - TE ŪNGA TUKUNGA Ā-ROTO

In line with the proposed Central Government targets, we are **committing to a target to reduce our organisational greenhouse gases (except biogenic methane) to net zero by 2050, as a minimum.** 

As a first step, we are focusing on our <u>direct</u> organisational carbon emissions: this covers carbon dioxide only and does not include any indirect emissions from Council services, such as the emissions from public transport. How we account for these indirect emissions will be considered as one of the work areas under the action plan.

In adopting an internal emissions target, there will be a need to address other organisational priorities and these trade-offs need to be recognised and made explicit. For example, whilst reducing (or even eliminating) air travel is desirable in term of emissions reductions, this would have an impact on our ability to do business and position ourselves within national processes.

Over time we will review this organisational target and consider whether its coverage needs to be extended or it needs to be made more stringent (e.g. net zero emissions by 2030).

#### FOCUS AREAS - NGĀ WĀHI AROTAHI

Our action plan is structured around four focus areas covering mitigation and adaptation, as well as addressing issues of engagement and awareness, both from an internal (within Council) and external perspective.



Our house in order - Kia tika tō mātau whare: defining our internal carbon emissions target and setting out the deliberate mitigation actions that we will take in order to deliver this target and contribute to the national targets



**Decision making** – **Whakatau tikanga**: reviewing and resetting our thinking around all Council actions and decisions to bring in awareness and consideration of climate change in everything that we do, both in terms of mitigation and adaptation



The work we do –  $\bar{A}$   $m\bar{a}tau$  mahi: as a Regional Council, in responding to climate change our primary focus is on adaptation which involves a range of Council functions, including integrated catchment management, pest management, regional planning, flood protection and emergency management – we will build on our existing work in this area, making climate change an explicit focus. We will also look for opportunities to reduce greenhouse gas emissions through the range of services we provide to the community



Working with our communities – Te mahi me ngā hapori: looks at how we will approach the wider challenge of the Bay of Plenty's response as a region to climate change: the role we play in supporting the community's contribution towards emissions reductions (mitigation) and assisting the community with building resilience and dealing with the impacts of climate change (adaptation)

Table 1: Coverage of the four focus areas of the Action Plan

	Mitigation	Adaptation	Engagement & awareness
Focus Area 1 - Our house in order (internal)	✓		
Focus Area 2 - Decision making (internal)	$\checkmark$	$\checkmark$	
Focus Area 3 - The work we do (internal/external)	$\checkmark$	✓	✓
Focus Area 4 - Working with our communities (external)	$\checkmark$	✓	✓

For each focus area we have listed an initial series of 'actions' and 'pathways':

- **Actions** are specific pieces of work that Council has committed to deliver in this first iteration of the action plan under the current 2018-28 Long Term Plan
- **Pathways** are more exploratory in nature and involve investigating or researching an area to identify if there are appropriate actions to include future iterations of the action plan (or to carry out as projects in future annual and long term plans)

Within each focus area, the actions and pathways are organised under 12 overarching goals:

1	Understand our carbon footprint so we can take action
2	Increase our carbon efficiency
3	Low carbon purchasing and procurement
4	Zero waste within the organisation
5	Reduce emissions from corporate travel
6	Staff are low carbon champions (at home, at work and in the community)
7	Ensure robust climate change information and science is available for decisions
8	Council documents and decisions include consideration of climate change impacts
9	Actively contribute to national and regional direction on climate change
10	Reduce greenhouse gas emissions in the region
11	Prepare for and adapt to climate change impacts
12	Build an aware, engaged and resilient community

Over time, it is anticipated that the actions and pathways under each of these goals will be added to.

# Climate Change Action Plan Focus Areas

# Te Mahere Mahi mō Te Huringa Āhuarangi Ngā Wāhi Arotahi

This section outlines each focus area in more detail and outlines the actions and pathways under each area.

Kei roto i tēnei wāhanga ko ngā kōrero taipitopito mō ia wāhi arotahi me te whakarārangi i ngā mahi me ngā ara i raro i ia wāhi.



Focus Area 1 considers our organisational carbon footprint (the quantity of greenhouse gas emissions released into the atmosphere as a result of Council operations) and opportunities to reduce it (mitigation). This covers our buildings, vehicles and other infrastructure as well as any products and materials that we purchase.

Building a solid foundation for our internal actions is crucial to providing legitimacy to our external work and supporting our role in assisting the wider transformation to a low-carbon, resilient region. A key feature of this focus area is building staff awareness, capability and capacity in relation to climate change actions, creating an internal community that supports climate-friendly behaviours and choices, both at work and at home.

The focus is on the deliberate mitigation (greenhouse gas reduction) actions we are taking as an organisation and will require setting up the necessary processes and monitoring to ensure we can meet our internal emissions target of net zero carbon emissions by 2050.

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
1. Understand our carbon footprint so we can take action	Priority action  1.1 Action: Build framework for achieving our internal mitigation target	Identify specific contributions to the target under each goal using a common reporting standard	Mitigation	Environmental Strategy	2019/20
	1.2 Action: Initiate the CEMARS certification process	Undertake baseline audit to establish our current carbon footprint	Mitigation	Property	2019/20
	<i>1a Pathway:</i> Identify steps to reduce our carbon footprint following the CEMARS baseline audit	Set goals with timeline and intensity scale for reduction	Mitigation	Property	Future
	1b Pathway: Explore carbon sinks for offsetting our organisational emissions	Consider land purchase for carbon sequestration as a method to offset emissions (noting potential for multiple objectives such as biodiversity, nutrient reduction, flood mitigation)	Mitigation	Integrated Catchment Management (ICM)	Future
2. Increase our carbon efficiency	Priority action 2.1 Action: Set goals for the reduction of carbon emissions relating to energy and resource use	<ul> <li>Reduction of carbon emissions in relation to building energy use at the Tauranga and Whakatāne sites (LTP 2018-28 KPI) e.g. through installation of LED lighting and solar photovoltaic systems</li> <li>Introduce a Building Management System to enable monitoring and reporting of energy use, and ability to target improvement areas e.g. air-conditioning, night energy use</li> <li>Review processes to reduce resource use (e.g. paper printing, interoffice mail system)</li> </ul>	Mitigation	Property / Information and Communication Technology (ICT)/ Customer Services/ Print Production/ Governance	2019/20
	2a Pathway: Look at opportunities for further low carbon behaviours by staff around energy and resource use	Stocktake current usage and behaviours, and provide appropriate training and awareness raising for staff e.g. use of printers, Council agenda distribution	Mitigation	ICT/ Customer Services/ Print Production/ Governance	Future
	2b Pathway: Explore further options for carbon efficiency in energy and resource use	<ul> <li>Develop a new process for internal mail</li> <li>Investigate options for reducing the use of plastic products and increasing proportion of recycled products in printing</li> </ul>	Mitigation	Customer Services/ Print Production/ Governance	Future

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
3. Low carbon purchasing and procurement	3.1 Action: Establish initiatives and standards that reduce organisational contributions to climate change through the products and services we purchase	<ul> <li>Implement low carbon catering standards for Council (local, seasonal food, mainly vegetarian, less packaging and ecofriendly wrapping)</li> <li>Investigate additional property and building initiatives and standards</li> <li>Improve efficiency of equipment (on renewal)</li> </ul>	Mitigation	Property/ ICT/ Procurement/ Engineering/ BOPLASS	2019/20
	3a Pathway: Consideration of "live lightly" as a corporate approach to procurement and purchasing decisions	<ul> <li>'Low carbon' becomes a criterion for procurement (e.g. consultants, contracts for goods and services) and purchasing (e.g. housekeeping, stationery etc.)</li> <li>Other criteria could be embodied carbon / life cycle analysis, locally made, fair trade, organic, chemical free, recyclable</li> </ul>	Mitigation	Procurement	Future
4. Zero waste within the organisation	4.1 Action: Reduce quantity of landfill waste (including e-waste) produced within our offices	<ul> <li>Baseline audit and reporting on current waste quantities (as part of CEMARS certification)</li> <li>Introduce Method Bin recycling system and provide composting bins in all kitchens</li> <li>Encourage minimal/ bio-degradable packing for supplies</li> <li>Provide re-usable cups, encourage keep cups for take away coffee, phase out wax coated paper cups (esp. at water coolers in public spaces) and replace with recyclable/ compostable</li> </ul>	Mitigation	Property/ ICT/ Procurement/ BOPLASS	2019/20
	4a Pathway: Investigate further options to reduce quantity of landfill waste (including e-waste) produced within our offices	<ul> <li>Look at waste streams that recycle, reuse, reinvent e.g. redundant office furniture can go to recycling shops or gifted to schools and community groups</li> <li>Develop processes for recycling and reusing products where not currently in place e.g. e-waste</li> </ul>	Mitigation	Property/ ICT	Future

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
5. Reduce emissions from corporate travel	5.1 Action: Establish a baseline and implement initial actions to reduce emissions from corporate air travel and car fleet (including behavioural changes)	<ul> <li>Identify emissions from annual corporate travel         (including air travel) for each financial year (as part of         CEMARS certification)</li> <li>Identify current efficiency of fleet and realistic timeline for         electrification based on average renewal of fleet (as part of         CEMARS certification)</li> <li>Promote electric powered transport usage by staff</li> <li>Accommodation – use motels/hotels with robust         environmental policies/programmes in place</li> </ul>	Mitigation	Executive Assistants/ Transport/ Property/ Procurement	2019/20
	5a Pathway: Explore further options for reducing emissions from corporate travel and through influencing staff corporate travel behaviour	<ul> <li>In house transport emission study – baseline vs. future reducing targets</li> <li>Investigate feasibility of limits on air travel (e.g. carbon caps per person) and use of offsetting</li> <li>Investigate options for staff training and support programmes for low carbon travel or no-travel options e.g. bus/ passenger van carpooling between offices, increase web-based meetings, incentives for responsible business travel</li> </ul>	Mitigation	Executive Assistants/ Transport/ Property	Future
6. Staff are low carbon champions (at home, at	6a Pathway: Reduce emissions from staff travel to and from work	<ul> <li>Undertake a survey of staff travel patterns</li> <li>Implement a travel plan for staff travelling to work e.g. incentivise personal carpooling, support for cycling/ bus journeys, e-bike promotion, options to work from home</li> </ul>	Mitigation	Property/ Transport/ People & Culture	Future
work and in the community)	Priority action 6.1 Action: Build an internal culture of climate change awareness	<ul> <li>Undertake an internal change management initiative to transition staff through a successful lifecycle of change (in behaviour) to embed climate change awareness throughout the organisation</li> <li>Build up a repository of collateral (posters, tables, maps and other support materials) and technical information (education library) for staff to utilise</li> </ul>	Mitigation	Environmental Strategy	2019/20
	6b Pathway: Investigate other methods for supporting staff to change to low carbon behaviours and embedding a new culture	<ul> <li>Develop Information and education packs/ training sessions around individual actions (part of council induction)</li> <li>Low carbon champions for each office/floor</li> <li>Investigate incentives for staff for undertaking low carbon actions</li> </ul>	Mitigation	Environmental Strategy/ People & Culture	Future



Highlighting climate change as a strategic challenge means it is essential that all our actions and decisions as a Regional Council are made with the awareness and acknowledgement of the likely impacts of climate change, noting that this may not mean a specific response in all cases.

We want to be sure that we are incorporating climate change into all the decisions that we make on behalf of or with the community – such as in our planning, as part of investment decisions, in the design of new infrastructure and in all our environmental enhancement work. This may require new research so that we continue to build our understanding of what the future holds.

This aspect of the action plan is included as a specific focus since it is fundamental to transforming our approach to climate change as an organisation and requires considerable effort and commitment if it is to be successful. There are a number of elements that need to be addressed:

- Identifying where climate change should be considered as a priority
- Making climate change an explicit consideration in relevant decision making
- Establishing how we report on this to Council/Committee

The aim is that consideration of climate change becomes an explicit part of our business as usual approach. Examples of issues to consider include:

- Risks and opportunities for adaptation
- Awareness of carbon budgets
- Ability to reduce our net greenhouse gas emission profile

Initially, staff will need support and comprehensive guidance on assessing the impacts on climate change and how to report on this. Developing this guidance material will be key and we would look to draw on the expertise across our organisation, as well as from other local authorities. We already have a good example to follow in the incorporation of the Māori Implications Statement into the Council reporting template and the associated guidelines.

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
7. Ensure robust climate change information and science is available for decisions	Priority action 7.1 Action: Update climate change projections and identify priority areas for climate change information	<ul> <li>Contract NIWA to update climate change projections for the region</li> <li>Incorporate MfE 2017 Coastal Hazards and Climate Change Guidance for local government into development of Hazard Assessments</li> <li>Collate Mātauranga Māori on climate change in the Bay of Plenty</li> <li>Improve understanding on climate change implications to values related to fresh water bodies and freshwater ecosystems</li> <li>Identify climate change vulnerable areas (hotspots) and taonga species in the Bay of Plenty</li> </ul>	Adaptation	Environmental Strategy/ Science/ Natural Hazards/ Engineering	2019/20
8. Council documents and decisions are assessed in terms of climate change impacts	Priority action 8.1 Action: Inclusion of climate change implications in Council papers, statutory planning, and non-statutory strategies, plans and processes	<ul> <li>Incorporate section for consideration of climate change in decision-making into InfoCouncil template(s) supported by detailed guidelines and training</li> <li>Staff to explicitly consider climate change in all planning functions</li> </ul>	Both	Governance/ Policy and Planning/ Environmental Strategy/ Regional Development/ Water Policy	Ongoing
	8a Pathway: Internal review of Regional Policy Statement, Regional Natural Resources Plan and other planning documents to identify opportunities to improve focus on climate change impacts	<ul> <li>Develop a framework to review existing planning documents to assess climate change focus</li> <li>Identify foreseeable impacts of climate change specifically in relation to fresh water values and uses</li> <li>Strengthen RPS to avoid developments in areas vulnerable to climate change impacts</li> </ul>	Both	Policy and Planning/ Environmental Strategy/ Regional Development/ Water Policy	Future

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
8. Council documents and decisions are assessed in terms of climate change impacts	8.2 Action: Staff have an understanding of legal powers/levers to support action around climate change	Undertake internal review of legal ability to address climate change	Both	Legal services	2019/20
	8b Pathway: Develop an understanding of risk/ response to legal challenge on basis of climate change	Explore the risk of local government liability around climate change	Both	Legal services	Future
	8.3 Action: Include explicit consideration of climate change within Council's Treasury Policy in relation to socially responsible investment considerations		Both	Finance	2019/20
	8c Pathway: Investigate where we wish to be on the spectrum of responsible investment	Review current investment portfolio in terms of consideration of climate change in investments	Both	Finance	Future
9. Actively contribute to national and regional direction on climate change	9.1 Action: Participate in regional and national conversations around climate change	<ul> <li>Staff are representatives in regional and national groups that drive climate change in NZ e.g. CoBOP, UFTI, UNISA, MfE working Groups.</li> <li>Staff keep a watching brief on emerging issues and policy e.g. modification of food sources for stock and reductions in fertiliser use (impacts on water quality and agricultural emissions), fiscal measures such as a carbon tax</li> <li>Participate in discussions around a potential climate change mitigation strategy for the region</li> </ul>	Both	Policy and Planning/ Environmental Strategy/ Regional Development/ Water Policy	Ongoing



#### **SERVICE PROVISION**

Our internal stocktake highlighted the wide range of activities where we already engage in climate change adaptation or greenhouse gas mitigation. We want to build on this inventory, making our existing contributions to climate change in our current work explicit and identifying further opportunities for action.

#### **MITIGATION**

We provide a number of services to the community that can impact positively and negatively on greenhouse gas emissions. Through Focus Area 3, we would identify the opportunities for reducing greenhouse gas emissions in these areas, which include:

- Public transport
- Regional land transport planning
- Rivers and Drainage schemes (efficiency of pumping stations and associated equipment)
- Afforestation and planting programmes

#### **ADAPTATION**

As a Regional Council, we also have a significant focus on adaptation, particularly in terms of our legislative responsibility for flood protection and control, and provision of emergency management services. There are some challenging conversations to be had around how we adapt to the impacts of climate change as a regional community and as a country. While there will be costs associated with taking action around climate change, carrying on as 'normal' will also be costly.

The work we currently do in the adaptation space includes:

- · River Scheme Sustainability Project
- · Working with communities on building resilience
- Planning and engagement function within the Engineering activity
- Preparing for new pest incursions through the Regional Pest Management Plan

We will need to advance adaptation conversations with communities to identify how areas of vulnerability are best addressed. Part of this will involve developing a robust understanding of what role Council is best placed to play.

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
7. Ensure robust climate change information and science is available for decisions	Priority action 7.2 Action: Develop tools and methodologies to inform adaptation decisions	<ul> <li>Undertake a project with GWRC and WRC to support the development of a national Sea Level Rise tool</li> <li>Co-ordinate the Bay of Plenty Lifelines Group Climate Change Risk Assessment project</li> </ul>	Adaptation	Natural Hazards/ CDEM	2018- 2020
8. Council documents and decisions include consideration of climate change impacts	8.4 Action: Inclusion of climate change implications in all asset and infrastructure decisions		Adaptation	Engineering/ Rivers & Drainage	Ongoing
10. Reduce greenhouse gas emissions in the region	10.1 Action: Increase number of trees planted to balance our internal emissions	<ul> <li>Record number of trees planted through Council activities and look to increase (also helps erosion control and biodiversity protection)</li> <li>Undertake initial planting programme for sequestration – three year advance planting procurement approved</li> </ul>	Mitigation	Integrated Catchment Management (ICM)	2019/20
	10a Pathway: Investigate further options for tree planting to sequester carbon through Council owned land and programmes	<ul> <li>Develop a longer term planting and sustainable harvesting programme</li> <li>Investigate whether Coast Care planting can be used to sequester carbon</li> </ul>	Mitigation	ICM	Future
	10b Pathway: Investigate options for a more sustainable public transport system	<ul> <li>Review current bus fleet and prepare a transport emissions report</li> <li>Investigate the potential contribution of the existing bus service and new public transport technologies towards reducing carbon emissions</li> <li>Explore initiatives for transport for schools, more bus routes, encourage walking/cycling</li> </ul>	Mitigation	Transport	Future
11. Prepare for and adapt to climate change impacts	Priority action  11.1 Action: Develop a climate change community adaptation framework (strategy/plan)	Identify Council's role in community adaptation and resilience	Adaptation	Engineering	2019/20

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
11. Prepare for and adapt to climate change impacts	11.2 Action: Increase ecosystem and biodiversity resilience to the changing climate	Investigate the risk of increasing pest numbers and species, and effects on work programmes and resources	Adaptation	ICM	Ongoing
	11a Pathway: Investigate our role in protecting biodiversity from the actions of climate change	<ul> <li>Links to voluntary biodiversity programme for landowners and community groups</li> <li>Investigate a programme of wetlands protection, restoration, enhancement and opportunities for increasing areas of wetland</li> </ul>	Adaptation	ICM	Future
	11b Pathway: Investigate the effects of climate change on pests, diseases and weeds in the Bay of Plenty	Build resilience plans around new pests	Adaptation	Biosecurity	Future
12. Build an aware, engaged and resilient community	Priority action  12.1 Action: Establish a central hub for information and knowledge sharing about climate change	<ul> <li>Bring together science, information and resources about climate change mitigation and adaptation, to raise community understanding and support their decision- making on taking action on climate change</li> <li>Set up a 'Climate Bay of Plenty' website</li> </ul>	Both	Communications	2019/20
	12.2 Action: Provide educational resources for the community to increase understanding and enable them to take action	<ul> <li>Build education packages (both general and tailored) that can be used to educate communities on the effects of climate change, including waste minimisation</li> <li>Develop guidelines around including specific climate change considerations into Hapū/lwi Resource Management Plans</li> <li>Ensure education material is accessible, recognising the diverse cultural make up of our communities (e.g. use of Te Reo and other languages)</li> </ul>	Both	Communications Māori Policy/ Community Engagement/ Strategic Engagement	2019/20
	12a Pathway: Investigate options to increase the resilience of Tangata whenua to climate change	<ul> <li>Hold conversations with Te Puni Kokiri (TPK) around how Council can align with TPK work supporting climate change resilience</li> <li>Investigate ways in which to fund marae enhancement around climate change</li> <li>Investigate building considerations for climate change into the criteria for He Toka Tumoana</li> </ul>	Both	Maori Policy	Future



Tackling climate change in our region is not up to us alone. Focus Area 4 looks beyond the work we do as an organisation towards the wider challenge of the region's response to climate change and the roles that we could play in working with our communities, iwi, industry, sectors, organisations and individuals as they look to make their own contributions to national targets and grow their resilience to future climate impacts.

There is a need to build our understanding about the impacts of climate change and the need for both adaptation and mitigation: an informed community will be empowered to take action in future proofing their communities and their investment decisions.

Through Focus Area 4, we will work with our partners in the region to determine how we can best assist the community in responding to the challenges of climate change and transform to a resilient, innovative and low-carbon regional economy. As highlighted in the introduction, we are committed to building relationships, working with others and supporting community and sector initiatives. This may include:

- · Setting a regional emissions target
- Advising on greenhouse gas mitigation actions
- Providing information on and outputs of our research
- Acting as a conduit to research or projects of others
- · Advising on reducing the possible risks related to climate change
- Raising awareness around both mitigation and adaptation
- Funding support for community initiatives

Goal	Action or pathway	Steps	Mitigation or adaptation	Led by	Timing
9. Actively contribute to national and regional direction on climate change	Priority action  9.2 Action: Run a 'Climate Change Forum', bringing together government agencies, local councils, community groups and business and industry sectors	<ul> <li>Include community and youth representatives (potential Youth Council)</li> <li>Consider declaring a 'climate state of emergency'</li> <li>Look at developing a 'Regional Climate Change pathway' e.g. Venture Southland's 'Carbon Neutral Advantage' model</li> </ul>	Both	Environmental Strategy	2019/20
10. Reduce greenhouse gas emissions in the region	Priority action  10.2 Action: Develop an understanding of the regional position on greenhouse gas mitigation and carbon sequestration	<ul> <li>Undertake a regional sector review on current mitigation actions and targets</li> <li>Investigate our role in supporting regional waste reduction (Regional Waste Strategy)</li> <li>Look at plastic waste reduction and working towards zero waste for the region</li> <li>Consider 'car free days' and 'combustion engine' free urban centres</li> </ul>	Mitigation	Environmental Strategy/ Regulatory Compliance	2019/20
	10.3 Action: Explore possibility of a regional emissions target	• Conversations with Bay of Plenty local authorities around a Bay of Plenty target and collective actions	Mitigation	Environmental Strategy	2019/20
	10.4 Action: Incorporate climate change considerations into Urban Form and Transport Initiatives (UFTI) work in Western Bay of Plenty		Mitigation	Policy & Planning	2019/20
	10c Pathway: Investigate options for installing community charging stations (EV)	<ul> <li>Consider third party funding or fully funding</li> <li>Focus on regional areas with lower commercial incentives for installing</li> </ul>	Mitigation	Environmental Strategy	Future
12. Build an aware, engaged and resilient community	12b Pathway: Investigate practical community initiatives to build community understanding of and resilience to climate change	<ul> <li>Consider citizen based science initiatives such as 'East Coast Lab' and 'King Tides Auckland'</li> <li>Investigate practicability of supporting/incentivising school and/or business carbon footprints and reduction initiatives (building on Youth Jam recommendations) e.g. Enviroschools, Environmental Enhancement Fund (EEF)</li> <li>Investigate whether a 'low carbon challenge' (e.g. Wellington City Council) would be feasible for the Bay of Plenty</li> <li>Consider including a carbon calculator on EEF application forms</li> </ul>	Adaptation	Natural Hazards/ CDEM/ Strategic Engagement/ Community Engagement	Future



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