Patuharakeke Hapū Environmental Management Plan

DRAFT Climate Change Update 2025

Patuharakeke
TE POU TAIAO

Patuharakeke
Hapū Environmental Management Plan

DRAFT Climate Change Update 2025

Acknowledgements:

This Climate Change update has been prepared on behalf of the hapū by Te Patuharakeke Te Iwi Trust Board, led by Hollie Kereopa, Alyssa Thomas, Juliane Chetham and Dave Milner.

We have been assisted and supported by numerous people, but in particular acknowledge the support, input and advice of:

Northland Regional Council and Foundation North – for the financial support that enabled us to undertake this climate change review.

Andrew MacDonald and Pania Te Whaiti (Biospatial) – who developed our climate change dashboard maps.

Will Bowden, Dr Peter Nuttall and Ali Newell – who helped with the drafting and climate change science.

Benjamin Jones (Auckland University) – who helped build our capacity in relation to recording and protecting our waahi tapu affected by sea level rise.

Sheila Taylor (Te Huia Consulting) – for her funding advice and assistance.

Eddy Besselink (Besselink Creative Studio) – who helped with graphic design.

PTITB Trustees, Patuharakeke Kahui Kaumatua and Taitamariki Roopu members – for their insights and guidance.

Table of Contents

1. The Climate Crisis

Anthropogenic greenhouse gas emissions are the main driver of the climate crisis and 2024 saw global average temperatures exceed 1.5˚C for the first full year[1]. The International Panel for Climate Change (IPCC) projects over 3˚C of warming by the end of the century (the IPCC[2] projects global temperatures between 3.3˚C - 5.7˚C by 2100).

At the current 1.5˚C of warming, significant changes in the long term weather patterns and climatic conditions of our rohe are already being felt and include:

- Heatwaves
- Sea level rise
- Erosion
- Drought
- Wildfires
- Ocean acidification
- Extreme weather events such as tropical cyclones, floods and atmospheric rivers

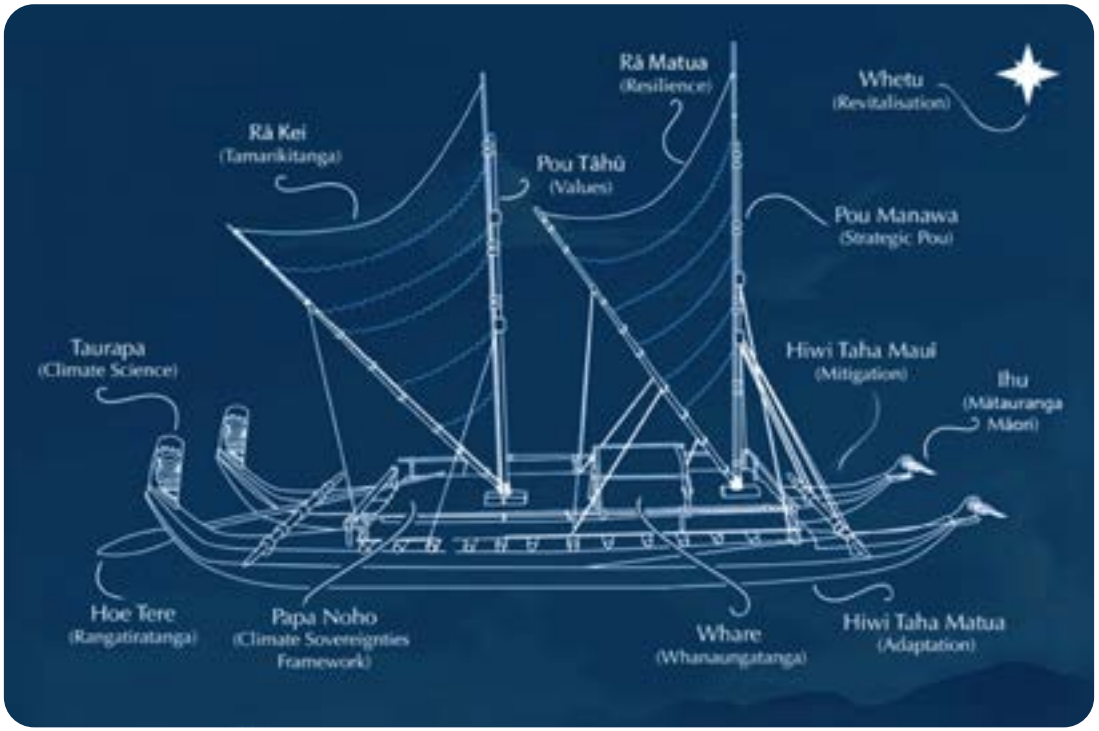
Most future modelling sees the Patuharakeke rohe experiencing:

- Further increasing average temperatures (water, air and ocean)
- Increasing annual rainfall
- Increased severe weather events
- Significant sea level rise

Looking forward, coastal inundation and flooding is a particular risk to our low-lying rohe, threatening our Takahiwai Marae, kainga and urupa, which are of immeasurable social, cultural and spiritual value to our iwi, as well as infrastructure for energy, trade and transport in the local, national and international interest.

To help our people better understand some of these risks, we have been developing a *Climate Change Risk Assessment Toolbox* which includes projected impacts specific to our rohe.

2. Building the Patuharakeke Climate Waka



2

We begin our climate response knowing that as descendants of many great tupuna whakatere (navigators), tohunga (experts) and rangatira (chiefs), we can adapt, evolve and thrive despite the risks, challenges and uncertainties that Te Ao Hurihuri (the ever-changing world) brings.

From across our rohe and at our present day Takahiwai kainga we can observe many tohu (signs) in the taiao (natural environment) indicating that the climate crisis has arrived. Engaging with modern climate science serves to confirm this as fact. The scale and gravity of the deepening climate crisis requires Patuharakeke to take all urgent action possible to prepare our people to navigate a better pathway forward.

We therefore seek to build a metaphorical **'Patuharakeke Climate Waka'** that supports our uri through the unprecedented storms, setbacks and challenges that the deepening climate crisis entails, whilst also providing a foundation for a just and equitable transition into a zero-carbon future.

As a Waka Hourua, the 'Patuharakeke Climate Waka' takes the following form:

- **Whetu (Guiding star)** - Revitalisation
- **Hiwi Taha Mauī (Port Hull)** - Mitigation
- **Hiwi Taha Matua (Waka Hull 2)** - Adaptation
- **Ihu (Bowsprit)** - Mātauranga Māori
- **Taurapa (Sternpost)** - Climate Science
- **Hoe Tere (Steering Paddle)** - Tino Rangatiratanga
- **Papa Noho (Deck)** - Climate Sovereignties Framework
- **Pou Manawa (Main Mast)** - Strategic Pou
- **Pou Tāhū (Mizzen Mast)** - Values
- **Rā Matua (Mainsail)** - Resilience
- **Rā Kei (Mizzen Sail)** - Tamarikitanga
- **Whare (Cabin)** - Whanaungatanga

2.1 Whetu (Guiding Star) – Revitalisation

'Revitalising the mauri of our Taonga Tuku Iho', the principal mission of the Patuharakeke Te Iwi Trust and our Te Pou Taiao Unit, provides an enduring direction for our people to navigate our waka towards.

'Revitalising the mauri of our taonga tuku iho' is the all-encompassing mission that ngā kaumātua o Patuharakeke gifted Patuharakeke Te Iwi Trust (PTITB) in the early development of our Hapū Environmental Management Plan. Revitalising means taking all necessary actions as kaitiaki to protect our wai (waters), whenua (lands) and moana (seas) from new threats, as well as to continue regenerating our Taonga Tuku Iho from the many harms that have already been inflicted.

Ultimately, we seek to revitalise the mauri of our Taonga Tuku Iho to ensure that our natural ecosystems, taonga species and people thrive despite the uncertainties, challenges and pressures of a rapidly warming world.

This positive direction inspires our climate planning and response to be a mana and mauri enhancing experience for our people.

2.2 Ihu (Bowsprit) – Mātauranga Māori

A holistic lens used by our people for millennia to understand the world, Mātauranga Māori is at the forefront of our waka as we navigate through the climate crisis.

Affirming our place within te taiao, Mātauranga Māori provides the foundational knowledge system to inform our mana enhancing climate response.

A holistic counterbalance to the reductionism of modern science, Mātauranga Māori considers all living things as being interconnected through their whakapapa (genealogy).

This interconnected worldview leads our climate response, encouraging us to look for the root cause of problems and seek out novel solutions that reflect the unique qualities of te iwi me te rohe o Patuharakeke.

The traditional principles, values and practices of Mātauranga Māori which have enlightened our people for thousands of years, including tikanga, kaitiakitanga, whanaungatanga and manaakitanga will therefore take a central role in our climate change planning and activities.

Te Tohu o Te Taiao Framework

Patuharakeke tūpuna have passed down complex intergenerational observations and experiences, to predict environmental patterns and seasonal signatures that when combined form tohu. These tohu have been used to inform decisions and actions on how to use taonga and the natural environment without causing an imbalance.

Patuharakeke and other hapū and iwi around the motu have been working to retain and revitalise mātauranga in relation to matters such as celestial navigation, maramataka, rongōa and tohu. The critical knowledge gap is the need for new tohu that will help us to understand and respond to the new pressures and opportunities that climatic changes and extreme events are creating. As an example, the flowering of pōhutukawa has been used as a tohu for harvesting kaimoana for generations, but with warming seas and climates, and the establishment of the myrtle rust pathogen Austropuccinia, these may no longer be linked. New tohu or application of a traditional tohu in a contemporary context will be required to ensure customary practices do not create an imbalance compromising food security and other elements of our tribal sovereignty.

2.3 Taurapa (Stern Post) – Climate Science

Also at the forefront of our waka, climate science provides detailed and accurate data, modelling and knowledge to inform how we navigate the climate crisis.

Supporting our mātauranga-led climate response with the best available tools, data and modelling when and where they are needed, climate science provides detailed and accurate insights that enable us to make the best planning decisions for our iwi and rohe.

To get the best of climate science we must enhance the climate science skill sets of our people whilst also building working relationships with leading researchers, academics and agencies, Managed to work in partnership with Mātuaranga Māori, Climate Science will greatly enhance the performance of our entire waka, supporting our people to revitalise our Taonga Tuku Iho as we navigate towards a better future.

2.4 Hiwi Taha Mauī (Port Hull) – Mitigation

The deepening climate crisis requires two responses working in parallel. Mitigation is the first of two hulls where our climate action takes place. We must all urgently stop emitting the greenhouse gas pollution that is causing the climate crisis.

The dilapidated infrastructure of the Marsden Point oil refinery at the entrance of Whangārei Terenga Paraoa, sitting on land illegally alienated from Patuharakeke in 1845, constantly reminds our people of the many harms that have come from the rapid rise and now declining fortunes of fossil fuels. What has not been visible to our eye during this time is an increase in atmospheric CO2 levels from 282 ppm in 1800 to 427 ppm today. This unprecedented rise in anthropogenic greenhouse gas emissions is the main cause of the climate crisis which presents the single greatest threat to our Taonga Tuku Iho today.

Despite remaining an infinitesimally small contributor to national and international greenhouse gas emissions, our holistic Mātauranga Māori worldview reminds us of our interconnectedness.

Our whakapapa focus highlights an intergenerational equity issue where present and past-generation economic practices and lifestyles pass the climate burden on to current and future generations. As such, all high carbon emitting industrialised societies are complicit in their contribution to the climate crisis through the use of fossil fuel energy, especially New Zealand which has the 19th highest per-capita carbon footprint globally.

Even the largest of industrialised nations are made up of countless localities much like our own rohe that produce, consume and distribute goods and services that emit the greenhouse gases causing climate change.

Our Patuharakeketanga reminds us to be responsible, bold, and active at the forefront of our local climate change response. We will draw from our tikanga and kaitiakitanga traditions such as rāhui to reduce our own operating emissions, whilst also using science to support the identification and monitoring of our own local emissions profiles and offsets.

Our objective is to reach net-zero emissions of our operations, assets and infrastructure no later than 2050. The speed and scale with which we reach this target is key with actions and decisions taken in the next five years being critical. All delays only increase the inevitable long-run costs for our tamariki and mokopuna.

We must therefore immediately begin all available action to mitigate the effects of climate change and this plan contains mitigation policies that we can begin to immediately implement.

2.5 Hiwi Taha Matau (Starboard Hull) – Adaptation

The second of the two hulls where our climate response takes place, adaptation means preparing for the inevitable environmental, economic and social impacts that are coming to our whenua, wai, moana and whānau.

Severe climate impacts may significantly alter or even irreversibly damage the biophysical foundations of our rohe and taiao. It is therefore critical to plan practical measures to adapt to the now unavoidable impacts of the climate crisis. Adaptive actions may include planning managed retreat to protect against sea level rise or undertaking measures for local surface cooling to protect against heat waves.

The IPCC says with high confidence that examples of effective adaptation options include: cultivar improvements, on-farm water management and storage, soil moisture conservation, irrigation, agroforestry, community-based adaptation, farm and landscape level diversification in agriculture, sustainable land management approaches, use of agroecological principles and practices and other approaches that work with natural processes[4].

Ecosystem-based adaptation approaches such as urban greening, restoration of wetlands and upstream forest ecosystems are effective in reducing flood risks and urban heat. Adaptation will present new challenges (as well as opportunities) for tangata whenua[5].

For Patuharakeke the effects of climate change have serious implications, with a historic lack of information or planning by decision-makers being a major issue. All international evidence to date points to the fact that poor, youth, women and remote communities are disproportionately impacted by climate change.

Māori figure highly in all these categories. Climate change exacerbates many of the inequities already faced by Māori. The adverse effects are wide-ranging and extremely serious. As the kaitiaki of our rohe, we need to act decisively and with confidence.

2.6 Hoe Tere (Steering Paddle) – Tino Rangatiratanga

Our Tino Rangatiratanga, or political self-determination, allows our people to lead and steer our own independent path towards a better future.

Revitalising our Taonga Tuku Iho requires Patuharakeke to fully express our Tino Rangatiratanga, Mana Motuhake and the political self-determination guaranteed to us through He Whakaputanga me Te Tiriti o Waitangi.

By failing to uphold the constitutional agreements of this nation and illegally alienating Patuharakeke whenua, the Crown has defiled our sovereignty. Rebuilding our rangatiratanga is a crucial foundation for revitalising our mauri as a people and is critical to a successful climate response.

We will endeavour as Te Tiriti partners to work with the Crown and its respective agencies to show leadership and uphold our obligations and responsibilities under international, national and local climate legislation as well as any treaties and agreements relating to climate change.

We will open our doors to our local community to join our climate change actions and will continue to offer our marae as an emergency shelter whenever the need arises.

We will also continue to engage with and whakamana our whānaunga as well as other hapū and iwi across the motu as we collectively respond to the climate crisis.

2.7 Papa Noho (Deck) – Climate Rangatiratanga Framework

Connecting both hulls, the 'Patuharakeke Climate Rangatiratanga Framework' is at the heart of our climate mahi and provides vigorous biophysical foundations to support our people as the climate crisis unfolds.

In light of our need to fully express our tino rangatiratanga and mana motuhake, we will develop a Climate Rangatiratanga Framework with the following five dimensions:

1. Rangatiratanga Kai (Food Sovereignty)
2. Rangatiratanga Wai māori (Water Sovereignty)
3. Rangatiratanga Pūngao (Energy Sovereignty)
4. Rangatiratanga Whenua (Land Sovereignty)
5. Rangatiratanga Moana (Ocean Sovereignty)

Enhancing these dimensions is critical to helping our people acquire the political mana and resources required to achieve Tino Rangatiratanga, become resilient and live well in a climate crisis future. This then shapes the next stage of our voyage, with each dimension requiring its own dedicated workstream to develop and implement.

We will engage with Councils, Agencies as well as experts and local practitioners to develop these. The existing mahi to develop the sovereignties framework is in early development and can be found here: ***DRAFT FRAMEWORK***

2.8 Pou Manawa (Main Mast) – Strategic Pou

We uphold our Strategic Pou to capture opportunities from the winds of change.

The ongoing effects of the climate crisis are likely to radically alter the conditions within which we uphold our Strategic Pou.

As such, all potential impacts to our Pou need to be explored and subsequent actions planned to ensure their continued efficacy in the climate crisis. These Pou include:

- **Pou Taiao** (environment)
- **Pou Ahurea** (culture)
- **Pou Taitamarikitanga** (succession)
- **Pou Kāwanatanga** (governance)
- **Pou Whaioranga** (economy)
- **Te Poupouwhenua** (Treaty claims)
- **Pou Hauora** (health)
- **Pou Mātauranga** (education)

2.9 Rā Mātua (Mainsail) – Resilience

When our waka is in order we can raise our sails of resilience and capacity and set forth into a revitalised future.

Resilience is our ability to recover quickly from the difficulties and setbacks that the climate crisis brings. To ensure the collective resilience of our iwi, the individual features of our climate need to be balanced, strengthened and operate in unison.

When our waka is resilient, healthy and performing well we will have the agility and ability to navigate the many challenging weather events and climatic conditions that the climate crisis will bring.

2.10 Pou Tāhū (Mizzen Mast) – Values

Key Principles, Values and Practices: As Inspiration for Climate Response.

- **Kaitiakitanga** – The rising tide of climate related impacts only serves to crystallise and strengthen Patuharakeke's commitment to kaitiakitanga. Our role as kaitiaki compels us to take all necessary actions to protect the rohe from negative impacts and harm. As our rohe, taonga tuku iho are reshaped by the climate crisis, we may also have to adapt and evolve our kaitiakitanga accordingly.
- **Whanaungatanga** – Climate change poses global challenges on an unforeseen scale and effective climate responses will require collaboration on an equally unforeseen scale. Hapū led whanaungatanga will be crucial to establishing and maintaining the relationships that are required to underpin effective climate responses.
- **Whakapapa** – Climate change may profoundly impact and reshape the many elements of the world that Patuharakeke whakapapa to, especially features within the hapū rohe whenua and moana. Sea level rise presents a particular force of change that may render certain locations less or even entirely inaccessible as they undergo transformation from whenua to moana. Whenua on higher ground and further inland may rise in strategic value as locations for resettlement.
- **Manaakitanga** – A rapidly warming climate has the potential to upend existing economic, ecological, and societal conditions, which presents challenges to the hapū to maintain and practice manaakitanga into the future. Protecting and revitalising the mauri of traditional manaakitanga enabling resources, such as mahinga kai, and also establishing futureproof sources of sustenance will become a key priority for the hapū.
- **Mātauranga** – The unprecedented disruption to the natural world and Patuharakeke's rohe that climate change brings, makes hapū mātauranga crucial to enabling us to navigate the challenges and opportunities that the changing future presents.
- **Mana Whenua** – As climatic shifts unfold, demands for access to the natural resources and strategic locations located within the Patuharakeke Rohe are expected to increase dramatically. Patuharakeke must therefore expand its role and influence as the mana whenua partner in all resource management processes and decisions.
- **Mauri** – Climate change impacts on sea levels, ocean acidity, and the frequency and severity of extreme weather events will almost certainly create widespread and detrimental impacts to the mauri of Patuharakeke taonga tuku iho. Improving the mauri of these taonga is critical to our ongoing physical, cultural and spiritual wellbeing. As Kaitiaki, implementing mauri enhancing kaupapa, strategies and projects within the rohe are critical and a priority for the hapu.
- **Tikanga** – Our tikanga, which encompasses all of these interwoven values, provides a robust framework or lens through which we can create, assess and implement our response as Patuharakeke to the climate crisis. In the face of unprecedented and rapid change tikanga will likely need to adapt and evolve.

  Our history demonstrates that our tūpuna have faced and adapted to enormous change while upholding these values and norms throughout the centuries. In the words of Matua Hori Parata "Tikanga as I know it embodies the thousands of years of practices and values carried with us through the Pacific to Aotearoa. Tikanga is Māori law and must be respected, however how it is applied can adapt and evolve.

  To use an analogy of a kete, the bottom or backbone is known as the aho and how it is woven is constant, it has a whakapapa. However, the raranga or plaiting of the sides is up to the individual weaver and can incorporate any number of patterns or colours. In other words, tikanga is where the commonality is but its application and expression in relationships with others and with our environment can be flexible."[6]
- **Taitamarikitanga (succession)** – Our Tamariki and mokopuna will inherit a hotter and vastly different world. While we have the responsibility to do all we can to mitigate the extent to which these changes will impact them, we must whakamana our rangatahi to formulate their own solutions and approaches to these challenges. Providing them the space and resource to do this will reinforce a bold and decisive response from our hapū and holistic and positive pathway forward in climate mitigation and adaptation.

2.11 Rā Kei (Mizzen Sail) – Taitamarikitanga (succession)

It is our tamariki and our mokopuna that will face the full effects and challenges of a climate-changed world. It is our collective responsibility today to ensure that the next generation are empowered and upskilled to face the new challenges of te ao hurihuri with mana, kaha and aroha.

This will require building and strengthening relationships, providing safe spaces for our tamariki and mokopuna to learn and share, and supporting them to speak out and contribute to decision-making that will impact on their futures and those yet to be born. Key ways our tamariki and mokopuna can be supported to increase their knowledge and understanding of climate change impacts include:

- Building connections and relationships with other youth, in Aotearoa, the Pacific Islands and globally who are actively engaged in climate action
- Engaging in regular events (e.g. hui, noho, site visits) and korero focused on climate change adaptation and mitigation
- Securing support for upskilling our tamariki (e.g. scholarships, internships/work placements) in areas relevant to building resilience for Patuharakeke

2.12 Whare (Cabin) – Whanaungatanga

With the disruption, havoc and harm that Climate Change promises to wreak on our world, relationships will be under more pressure than ever. Yet as we collectively navigate this challenging future, hapū whanaungatanga will also be more precious than ever for practicing the mutual aid that ensures everyone's needs are met.

As a hapū we must ensure that we continue to create open and inclusive spaces for our people to retain their close familial connections. We expect that a renewed focus on our tribal sovereignty will provide proactive opportunities, actions, and roles for whānau to connect with each other and strengthen our collective tribal identity.

3. Climate Change: Issues, Objectives & Policies

The issues, objectives and policies we have developed the different elements of our climate waka are all interwoven and interlinked. Although we have developed a comprehensive climate waka conceptual framework with many features, not all of these features are expanded into respective issues, objectives and policies.

Certain elements, e.g. both Mātauranga Māori and Climate Science for example apply to other features of the waka, e.g. mitigation, adaptation and resilience, but do not require a section of their own.

All of the following issues, objectives and policies must be viewed as a whole and not in isolation as they are all related.

3.1 Hiwi Taha Mauī – Mitigation

Issues	Objectives
As a hapū, our activities emit greenhouse gases.	The activities of Patuharakeke, including PTITB entities such as Te Pou Taiao Unit, become net zero / carbon neutral no later than 2050.
Other activities in te rohe o Patuharakeke emit greenhouse gases.	All other activities in our rohe reach net zero / carbon neutral no later than 2050.
We do not have an accurate greenhouse gas emissions profile for our own activities or for the other polluting activities taking place within our rohe.	Patuharakeke has an accurate greenhouse gas emissions profile for our own activities and for the other activities taking place within our rohe.
We have not developed a 'Patuharakeke Emissions Mitigation plan' for our own activities.	Patuharakeke has an in-depth mitigation plan for our own activities.
There is no emissions mitigation plan in place for other activities within 'Te Rohe o Patuharakeke.	Other actors in our rohe provide emissions mitigation plans and transparently report on their emissions mitigation.
Development in our rohe is being planned in a way that will imbed an increasing future reliance on fossil fuels.	All future development in our rohe contributes to a just and equitable transition to a net-zero, decarbonised economy, and does not result in an increase in emissions.
Agriculture is the largest source of emissions in the Northland Region, transport and industry is likely the highest emissions sources for our rohe.	All land uses and activities, including agriculture, transport, industry and trade in our rohe becomes less polluting.
Climate change modelling & reporting has tended to be inaccurate and underestimated.	Patuharakeke has access to state of the art climate modelling that accurately reflects the scale and impact of climate change on our rohe.
We lack the data and knowledge to fully understand the carbon sinks & emissions offsetting opportunities within our rohe.	Patuharakeke has data and knowledge to support all possible opportunities to offset our emissions from native ecosystems within our rohe.
We have not developed emission offsets from the native ecosystems in our own rohe.	Patuharakeke offsets any emissions through native ecosystems in our own rohe.
Natural carbon sinks in our rohe have greatly diminished in size and vitality.	Natural carbon sinks in our rohe are revitalised and expanded to offset emissions to their fullest potential.

Issues	Objectives
In the event we need to purchase emissions offsets to reach net-zero emissions, we do not have a plan on where we will source them.	We will investigate options to purchase emissions offsets that contribute to a just and equitable transition.
There is a lack of clear and unified climate leadership from councils, government agencies and other organisations in Northland.	Councils, Government Agencies and other organisations show climate leadership by taking proactive action towards a just and equitable transition to a zero-carbon economy.
Patuharakeke is not yet demonstrating climate leadership in emissions mitigation.	Patuharakeke demonstrates climate leadership by implementing our mitigation and adaptation plans and advocating all other activities in our rohe to fully decarbonise no later than 2050.
While the economy relies on fossil fuels to operate, pressure for more development AND economic growth will lead to increasing emissions in our rohe.	We will support the development of an economy that is less reliant on fossil fuels.
Climate change is dynamic and changes can occur more quickly than our planning documents can respond to.	Our climate planning documents are 'living' and regularly updated as new knowledge on climate change emerges.

Mitigation Policies

1. Patuharakeke engages with all willing partners to develop a plan to make a just and equitable zero-carbon transition for our rohe.
2. Patuharakeke explores all potential pathways and take all available and practicable actions to mitigate our emissions and become carbon neutral / net-zero by 2050.
3. Patuharakeke measures and regularly updates the emissions profiles of our own activities and works with others to calculate the emissions profile of our rohe.
4. Patuharakeke develops and implements an in-depth 'Patuharakeke Emissions Mitigation' plan for our own activities.
5. Patuharakeke engages with the major emitters in our rohe to advocate for their own greenhouse gas emissions mitigation as well as review their existing mitigation plans and progress towards their targets.
6. Patuharakeke advocates and lobbies for future development that contributes to a just and equitable transition to a net-zero, decarbonised economy, and does not result in an increase in emissions.
7. Patuharakeke advocates for changes to land uses that reduces emissions whilst providing a healthy environment and sustainable livelihoods.
8. Patuharakeke works with experts to access the best available climate modelling.
9. Patuharakeke conducts studies to identify all existing and potential future opportunities to offset our emissions from native ecosystems within our rohe.
10. Patuharakeke takes action to develop emissions offsets from native habitats found in our rohe, if we can't reduce our emissions to zero.

11. Patuharakeke revitalises and where possible expands natural carbon sinks within our rohe.
12. In the event Patuharakeke needs to purchase emissions offsets, we will seek offsets that contribute to a just and equitable transition.
13. Patuharakeke engages with councils, government agencies and other organisations to facilitate and implement proactive climate action and a just and equitable transition to a zero-carbon economy.
14. Patuharakeke will continue to advocate for positive-climate action, and to demonstrate our leadership through our actions to both reduce our carbon footprint, offset our emissions by looking after and expanding native habitats, and plan for our future and adapt to our changing climate.
15. Patuharakeke will support all climate actions and initiatives so long as they enable a just and equitable transition.
16. Patuharakeke actively updates and maintains its climate change plans so that they are 'living' documents informed by the best available and latest data.

3.2 Hiwi Taha Matau – Adaptation & Resilience

Issues	Objectives
A lack of rohe specific climate knowledge, data and information impacts our ability to adapt and build resilience.	Our Patuharakeke hapū and whānau community have sufficient knowledge, data and information to allow us to make effective planning decisions and prepare for the increasing effects of climate change.
Patuharakeke is not able to exercise complete rangatiratanga over our mahinga kai, whenua, wai māori, moana, or pūngao (energy).	Patuharakeke reinforces hapū rangatiratanga over our: kai, whenua, wai māori, moana, pūngao (energy).
The effects of climate change will accelerate existing impacts on the cultural, economic, social, and environmental wellbeing of Patuharakeke.	Patuharakeke responds to climate change in ways that contribute to a just and equitable transition and uplift the cultural, economic, social and environmental wellbeing of our hapū and whānau and our local communities.
Our unique Tribal Identity is held in key locations vulnerable to sea level rise, increased coastal erosion and flooding. These sites include our wāhi tapu, wāhi tupuna, urupā and middens, as well as key tribal structures such as our marae and kāinga.	Patuharakeke maintains our identity, including our Taonga sites, as well as core tribal structures and facilities such as our marae and papakainga, despite the impacts of climate change.
There remains a lack of preparedness across Government Agencies around climate change impacts. This is particularly concerning for Patuharakeke as our low-lying coastal communities become increasingly vulnerable.	Government Agencies provide access to a range of tools and resources that enable Patuharakeke to be well informed of climate change impacts in our rohe and undertake appropriate actions for adaptation and resilience.
Community-based integrated catchment management planning lacks a climate change focus and tangata whenua are not resourced to partner in catchment planning.	Climate change is an integral part of community-based integrated catchment management planning led by tangata whenua.
Patuharakeke does not have a climate change adaptation plan to ensure resilience is at the forefront of all future decision making.	Patuharakeke has a climate change adaptation plan for its hapū, whānau and rohe in place.
Our hapū and whānau community is not resilient and capable of being self-sufficient in time of extreme events such as flooding, severe storms and drought.	Our hapū and whānau community is resilient and capable of being self-sufficient in times of extreme events such as flooding, severe storms, and droughts.
Currently there is more focus by Government Agencies on adaptation (more hard defences, bigger stopbanks, more sea walls) when it must equally be about resilience (ability to withstand change) which is a prerequisite for adaptation.	Government Agencies understand that resilience is a prerequisite for adaptation and ensure that their climate response policies reflect this.

Issues	Objectives
Our entire rohe is under significant industrial development pressure, especially in low lying areas that are at risk of flooding and coastal inundation.	Industrial entities in our rohe have plans in place for protecting and adapting their activities to the impacts of climate change, including managed retreat.
Existing historical industrialisation and land use of the rohe has left a legacy of emissions, contamination, potential stranded assets and missed opportunities for sustainable businesses and industries.	Industrial activity in the rohe responds to the gravity of climate change by cleaning up existing pollution and transitioning rapidly to more sustainable businesses and zero-carbon industries.
Climate change will radically alter the climatic and biophysical conditions of our rohe that support our people's lives.	Our hapū and whānau community is enabled to make the most of any opportunities that a changing climate might bring.
Sea level rise and coastal inundation create the risk of pollution escaping from contaminated sites e.g. historic landfills at Uretiti, and industrial sites at Poupouwhenua.	All pollution at closed industrial sites is cleaned up and the sites are remediated and restored to as close to a natural state as possible. Existing industrial polluters must have action plans to remove pollution and mitigate the harm of pollutants in their rohe, given the climate change implications for their sites.
Pressure for regional economic growth is adding stress on resources, habitats and ecosystems that are key to protecting our rohe from the effects of climate change.	Further development in our rohe does not adversely impact the natural resources, habitats and ecosystems key to fighting climate change. in our rohe
Increased risk of new and existing pest species invasions that are better adapted to the changing climate.	All new pest species are managed as effectively as possible, with Patuharakeke playing a primary role in monitoring and response to pest incursions.
Our economy is entirely reliant on international trade, aviation and shipping.	Our economy becomes more reliant on value-added local goods and services and less focused on low-value bulk exports for overseas markets.

Adaptation & Resilience Policies

17. Patuharakeke undertakes research, creating tools and resources to enhance our understanding of climate change and the impacts it will bring to our rohe.
18. Patuharakeke develops and actions a Rangatiratanga Framework covering the kai, whenua, wai māori, moana, pūngao (energy) dimensions of sovereignty.
19. Patuharakeke takes climate action that contribute to a just and equitable transition to a zero-carbon economy.
20. Patuharakeke's climate change adaptation plan takes appropriate measures for the protection or managed retreat of core tribal structures and facilities as well as key sites to our cultural identity.
21. Patuharakeke advocates for the government and our national universities and research institutions to provide the best range of tools and resources for hapū and iwi to be well informed of climate change impacts and to undertake appropriate actions for adaptation and resilience.
22. Patuharakeke engages with all relevant parties to advocate for climate change considerations and Tangata Whenua leadership in Integrated Catchment Management and strategic planning.

23. Patuharakeke develops a climate change adaptation plan by 2026 and begin implementing it in 2027.
24. Our climate change adaptation plan includes a Climate Rangatiratanga framework so that our hapū and whānau can be self-sufficient during extreme events.
25. Patuharakeke engages with Government Agencies to develop policy that recognises resilience as a prerequisite to adaptation.
26. We will ask industrial and business entities to share their climate adaptation plans and if they do not have one we will urge them to develop one.
27. PTITB and our Te Pou Taiao Unit work directly with industry, landowners and Government Agencies to plan and implement actions to remedy existing pollution and transition polluting industries and land uses into more sustainable activities.
28. Patuharakeke activates our strategic pou and Climate Rangatiratanga Framework to identify and make the most of opportunities that a changing climate brings for our people.
29. Patuharakeke makes plans that identify and protect the natural resources, habitats and ecosystems in our rohe key to fighting climate change.
30. Patuharakeke prepares and plans for potential pest invasions that a warming climate may bring.
31. Patuharakeke encourages the development of community-owned renewable energy resources within our region that contribute to a just and equitable transition, and opposes any proposal that results in the proliferation of fossil fuels
32. Patuharakeke focuses on developing a local circular economy and reducing the regional economy's reliance on overseas exports/imports, international shipping, and aviation.

3.3 Whare – Whanaungatanga

Issues	Objectives
Patuharakeke hapū and community are not fully resilient or capable of being self-sufficient in times of extreme events such as flooding, severe storms, and droughts.	Patuharakeke hapū and community is resilient and capable of being self-sufficient in times of extreme events such as flooding, severe storms, and droughts.
Patuharakeke needs to collaborate more with the mahi being done by other iwi, hapū, communities and our Pasifika neighbours which limits the efficacy of our own adaptation planning and response.	Patuharakeke adaptation and resilience methods are informed through whanaungatanga connections with other iwi and hapū groups, communities and our Pasifika neighbours.
Tourism activities in our rohe are polluting and not geared towards a positive climate response or a just and equitable transition.	Tourism activities in our rohe contribute to a positive climate response and a just and equitable transition.
Our Taitamariki are varied in their climate literacy and ability to undertake positive climate action that contributes to a just and equitable transition.	Our Taitamariki are enabled to engage with climate change, develop a high level of climate literacy and are able to undertake positive climate action that contributes to a just and equitable transition.
Patuharakeke may not be able to protect certain Taonga, especially the low lying land, mahinga kai, wāhi tapu and wāhi tupuna, that are most vulnerable to the impacts of climate change.	Patuharakeke is informed to make appropriate decisions towards prioritising the Taonga that can be protected through our adaptation and resilience efforts.

Adaptation & Resilience Policies

33. Patuharakeke will continue to develop and implement our Hapū Civil Defence Plan with Northland Regional Council
34. Patuharakeke collectivises and draws inspiration and guidance through our whanaungatanga with other iwi and hapū groups, and our Pasifika neighbours, and derive our own adaptation and resilience methods suited to our particular local circumstances.
35. Patuharakeke explores slow/ecotourism opportunities, especially those that allow the hapū to uphold kaitiakitanga with local partners and the public.
36. Patuharakeke includes Taitamariki in our climate change planning and creates space for Taitamariki to engage in our adaptation and resilience projects.
37. Patuharakeke establishes reciprocal exchange with hapū and iwi who also share rangatiratanga aspirations to enhance our collective resilience.
38. Patuharakeke takes a realistic approach to redirecting focus away from the unsavable remnants of vulnerable land and habitats for example the depleting/depleted pipi beds at Mair and Snake Banks] and identify and focus on new areas to relocate vulnerable species to and create new habitats/ecosystems.

3.4 Hoe Tere – Tino Rangatiratanga

Issues	Objectives
Patuharakeke does not fully express rangatiratanga over our key dimensions of sovereignty including kai (food sovereignty), wai māori (water sovereignty), whenua (land sovereignty), moana (ocean sovereignty) or pūngao (energy sovereignty), which are all under increasing threat from the climate crisis.	Patuharakeke holds full rangatiratanga over our key dimensions of sovereignty.
Patuharakeke does not have all of the required skills, knowledge or experience to develop the key dimensions of our rangatiratanga framework.	Through collaboration and education, Patuharakeke develops the skills, knowledge and experience required to fully express rangatiratanga.
The many impacts of climate change threaten the rangatira / tapu resources of Patuharakeke	Patuharakeke is able to take actions that ensure rangatira resources are preserved for generations to come.
Local authorities do not currently recognise and provide for collaborative catchment management, led by tangata whenua that incorporates responses to current and impending changes in climatic conditions.	Local authorities recognise and provide for collaborative catchment management, led by tangata whenua that incorporates responses to current and impending changes in climatic conditions.
As a treaty partner, Patuharakeke is obliged to take all measures necessary to ensure that Aotearoa complies with international laws, ngā Tiriti and judicial rulings for the protection of the environment from the impacts of climate change. See Resource 13 for more information on this.	Patuharakeke takes all measures necessary to ensure that Aotearoa complies with international laws, treaties and judicial rulings for the protection of the environment from the impacts of climate change. See Resource 13 for more information on this.
Fossil fuel production and consumption are being proliferated globally.	Fossil fuel non-proliferation treaties are signed globally, preventing the further expansion of fossil fuel production.

Tino Rangatiratanga Policies

39. Patuharakeke develops a comprehensive 'climate rangatiratanga framework' to secure our rangatiratanga over key dimensions of sovereignty.
40. Patuharakeke takes all possible actions required to develop the knowledge and skills required for a complete rangatiratanga framework.
41. Our sovereignty framework includes measures to preserve Patuharakeke's rangatira resources.
42. Patuharakeke advocates for collaborative catchment management, led by tangata whenua that incorporates responses to current and impending changes in climatic conditions.
43. As a responsible Te Tiriti partner, Patuharakeke takes all the means available to us to ensure that Aotearoa complies with international laws, treaties and judicial rulings for the protection of the environment from the impacts of climate change. This includes reminding national and local government ministries, departments and agencies of their international legal obligations, as well as signing up to and lobbying others to sign up to fossil fuel non-proliferation agreements and other climate action treaties. See Resource 13 for more information on this.

3.5 Rangatiratanga Taiao

Issues	Objectives
Treaty settlement redress may offer our hapū coastal land in our rohe that is a liability due to its vulnerability to sea level rise and climate enhanced events	Patuharakeke and the Crown will ensure any Treaty settlement redress will be appropriate to the changing climate and therefore be an asset not a liability.
Local authorities currently enable and promote beachfront/waterfront development in our rohe, whether it be for industrial, commercial or residential use.	Local authorities and other relevant decision-makers only permit or consent those activities and land-uses that do not increase the risk to people and infrastructure to the impacts of climate change, e.g. only permit seawalls, stopbanks and other hard structures when nature-based or managed retreat options are not available and stop allocating resources to maintaining or upgrading infrastructure that is at risk from climate change.
Sea level rise threatens the kāinga and housing stock of ngā iwi o Patuharakeke that sits on low lying land.	Patuharakeke establishes new kāinga and housing options that are adapted to the impacts of climate change.
We do not know when to begin the managed retreat of our key tribal structures, wāhi tapu and kāinga.	Patuharakeke has a managed retreat plan in place, where specified actions are triggered when specific sea levels are reached.
Ngā Whenua Rangatira me Taonga Tuku Iho o Patuharakeke are at risk of damage and or total loss due to the effects of climate change.	We Identify preserve and protect rangatira whenua o Patuharakeke and taonga tuku iho.

Rangatiratanga Taiao Policies

44. Patuharakeke and the Crown assess the risk climate change poses to land we are negotiating the return of through Treaty settlement redress.
45. Patuharakeke opposes any development proposals in the coastal and estuarine environment where the effects of climate change pose an undue risk.
46. Patuharakeke responds to the needs of our community for when sea levels encroach, by investigating suitable options for the establishment of new kāinga and housing options inland and uphill.
47. Patuharakeke works with our local communities and experts to assess and identify the sea level rise contours that will trigger the managed retreat process.
48. PTITB's Te Pou Taiao, continues to develop our own native plant nursery as well as support whanau initiatives to increase capacity and provide native plants to various projects.
49. Patuharakeke develops and implements a waste management plan to reduce the use of single-use plastics and other environmentally unfriendly materials. See section 5.10 'Waste Management' in this HEMP for more detail.

4. Resources

References

1 Copernicus: Summer 2024 – Hottest on record globally and for Europe

2 IPCC (2023) Climate Change AR6 Report

3 https://natlib.govt.nz/schools/tuia-matauranga/voyaging-through-nz-histories/voyaging-waka-hourua and annotated with the mātauranga of Hek Busby and Arawai Ltd: https://www.arawai.co.nz/Home.html.

4 IPCC (2023) Sixth Assessment Report AR6 Synthesis Report

5 NIWA website: climate and māori society

6 Parata, Hori Temoanaroa (8th December 2023). *Brief of Evidence. Whangārei Harbour Marine and Coastal Area (Takutai Moana) Act Hearings Stage 2.* CBD [201.00117].

Other websites

ngaa-rauru-kiitahi-climate-change-strategy.pdf (environment.govt.nz)

Maketu-Climate-Change-Adaptation-Plan-He-Toka-Tu-Moana-Mo-Maketu.pdf (maketu climateplan.iwi.nz)

https://on.mas.co.nz/issues/july-2022/climate-change-through-a-maori-lens/

https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/empowering-maori/

https://www.sciencelearn.org.nz/resources/2545-matauranga-maori-and-science

file:/Users/admin/Downloads/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf

https://thespinoff.co.nz/atea/01-06-2022/the-place-for-matauranga-maori-is-alongside-science

https://nzase.org.nz/wp-content/uploads/2023/11/2023-11-Teaching-at-the-interface-NZASE-research-article.pdf

https://www.nrc.govt.nz/environment/climate-action/climate-change-in-northland/impacts-of-climate-change-for-maori/#:~:text=reflect%20their%20worldview.-,Te%20ao%20M%C4%81ori%20view%20of%20climate%20change,and%20Papatuanuku%20(Earth%20Mother).

https://seniorsecondary.tki.org.nz/Science/What-is-science-about/TMoA

https://www.maramatanga.ac.nz/sites/default/files/TO%20Te%20Ara%20P%C5%ABtaiao%20Maori%20scientists.pdf

https://www.sciencelearn.org.nz/resources/2544-understanding-kaitiakitanga

Summary and Relevance of International Climate Laws, Treaties or Judicial Events:

International law, treaty or judicial even	Summary	Relevance
UNFCCC and the 2015 Paris Agreement	An international treaty among countries to combat "dangerous human interreference with the climate system, The United Nations Framework Convention on Climate Change (UNFCCC), the UN process for negotiating an agreement to limit dangerous climate change. The convention's main objective is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [i.e., human-caused] interference with the climate system.	Without establishing concrete targets, the UNFCCC provides the international framework between nations for future agreements and policies relating to the reduction of greenhouse gas emissions. Common but differentiated responsibility is a fundamental principle of the UNFCCC, acknowledging that, while all countries share responsibility in addressing climate change, industrialised countries like New Zealand are historically major contributors to GHG emissions and therefore bear greater burden in combating this global issue.
ITLOS advisory opinion 2024	The International Tribunal for the Law of the Sea (ITLOS), which has jurisdiction over the interpretation and application of the United Nations Convention on the Law of the Sea (UNCLOS), including responsibilities for maritime zones, navigation, conservation and management of the living resources of the sea, protection and preservation of the marine environment and marine scientific research, delivered a long awaited judicial opinion on state obligations concerning greenhouse gas emissions and climate change. This opinion unanimously concluded that GHG emissions constitute pollution of the marine environment. Due to this decision, GHG emissions are now recognised under Article 194(1) of UNCLOS, which obliges states to take all necessary measures to prevent, reduce, and control pollution of the marine environment from any source. This inclusion to recognise GHG as pollution is the first ever international legal decision obliging to take all practicable and proactive measures to reduce their GHG emissions, with the most stringent standards of due diligence, even in the face of scientific uncertainty.	The classification of GHG emissions as maritime pollution clarifies and reinforces both Patuharakeke and New Zealand's roles, responsibilities and commitments towards climate mitigation. Further, it obliges Patuharakeke as a Te Tiriti partner to hold the Government accountable to the highest standards for its climate change policies, progress towards GHG emissions reduction targets and whether it is taking all practicable measures towards the cessation of GHG emissions. Failure by the New Zealand government to uphold these obligations may give Patuharakeke reason to take any necessary actions, including legal action, to ensure these shared international responsibilities and obligations for decarbonisation are met. Article 194(2) of UNCLOS requires "states to take all measures neces sary to ensure that activities under their jurisdiction and control are conducted so as not to cause damage by pollution to other States and their environment, and that pollution from incidents or activities under their jurisdiction or control does not spread from areas where they exercise sovereign rights". Recognising the inherent and unavoidable transboundary nature of GHG emission pollution, ITLOS prescribed that the duty of states to undertake proper due diligence towards Article 194(2) is even higher than that for Article 194(1). This transboundary nature of GHG pollution and the high standards required for due diligence with other states compels New Zealand to cooperate either directly or through international organisations to prevent, reduce and control pollution from greenhouse gases. This level of cooperation requires continuous, meaningful and good faith approaches at an international level.

International law, treaty or judicial even	Summary	Relevance
ICJ Advisory Opinion (forthcoming)	This International Court of Justice request advisory opinion case canvases the legal obligations of nation states in terms of climate change action. Whilst the Court has yet to release its findings, submissions and hearings have been completed. Once the International Court of Justice releases its findings and advice, this case will spell out the specific international legal obligations that every nation state has in regard to taking action to limit the impacts of climate change.	This case was the initiative of Pacific Islands' law students from Vanuatu and demonstrates well how Pacific Youth can have profound and global impact in terms of climate change action. The advisory opinion, once released, will provide further basis for legal challenges as to the failure of the New Zealand government to meet its international obligations in regard to climate change.
Pacific Islands Forum Declaration on Sea-Level Rise and Maritime Zones 2021	The Leaders of the Pacific Islands Forum, including former Prime Minister Jacinda Ardern, have issued the Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise Sea-level rise, which is a growing issue for the international community, is particularly concerning for New Zealand and our Pacific neighbours. In our region, the ocean is at the heart of our geography and is inextricably linked to our identity.	Sea-level rise caused by climate change was not well understood at the time that the United Nations Convention on the Law of the Sea (UNCLOS) was negotiated. The Leaders' Declaration sets out our region's collective position on how the Convention's rules on maritime zones should apply in the situation of climate change-related sea-level rise. It makes clear our intention to maintain our zones, without reduction. Maritime zones, and the resource rights that come with them, are of fundamental importance to Pacific countries' economies. Moreover, these countries have been planning their long-term development in reliance on those rights, which are guaranteed to them under UNCLOS. New Zealand is a strong defender of UNCLOS, which sets out the enduring legal order for the oceans and seas. The Leaders' Declaration is firmly grounded in the primacy of UNCLOS and promotes the principles of legal stability and certainty over maritime zones.
Pacific Islands Forum Declaration on Statehood and Sea-Level Rise, 2022	The Leaders of the Pacific Islands Forum on 9 November issued the 2023 Declaration on the Continuity of Statehood and the Protection of Persons in the Face of Climate Change-related Sea-Level Rise (external link. Climate change remains the greatest existential threat to the livelihoods, security, and well-being of the Pacific. The impacts of climate change include sea-level rise which is already affecting Pacific countries. This Declaration is grounded on existing principles and features of international law, declaring that the statehood and sovereignty of the Pacific Islands nations will continue, and their inherent rights and duties will be maintained, notwithstanding climate change-related sea-level rise. Forum Members also commit to protecting persons affected by sea-level rise and call upon the international community to support the Declaration.	This Declaration is relevant to Patuharakeke in that we too will lose land within our rohe to sea level rise and protecting our community from the impacts of climate change is critical. This Declaration confirms that our tino rangatiratanga rights and obligations remain, despite our land increasingly becoming inundated by the moana.

Patuharakeke
TE POU TAIAO

Patuharakeke Te Iwi Trust Board
PO Box 557
Whangārei 0140

Te Pou Taiao
711 Port Marsden Highway
Ruakākā 0171

Takahiwai Marae
229 Takahiwai Rd
Takahiwai

Contact

rmu@patuharakeke.maori.nz
www.patuharakeke.maori.nz