
KAUPAPA **Insight to the Rauora Indigenous Worldview Framework for the National
Climate Change Adaptation Plan**

TĀKINA

E tū ko te Ranginui
ko te pou o te whakatiina kia tiina
ko te pou o te whakatoka kia toka
Tiina toka te manawa ora kia tū tonu mai rā
Ko te pou o te whenua ko te pou o Ranginui e tū nei

Ko Tū kaiawhitia te nuku ko Tū kaiawhitia te rangi
Ko Tū āpiti nuku ko Tū āpiti rangi ko Tū aropaki
Tēnā tawhito pou ka tū ko te pou o Ranginui e tū nei

Kia Tūturu whakamoua kia tiina
E Rongo whakairihia ake ki runga
Tiina toka te manawa ora ko te pou o Ranginui e tū nei
Ko te pou o Papatūānuku e takoto ake nei
Tihei mauri ora!

***Kia uiui mai rā, kei hea he aratakina mā tātou?
Me kii – ka mua ka muri.***

HE PUNA TAAORA HE RAUORA

Ka whakairihia ake ki runga ko te whakapapa tātai whetu ki te rangi, tātai rangi ki te whenua, tātaiao e tū tonu mai ra.

Kei te ao Māori he tapu te whakapapa, me te mōhio katoatia ko Ranginui ki runga, ko Papatūānuku ki raro.

Ka maarama pai ai kei te ora te katoa kei waenganui i a rāua nā te mea, ka tū he pou tawhito.

Nā te tini e kaha patu nei i ēnei tipua, i ēnei pou tāwhito, i ēnei puna taaora, ka kimihia ētehi he ara ki te taha o te awa maarama, me pēhea tātou e whai oranga? Kei hea he aratika, kotewhea ara he ara maamaa pea? Ahakoa kei te mōhio kei whea te raru e puta mai ana, te āhua nei kua kitea kāore e pirangi ki te whakatika.

Mehemea ko te hiahia ki te whakatika, ka tika.

Ahakoa ko te kete pāpaku e kore e taea te whangai te iwi, ka taea he iti kupu kia nui te kōrero. Nā reira, ko te tirohanga ki te whakapapa, ka whakawhānui te maarama he mahere whakaarahia, he rautaki raurarahi, he rauora.

1. An Indigenous Worldview Framework

- 1.1 A technical analysis with conceptual development was presented in the form of an overarching framework called *Rauora (June 2021) – EXPLORING AN INDIGENOUS WORLDVIEW FRAMEWORK FOR THE NATIONAL CLIMATE CHANGE ADAPTATION PLAN*.
- 1.2 The Rauora framework provides an insightful introduction and concise explanation of an evolving and expansive indigenous lens, which centres Māori language and cultural concepts that acknowledge ancient narratives, historic colonial and contemporary contexts of Māori lives and **Traditional Ecological Knowledge (TEK) systems**.
- 1.3 The unique conceptual structure of the Rauora framework situates the root causes of the climate crisis within the direct view of the solution pathways required to achieve an equitable transition to the goal of a zero carbon future for our nation.
- 1.4 This summary paper is informed by the short-written report and infographic, however the author would like to acknowledge the important intertextual quality of audio-visual elements included in the verbal report back (ref: PowerPoint slide-deck).

2. MAURI

- 2.1 The concept of Mauri refers to a 'life force or 'vital essence' and the core proposition of the Rauora framework begins with an idea that an holistic approach be considered as a Mauri balancing approach.
- 2.2 In effect the work of the National Adaptation Plan should aspire to the maintenance and restoring of our environmental balance as a 'joint-aspiration' to ensure policy coherence in any undertaking of transformative actions across the whole country, which must address the equity needs of the total population – our Team of 5million.
- 2.3 It has been said that our atmosphere is a delicate balance of gases, and simply put the balance is tipping. Addressing the balance of gases is the primary concern analogous to the balancing of Mauri, which includes examination of the balance of power in the relationships needed to progress the work to be done.

3. TE REO RANGATIRA

- 3.1 With respect to the many Māori language variables across the landscape of Aotearoa, we have not translated into English because the work would become bereft of cultural texture and richness.

05 June 2021

Ihirangi Report

'Exploring An Indigenous Worldview Framework for the National Climate Change Adaptation Plan'

Context for this Report

On 11 May 2021 Ihirangi was contracted by the Ministry for the Environment ('MFE') to provide a report outlining a proposed scope for the Indigenous Worldview Framework to underpin the National Climate Change Adaptation Plan (NAP). This was to be based on Ihirangi's expertise and testing with Maori whanau/hapu and iwi.

Who is Ihirangi?

Ihirangi was established by a foundational group of Maori climate and environmental experts. It is supported by the National Iwi Chairs Forum, and provides some operational capacity to the Pou Take Ahurangi, the National Iwi Leadership Group for Climate.

Ihirangi's core work is to empower and increase capacity of whanau, hapu and iwi to engage proactively in climate change mitigation and adaptation through the provision of robust, comprehensive and relevant data, information and analysis to whanau, hapu and iwi. The secondary objective, while building the capacity of whanau, hapu and iwi to proactively address and plan for climate change, is to also increase the ability of hapu and iwi Maori to engage with government, both local and central, around climate issues.

A further discussion on the role and establishment of Ihirangi is available in other documentation previously provided to MFE, including the Memorandum of Understanding between the parties. The co-leads for Ihirangi for this report were Mike Smith (climate specialist/Pou Take Ahurangi for National Iwi Chairs Forum) and Dayle Takitimu (environmental/indigenous rights lawyer).

Of importance to note is that Ihirangi does not speak for, or represent, all Maori, all iwi; nor does it purport to represent indigenous collective rights holders. Ihirangi members bring their expertise in terms of past and current work, and their extensive Maori networks, to their consultative work, but this does not, in and of itself, discharge the MFE's wider Tiriti obligations owed directly to hapu and iwi. Where appropriate, Ihirangi has provided advice to MFE on the critical need for relationship improvement and investment with hapu/iwi; particularly around investing in longer term direct relationships based on sound engagement principles and protocols that meet hapu/iwi aspirations as well as those of the Crown.

The Contract

The Contract, signed 11 May 2021, set out a series of major deliverables across both the NAP and the Emissions Reductions Plan¹; to be fulfilled within a 7 week timeframe (to 30 June 2021). The urgency of this work required Ihirangi to rapidly re-prioritise and re-allocate resources to complete the work at speed.

¹ This report does not include deliverables relating to the Emissions Reductions Plan, which are reported on separately.

The conceptual piece of work for the core NAP deliverable was to explore and outline the scope for an Indigenous Worldview Framework proposed, by Ihirangi, to underpin the national climate change planning documents, including the NAP. The scope to pursue this proposal was the result of a Cabinet decision in late April 2021 that agreed, in principle, to exploring the utilisation of an Indigenous Worldview Framework as the lens for progressing the National Adaptation Plan.

For context, the NAP is being developed, with MFE as the lead agency, over the 2020-21 year, for adoption and implementation in the 2022 year. Thereafter the NAP will be monitored and reported on by the quasi-independent Climate Commission and reviewed in six-yearly cycles.

The Contract Ask – NAP Indigenous Worldview Framework

The contracted deliverable for the ‘National Adaptation Plan – Indigenous world view proposal (slide pack and written report) (due 1 June 2021)’² is as follows:

Task: Technical analysis, development of the report and slide pack, informed by consultation beyond Ihirangi, including with a range of iwi leaders and leaders of key iwi/Maori national bodies.

Deliverable: PowerPoint slide pack and short written report outlining the proposed scope of the indigenous worldview as the lead worldview for the National Adaptation Plan. The short written report will be between 10-15 pages. The slide pack will provide an overview of the written report. Both the report and slide pack can be read as standalone documents.

At a minimum, these were to include:

1. An outline (and explanation) of the key elements/constructs that comprise the worldview, and explanation of the relationship between them.
2. How this framework could be applied to this and future National Adaptation Plans, future National Climate Change Risk Assessments, and their implementation. An example of what this would look like in practice (such as to the current or future NAP, future NCCRAs or a specific risk).
3. The significance of the worldview in relation to iwi/Maori, and for New Zealand society as a whole.
4. Key advantages for this worldview compared to the strategic direction agreed in-principle by Cabinet
5. Any limitations of the worldview, including divergent views that were raised through the process (such as by other iwi leaders)
6. Outline of method for developing the framework, including breadth of iwi/Māori involved in this work, and how this took place (specifics on who was consulted / engaged)
7. Details of engagement

² Note: There have been a number of variations (agreed or necessitated) to deliverable dates: the verbal presentation of the report to Adaptation Directors (initially timetabled in the contract for 26 May 2021) was re-scheduled to 5 June 2021 by MFE, the delivery of the final written report was delayed until 5 June 2021 to enable completion (including Climate Change Iwi Chairs engagement and testing beyond Ihirangi on 3 June 2021), and the ERP analysis has needed to be pushed out to allow for MBIE to provide Ihirangi with the documentation required to undertake the analysis (pending).

An Indigenous Worldview Led Climate Response for New Zealand, A Framework Blueprint, including application to the National Adaptation Policy (NAP)

1. The exploration and adoption of an Indigenous Worldview Led Climate Response is a courageous shift in political approach to climate change. It moves the political response beyond rhetoric and into real strategic alignment between national policy, community ownership and capacity/resilience building.
1. Strategically, the climate crisis is difficult to plan for; it is, and should be respected in policy design and delivery, as a rouge variable. The only thing we know for sure is that, to date, human occupation, consumption and extraction has pushed the earth beyond its sustainable capacity, and as a result the climate is responding to those excesses. Whilst we have mountains of historic data we can analyse to seek predictive answers for climate events, *all we really know is change is coming, and that its going to be disruptive, compounding and largely beyond our control.*
2. Internationally, the approach has been to develop both mitigation (reduction) strategies alongside adaptation (change) strategies. Domestically, this is the approach the New Zealand government has also adopted at a policy level. Statutory implementation of that policy is occurring, and the National Adaptation Strategy and Emissions Reductions Plan are integral to the policy suite being designed and implemented.
3. The purpose of this paper is to explore how an indigenous worldview can provide a robust framework blueprint for the good of the nation, including its 0.8 million indigenous citizens. The report does that by looking, specifically in a New Zealand context, at how those worldviews are held by indigenous hapu/iwi populations – and what the nation as a whole may glean from that ancient collective knowledge. Globally, there is some recognition that the complete systems thinking approach of indigenous cultures and lifeways offer rich insights into how populations survive and restore equilibrium to the eco-system they live as part of.³
4. Indigenous worldviews vary, from nation to nation, culture to culture. There is no one singular worldview; though there do appear threads of consistency through creation traditions. Each culture has gone on to adapt values based government in accordance with their circumstance, deeply rooted in the relationship they maintain with geographic time and space they occupy. This is what it means, in Aotearoa, to be tangata whenua. In this sense indigenous peoples share comparable societal development and design as any other peoples, or civilisations, throughout history.
5. The Westminster system, imported and imposed here in New Zealand, is just another system designed by a people to order themselves, in that case the 18 century British aristocracy. Their worldviews and laws set the parameters for their relationships with each other, and with the natural world within which they were to live. Indigenous peoples, including those whose territories are covered by Te Tiriti o Waitangi protections, had functioning and effective systems at the time of European contact, and many have maintained aspects of them, despite the violent brutality of colonisation upon them. It is from these reservoirs of intergenerational knowledge we now turn to assist the country at large in designing and developing a strong, equitable and highly effective systems response to climate change.

³ Of course, for many, these holistic approaches to population management were deliberately deconstructed as part of colonial interruption, and so there are now compounding external factors in the equation that need to be considered, and addressed, in policy design. There may, particularly around the policy areas of 'built environment' and 'development', need to be some hybrid, bespoke solution.

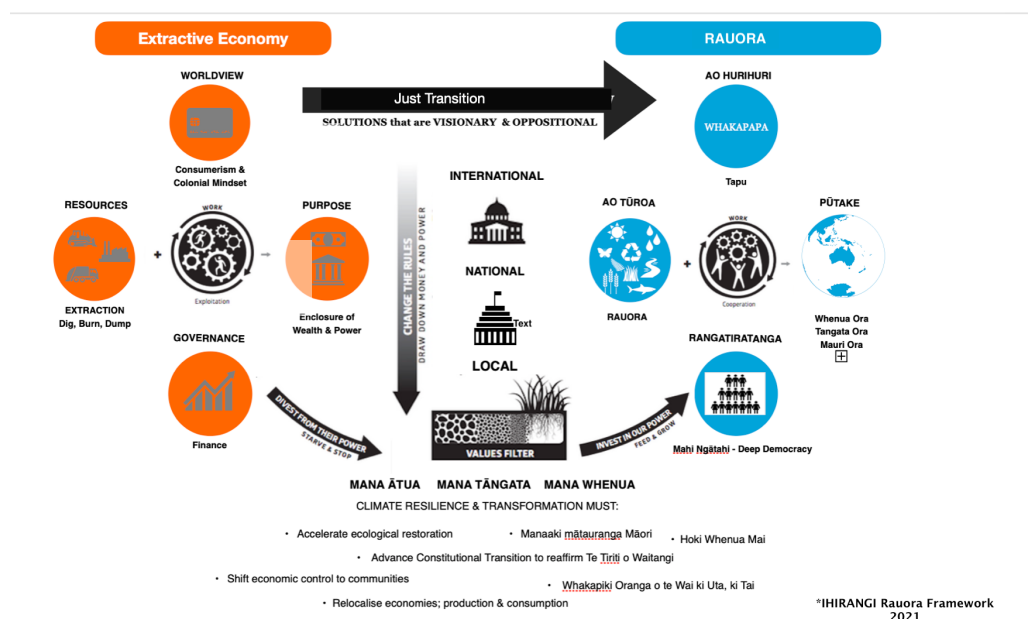
6. We draw on the indigenous worldviews we know, and (attempt to) extrapolate their value to apply in policy design and development. These, we know, are tried and tested, through generations of intimate inter-relationship with the earth and the natural environment. These are part of our collective taonga, our kete of ancestral knowledge; ko tenei ta matou rourou.
7. Application is vitally important. It would tragically over simplify the discussion and the relationship to render Maori values as some overarching conceptual symbolism, without really translating that into changed practice and design. Ihirangi has sought to 'reach beyond' the stock standard reference to fluffy values that has gained traction in recent times. That is not the positioning of an indigenous worldview as a lens for change. Non-indigenous rules and regimes gift wrapped in Maori values often leave Maori with only the glossy reports, graphics and translated proverbs as evidence they have participated in planning design and development. It would be too easy to list and translate manaakitanga (generosity), aroha (love), kotahitanga (unity) to install as the pillars of an indigenous framework. Ihirangi has tried though to look specifically at how an indigenous lens or worldview sees climate change, the current climate crisis and its complexities. This interplay between conceptual value/principle and application challenges us to critically unpack and *(re)see climate change through an indigenous worldview* as a series of verbs rather than a rigid set of nouns.
8. We need to ready ourselves for climate disruption and extreme weather events – at any location, at any time, in any intensity, (and with any other amount of sensible variables) – and we need to design and deliver solutions that aim at:
 - (a) Keeping our people safe, sheltered and well
 - (b) Maintaining the wellbeing of our communities (see both Statistics NZ Wellbeing indicators and international indigenous wellbeing indicators – or perhaps a tailored solution is warranted around indigenous co-designed NAP indicators?)
 - (c) Protecting the environment from further harm or unnecessary strain
 - (d) Actively restoring strength and capacity to whanau, communities and environment
 - (e) Continuing to provide for the sustainable development, growth and investment in, every whanau, community and region, for their wellbeing and quality of life.
9. The National Adaptation Plan needs to be describing, and providing for, the travel required from the current structure, worldview and approach to what we believe would be better founded on indigenous worldview. Maori have skin the in game, Maori are singularly the most vulnerable population on these shores across a range of variables.
10. Hapu/iwi populations have increased vulnerabilities to climate change because of a number of compounding factors; and while there are of course variations, nationally we can say that many hapu/iwi populations –
 - (a) Live 'close to the land' in terms of sustenance, relationship and identity;
 - (b) Live close to the coast, or in isolated, often impoverished communities;
 - (c) Already feature disproportionately high in ill-health statistics (both physical/mental);
 - (d) Experience weakened social cohesion arising from colonisation and deliberate incursion on Maori social structures, leadership, land base, economy, language, culture and education by the colonial State;

- (e) May have poorer access to expertise, data, intel and information relating to climate change;
- (f) May have poor existing physical infrastructure (roading, water, sewerage etc) within their tribal territories;
- (g) Have multiply owned land base with restrictions on use, or have been permanently alienated from large tracts of their traditional homelands and territories once used to sustain their people;
- (h) Are heavily invested in primary industries that will be highly impacted by either climate disruption or by mitigation measures (ie targetted emissions reduction measures to be implemented);
- (i) May already have a high volume of inadequate housing;
- (j) May already be experiencing environmental stress, water source pollution, degradation (Waiapu), over-allocation (Turanga) or the impacts of diversion (Waikato);
- (k) Are likely to be less proximate to national and regional decision making/policy setting; and
- (l) Still, overall, constitute a demographic minority; often with a small home base population with the majority hapu/iwi population disbursed through urbanisation (as a colonisation policy); creating detachment/engagement challenges where there are large pockets of socially and culturally disconnected tribal citizens.

Indigenous Worldview Lens or Framework

Rauora

11. An indigenous world view does not work from a minimal or reductionist lens; it operates above the baseline, *at the optimal*, and sees stress on any composite part of the eco-system (such as over use, over allocation, degradation etc) as creating its own measurable impact on other parts of the whole. This is a blend of an inter-connectivity lens with that of inter-generational equity; and then looks additionally at the quality and state of wellbeing; and assesses that against a measure of abundance, vibrancy, regeneration and optimal health. It is not necessarily that the measuring stick for impact is inconsistent with current applications, but critically the indigenous worldview starts the measurement from a markedly different point; that of abundance, or *rauora*.



12. The *Rauora* model depicts a worldview indigenous to Aotearoa; it centralises interconnection, collectivity, holistic wellbeing and intergenerational equity within a changing environmental dynamic. That changeable future is understood by first positioning the human existence within a sacredly interconnected world; within the mana of the ancient world, within the mana of the land, within the mana of the environment and within the mana of the whakapapa collective. Interconnection and collectivity are underpinned by indigenous knowledge, transmitted inter-generationally, relating to whakapapa, tapu and oranga. Decisions and leadership are contained within the collective, and focus on inclusivity, equity and sustainability. Rangatiratanga is subject to the ongoing will and wellbeing of the community as a whole; and is actively measured and accountable, in real time, to the collective, utilising a range of indigenous traditional indicators relating to wellbeing, balance, social cohesion and species management.

Interconnection:

- (a) Within an indigenous worldview there are multiple layers of interconnection. The first is at a very esoteric level; not commonly understood outside the culture it exists, where the creation narratives of a peoples are articulated in a way that explains the collectives' existence in a broader time and space continuum (and that knowledge is transmitted through successive generations). In Aotearoa/NZ this knowing is reflected in our understandings of Mana Atua, Mana Tangata and Mana Whenua/Moana/Ao Turoa.
- (b) We need to acknowledge at the outset the system of tikanga and worldview of hapu/iwi constituted, at the time of British arrival, complete social systems that were robust, future facing and balanced. There has been colonial interruption, no doubt, but there has also been the steadfast retention of our language, cultural practices and traditional knowledge, where possible. The investment in, and reconstruction of, traditional schools of learning and knowledge transmission, is core to climate adaptation in this country.
- (c) Mana Atua positions the human within the divine. Some hapu/iwi describe these as our Hawaiki stories, our Hawaiki traditions – that saw our ancestors descend from ancient and primordial realms, through their occupation of Hawaiki, as their spiritual homelands, to their trans-navigation of Te Moananui a Kiwa to occupy, as first peoples, the lands of Aotearoa/New Zealand. Other hapu/iwi have histories that pre-date those migrations, and recite descent direct from these lands and seas. Regardless of origin, there is a commonality that the human collective is positioned within an interconnected world that sees species inter-related, and co-existing within the same habitat.
- (d) Hapu/iwi assert their right to own, control and manage their ancestral lands and territories, waters and other resources. They further assert that their lands and territories are at the core of their existence, and they have a distinct spiritual and material relationship with their land and territory. Their lands and territories are inextricably linked to their survival and to the preservation and further development of their knowledge systems and culture.
- (e) Inherited and ancestral tikanga, or worldview and traditional law, ensures the conservation of, and the sustainable use and enjoyment of the lands, territories and resources within their tribal territory. Through their deep understanding of, and connection with, the land and territory the hapu/iwi have managed their interaction with the environment for generations. In turn the flora, fauna, other species and natural habitats have provided them with their livelihood and nurtured them.

Toitu te Mana Atua

- (f) It is acknowledged that the hapu/iwi have, in accordance with their tikanga, an unbroken, inalienable and enduring sacred relationship with their traditional territories. This relationship acknowledges Ranginui and Papatuanuku as the spiritual source of life, tapu, mauri and mana. Hapu/iwi view that sacred relationship as the source of their mana.
- (g) The spiritual integrity of this relationship maintains and protects, according to tikanga and traditional matauranga, the manner in which the hapu/iwi live in balance with their rohe, and by which the balance between the hapu, the natural world and the spiritual realm is maintained.

Toitu te Mana Whenua, Mana Moana, Te Mana o te Ao Turoa

- (h) The land has its own mana, tapu, mauri. As does the ocean, the wetlands, the entire natural world is seen as having its own authority and legitimate right of place. An indigenous framework does not elevate humankind above the environment; but sees instead humanity as a part of a larger, indivisible whole.
- (i) Hapu/iwi have unbroken, inalienable and enduring mana in relation to their rohe. This mana, according to their tikanga, places them within a sacredly interconnected world. Hapu/iwi tikanga protects and maintains this interconnection by respecting the mana, oranga, mauri and tapu of all other living beings, natural resources and their habitats within the tribal territory.
- (j) All human activity is fettered by the mana of Te Ao Turoa; we are part of it, therefore anything we do, by extension, becomes part of it, and needs to be balanced. This is a critical shift from an infinite financial growth model/mindset.

Toitu te Mana Tangata

- (k) Toitu te Mana o Nga Hapu

Hapu/iwi are collective groups legitimately possessing their own mana and expressing their own worldview, tikanga and kawa within their respective territory. They have a complex set of whakapapa based inter-relationships existing between each member of the hapu, and they, in turn, have collective obligations to each other to preserve the unity and the mana of the tribe, and ensure the wise management of the entire tribal territory. Hapu/iwi regard it as a birthright of the descendants of the collective are able to live according to their tikanga in a physically, culturally and spiritually safe and healthy environment.

- (l) Toitu te Oranga Whanui o Nga Whanau

Hapu/iwi have the right to ensure their oranga whanui, the sustenance and livelihood of their whanau through the maintenance and continued exercise of their tikanga and customary practices. Hapu/iwi that have maintained some measure of self-government additionally expect that they have some extant right to exercise influence over persons carrying out activities within, or impacting upon, the rohe. Hapu/iwi are concerned to ensure that the sacred, ceremonial and culturally significant sites, areas, and practices are preserved, respected and protected from destructive and exploitative development.

Toitu te Tiriti o Waitangi

- (m) Hapu/iwi and the Crown are bound by the framework established in the sacred covenant signed between them in 1840, the Treaty of Waitangi. Consistent with honourably implementing that agreement hapu/iwi expect to engage with the Crown as they did for the signing of that treaty, in good faith and as sovereign equals.

Collectivity / Te Mahi Ngatahi:

- 13. A healthy society can only come from healthy communities comprised of self-determining individuals acting and taking responsibility for their actions for all. This is the essence of the traditional Indigenous view of community. And it is this compelling need for communal action that must be energized to address the challenges of global climate change in both Indigenous and non-Indigenous communities. Community is a socially learned perception. Humans are social beings. We learn to be in community through participating and learning in community.
- 14. Exploring the idea of human communality – inherent in many indigenous worldviews – social cohesion is a central tenet of any adaptation or resiliency strategy. This is an area for key investment.

Healthy community gives us a sense of purpose. In its requirements for a collective agreement on core values, participation, communication, commitment, collaboration, and trust it connects us to our humanity. To function in a healthy way requires our conscious choice, our participation in a shared responsibility, an acceptance of healthy community norms and accountability. It requires us to respect one another, to have accountability to one another, and to practice reciprocity, transparency, and efficacy.

Intergenerational Equity

- 15. Indigenous worldview demands we take an indigenous lens – and that sees, plans, and takes responsibility for, the long game. Inter-generational equity. More than that, inter-generational legacy.

Applying an Indigenous Lens

- 16. In applying that worldview, climate resilience and transformation in Aotearoa/NZ must provide for, and be measured by how well it is able to genuinely:
 - (a) accelerate ecological restoration;
 - (i) Measuring effectiveness, ability to adjust and adapt fluidly, depends on measuring real impact factors for sustainable development, or where environmental limits need to be applied. Indigenous worldview would not take a minimum baseline approach, but a flourishing healthy, future insured approach.
 - (ii) This is essential an indigenous value of balance. Maintenance and restoration of environmental balance should be the part of a joint aspiration – ahakoa ko wai, ki hea.
 - (iii) Consider within a Tiriti measurement frame that prioritises indigenous estate; the progeny of Ranginui and Papatuanuku.

- (iv) There is an inevitability that changes will be required – to practices, permitted activities, impact, tolerances, monitoring, enforcement, restoration requirements – the human capacity to impact has to be fair to ‘the resource’ or fair to the system itself.
 - (v) Tahuhu to give effect to a more holistic approach, this idea of moving from a resource management approach to a mauri balancing approach. Not the masters of the universe, dominion over all things, mentality transposed into New Zealand law from biblical origins.
- (b) Manaaki matauranga Maori
- (i) We also note that the totality of an indigenous lens requires a step away from cherry picking palatable values (like manaakitanga, kaitiakitanga etc) and instead requires an understanding of the entire customary system in which those values are housed. An understand of mana atua, mana whenua, mana moana, mana tangata is intrinsically understood within the context of whakapapa, whanaungatanga and tikanga. Likewise the cultural toolkit that is utilized to maintain systems of cohesion and environmental interaction are also intrinsically interconnected to each other; and need to be understood within their natural context before being exported or appropriated into government policy devoid of that context that gives them such rich meaning and applicability.
 - (ii) Additionally, it is critical that an indigenous lens must be applied to the definition of core concepts. ‘Sustainability’ and ‘environmental limits’ have much stronger, and textured, characteristics in an indigenous world because of their integral positioning at the core of indigenous ethos/praxis.

A working definition of “Indigenous science” is “that body of traditional environmental and cultural knowledge unique to a group of people which has served to sustain that people through generations of living within a distinct bioregion.” All of this is founded on a body of practical environmental knowledge which is learned and transferred through generations of a people through a form of environmental and cultural education unique to them. Indigenous science is really Indigenous knowledge and may also be termed “traditional ecological knowledge” (TEK) since a large proportion of this knowledge served to sustain Indigenous communities and ensure their survivability within the environmental contexts in which Indigenous communities were situated.⁴
- (c) Hoki Whenua Mai
- (i) Where vulnerabilities have been created through colonial practices that fell short of the Crown’s obligations under Te Tiriti o Waitangi a conscious, concerted effort to remove or mitigate those vulnerabilities needs to be made. Dispossession of ancestral estate has meant many Maori are without land or the ability to occupy communal land. Notwithstanding, the Crown remains in possession of large tracts of reserve land taken from hapu/iwi estates that could be restored to local control to alleviate some of the pressures climate disruption will bring.
- (d) Advance Constitutional Transition to reaffirm Te Tiriti o Waitangi
- (i) Much work has been undertaken recently in the constitutional reform space, and the seminal Matike Mai Aotearoa report and workstreams has provided guidance on realigning the constitutional relationship in Aotearoa/NZ to better reflect the legitimate place of indigenous peoples, and their systems, upon this land.

⁴ Cajete, August 2020

- (e) Shift economic control to communities
 - (i) Communities need to be empowered to design and deliver their own climate solutions. The role of central government can support that, with robust information, data and technology. Local connection is essential to buy in, to ownership of both the issues and the solutions.
- (f) Whakapiki oranga o te wai ki uta, ki tai
 - (i) Freshwater quality and allocation needs to be addressed with an oranga lens; it is critically important to any viable climate change preparedness that fresh water is prioritised and protected for present and future generations needs. Climate disruption will already create severe weather systems, and will likely impact on international trade; the ability to preserve, maintain access to, and maintain the environmental integrity of fresh water sources will be imperative to New Zealand's ability to continue to be self-governing, and within that, for hapu/iwi to have any viable chance at manifesting self-determination.
- (g) Relocalise economies, production and consumption
 - (i) Economies need to be relocalised, and models of production and consumption need to be reviewed to reduce waste, excess and impact; and also to reposition communities to positions of strength rather than exposed vulnerability.

Seeing capitalism and colonialism as structural forces generating exploitation and ecocide is of critical importance as we need to be able to acknowledge that colonial capitalism will not and cannot solve the crises it is causing.⁵
- (h) Divest from extractive industries and other demonstrably problematic practices
 - (i) Every major international climate agreement, including those that New Zealand is a party to (Kyoto/Paris) recognise the need for carbon emissions to be urgently reduced. The single biggest contributors to carbon emissions are the fossil fuel, extractive industries and agribusiness. These industries need urgent regulation, particularly around their present and future impact, and they also need to be required to invest in the restoration of eco-systems they have been enabled to profit from whilst degrading them. This practice is simply an anathema to an indigenous lens that would see those directly responsible for negative impact censured, required to take responsibility, and required to stop.

Invest in mahi ngatahi – deep democracy

- (i) National level policy needs to invest, empower and resource communities to design and deliver their own climate solutions and resiliency plans. They fundamentally need to be specific to local needs. Communities need to be equipped with world class science (which NZ already has a reputation and partially established structure for), tech, industry, research, workforce, matauranga.
- (j) Propose a two tiered adaptation strategy development: (1) national structural adjustment including legislation and (2) specific local needs. This includes specific strategies for divesting in centralised dependency, and enabling community infrastructure (physical and social) to be built.

⁵ Dawson, 2016, p. 63

- (k) Whilst the Crown may have their national level objectives for climate policy, so do hapu/iwi. There is an ability to align on agreed aspirations/commitments, standards, definitions, scope, and negotiate the prioritisation of particular cultural imperatives. It is possible for all Treaty partners to jointly commit to a holistic, indigenously inclusive approach to creating a world class national adaptation framework that empowers, resources and fosters local design, delivery and resilience – at its essence it is a cultural shift model. We believe that is what addressing climate change is going to require.

Historically, Indigenous Peoples have survived epidemics, extreme weather events, droughts, floods, wars, colonization, displacement, and religious conversion. In the face of these challenges, Indigenous Peoples remained highly adaptive and resilient. In addition, Indigenous Peoples share an ethic of mutual-reciprocal relationship and responsibility toward one another and the natural world. Therefore, plants, animals, and the natural world are not viewed as resources but as valued relatives that have the right to exist and be cared for responsibly. It is these orientations that can provide a foundation for creating different kinds of educational, leadership, and social-economic activities that strengthen community while simultaneously mitigating the challenges of climate change for all.

- (l) The 2018 Intergovernmental Panel on Climate Change (IPCC) report makes clear that stabilizing the climate will require “rapid, far-reaching and unprecedented changes in all aspects of society” and that an important part of this is “to negotiate societal values, well-being...and to determine what is desirable and fair, and to whom”.

- (m) Employing an indigenous worldview to frame the policy response to climate change is investment in a cultural shift model. The central and local government agencies will actively empower (through legislative infrastructure), resource (through financial investment, research sponsorship, R+D investment, data commons) and foster (through funding, stimulus, investment, skillsharing, collaboration) local design (of resiliency solutions, of adaptation actions, of wananga, of improving access to skilled practitioners/expertise, of mitigation actions, of culture shifting actions, of education actions) etc. The aspirations can be hard locked; irrefutable development goals/wellbeing indicators – prepared to be measured, and refined. The actions, investment and ability to meet local level needs depends on the ability for the frame to flex to recognise community diversity, hapu/iwi relationship with their territories, the primacy of the indigenous flora and fauna estate, and its dependency on matauranga Maori for restoration/survival. Commitment to restoration. Commitment to re-balance. Removal of synthetic fertilisers. Again, the taxing of the Maori estate, as colonisation, and its impacts, continue to kick. But for our mokopuna, there is an obligation.

The Western economic paradigm and its focus on material economic indicators as the sole measure of development perpetuates a distorted and dysfunctional vision of what is in fact a dynamic multi-dimensional, multi-contextual social, cultural, and spiritual process for Indigenous communities.

- (n) Understanding the climate adaptation challenge requires a lens to problem-solving that is grounded in an understanding of the uncertainty, unpredictability and complexity of climate change and its impact on human (social, built, economic) and their host ecological systems. There is no single, definitive solution, rather that there are solutions that are better or worse or more or less adaptive or even maladaptive, in particular circumstances. Each solution may result in new, sometimes unanticipated consequences. Working with this level of complexity requires a systematic and holistic analysis of the risks and impacts of both the problem and the solutions; assessing who and what is, or will be, most vulnerable; and iterating and learning from adaptation measures that are implemented. This includes considering the emotional and psychological consequences of climate change on individuals and communities/organizations and finding ways to maintain personal and collective wellbeing and resilience.

- (o) The insistence that limitless economic growth is a non-negotiable part of the solution to climate change is deeply problematic. The fundamental flaw with this approach is that it fails to address or even acknowledge

the very real ways that economic growth drives climate change, economic inequality, the violation of indigenous rights, and the dispossession of indigenous lands.

- (p) It essentially amplifies the current vulnerabilities and entrenches those communities in servitude – a second wave of colonial subjugation for hapu/iwi Maori, who will again see their lands, waters, etc vulnerable to new policy that enables ‘clean growth’ for the ‘good of the nation’. Maoridom have been there before. In addition there will be new communities of vulnerability
- (q) This will require a deep and broad relinquishment of power from settler colonial structures and systems to ensure meaningful co-creation of climate policy that is rooted in indigenous self-determination. It is clear that mainstream worldviews and economies are not equipped to lead the transformative change away from colonial, capitalist extractive economies, but Indigenous communities are.

Design Principles

17. *Ihirangi has previously reported to MFE on the following; as significant design principles that would need to sit across the development of the NAP and its resulting actions/investments. These have been included, influenced by the analysis of the McKinsey Global Institute, as thought leaders in climate change, because they have resonate with the application of an indigenous worldview, that sees the causal interconnection between human wellbeing and the health of the environment. They are re-iterated here as a necessary cross application of inherent design principles an indigenous lens would require for any robust climate change adaptation planning:*
- (a) ***Increasing:*** *The level of climate risk increases exponentially by 2030, and further by 2050, increasing the socio-economic impact of between roughly two and twenty times by 2050 versus todays levels. This is about speed and scale. Engagement with communities, including hapu/iwi and assessment of the potential socio-economic impacts upon them, upon hapu/iwi populations and their territories is urgent; the nature of the potential impact must be understood properly to be addressed.*
 - (b) ***Spatial:*** *The direct impacts of physical climate risk need to be understood in the context of a geographicallyt defined area. There are variations between regions and within regions. Climate hazards manifest locally. A one size fits all approach will not address differences between communities, or hapu/iwi territories; and each unique spatial region (and sub-region) needs to be understood so that the impacts upon those spatial regions where communities, hapu/iwi are located are able to be measured and addressed.*
 - (c) ***Under-preparedness:*** *The pace and scale of adaptation need to significantly increase to manage rising levels of climate risk. Adaptation is likely to entail rising costs and tough choices that may include whether to invest in hardening or relocating people and assets. Early investment is crucial. At present communities, and hapu/iwi are grossly underprepared for climate change. Information, analysis and resourcing is required to enable these populations to design and deliver their own climate change solutions, and to develop their own climate planning.*
 - (d) ***Non-stationary:*** *As the Earth continues to warm, physical climate risk is ever changing, or non-stationary. Further warming is ‘locked in’ for the next decade because of physical inertia in the geophysical system. Furthermore, given the thermal inertia of the Earth system, some amount of warming will also likely occur after net-zero emissions are reached.*

Climate change will impact on all communities, whanau, hapu and iwi notwithstanding emissions reductions targets and best endeavors nationally and internationally to stem emissions. We also know that indigenous populations have contributed the least to emissions, globally, through their lifestyles; and are also likely to populate geographic spaces that will bear the brunt of climate disruption (coastal populations, rural isolated communities, urban diaspora).

- (e) **Non-linear:** *Socio-economic impacts are likely to propagate in a non-linear way as hazards reach thresholds beyond which the affected physiological, human-made, or ecological systems work less well or break down and stop working altogether. This is because such systems have evolved or been optimized over time for historical climates. Fluidity and the ability to pivot are crucial as are a multi stream risk management process.*

Given the unknown nature of climate disruption it is important that communities, hapu/iwi and the central government have the ability to anticipate and adapt to climate events. A rigid NAP that invests in set activities for set outcomes over set time periods risks locking in actions that may have little or no significant benefit once actual climate events eventuate. The ability to shift and fluidly address the ground truth for communities, and hapu/iwi is imperative; and, in particular we note the current lack of engagement between hapu/iwi and the central government will not sustain the relationship required to ensure this fluidity and ability to adapt planning, resourcing and investment in the near future.

- (f) **Systemic:** *While the direct impact from climate change is local, it can have knock-on effects across regions and sectors, through interconnected socioeconomic and financial systems. This has already been experienced through the Covid-19 Iwi Pandemic Response; where flow on or knock on impacts in one industry have impacted on communities, whanau, hapu and iwi economically downstream. A fuller analysis of the levers and dependencies of the particular communities, industries, hapu/iwi populations, and their economies, need to be understood so that the impacts can be properly forecast and addressed.*

- (g) **Regressive:** *The poorest communities and populations are typically the most vulnerable. Climate risk creates spatial inequality, as it may simultaneously benefit some regions while hurting others. Data clearly demonstrates those already disadvantaged within a 'climate neutral' system are further and disproportionately impacted by crisis, economic shut down, social turbulence and political marginalization.*

Whats different about this approach to the current policy settings?

18. We measure different things – we have seen how dedicated global attention has been on climate change, and since the 1992 United Nations Framework Convention on Climate Change (resulting in the Kyoto Protocol in 2005) there has been a resounding call for an urgent global commitment to reducing emissions. Notwithstanding the availability of robust data, information, research and political goodwill emissions have in fact increased since that time. Best intentions aside, the current paradigm is not achieving the greater aspiration because it is targeted at the wrong thing, and measuring the wrong indicators.
19. *Success and impact of these models continue to be tied to traditional and mono-dimensional economic references such as numbers of people trained or graduated, goods and services delivered, loans or profits made, etc. While these are quantifiable indicators of impact or relative success, it must be remembered that they are but one kind of indicator. Deeper level indicators which reflect the broader dimensions of change or impact are rarely researched and when they are, they are rarely taken seriously. The so-called business “bottom line” psychology continues to predominate as what is most*

*valued in measuring relative success of a development initiative, even as community and environmental issues continue and even worsen.*⁶

20. We need joint aspirations, unity of purpose on defined roles and functions, mahi ngatahi, both get skin in the game, ensure communities know and are empowered, team of 5 million approach. Tahuhu model – where we commit to the mainstay – and leave adaptable and variable all its supports. An overarching environmental ethic.

21. Mobilising and empowering ‘human communality’ at a grass roots level is imperative.

This community-based creative process might be summarized as follows: gaining firsthand knowledge of community needs through “problem-based action research”, developing a comprehensive understanding of the history and “ecology” of a community economy, implementing strategies for regaining control of local economies, creating models based on lessons learned and the application of research of practices that work, and cultivating networks for mutual support and action. This reflects authentic empowerment of communities from grassroots activity within the communities themselves. This also implies the need for a community education process that is initiated by the community in partnership with external expertise to produce solutions.

22. Applying an indigenous worldview lens enables policy makers, co-designing solutions with hapu/iwi to actively work towards climate policy in Aotearoa that:

- (a) includes community, and specifically hapu/iwi as full partners at policy decision-making tables. Whilst national organisations may have some representative capacity as advocates they should not be treated as decision makers or rights holders; those are the communities themselves and they need to be engaged, accommodated and empowered at a local level for site specific/regional solutions;
- (b) respects indigenous rights to self-determination and the international standard of free, prior and informed consent (FPIC) is required in the process of developing policy and in the contents of the policies and plans, as well;
- (c) adheres to Crown commitments to Treaty settlements, and other government-to-government relationships between iwi/Crown;
- (d) promotes climate solutions that take into account the realities faced by indigenous communities and nations, both rural and urban;
- (e) will not disproportionately or negatively impact indigenous populations; by way of active identification of vulnerabilities, by way of Crown flexibility to policy that has previously rigidly been applied and entrenched inequities (like the Crown policy of not releasing conservation lands to hapu/iwi for re-occupation, or the latest Significant Natural Area policies being implemented);
- (f) acknowledges and actively addresses structural inequalities, processes, and structures so that barriers to indigenous involvement on policy co-design and delivery are reduced;
- (g) addresses the root causes of climate change (e.g. colonial capitalism, extraction, agribusiness);

- (h) engages an intersectional understanding of climate to design intersectional climate solutions that reduce emissions while addressing systemic oppressions.

Because climate change affects all aspects of society, so too does climate adaptation require a whole-of-society approach, with engagement and contributions from all levels of government, private and public institutions and organizations, and across multiple sectors. Climate adaptation touches on regional, national and international policy landscapes; reconciliation agendas and the consideration and integration of Indigenous knowledges and rights; health systems and the health and well-being of populations; strategic planning and management; climate change communications; natural resource management; disaster risk management; business; accounting; change management; energy management; insurance; and community engagement.⁷

23. Adopting an indigenous worldview lens requires policy makers to get real and get brutally honest about the root causes of climate change – because to effectively address the problem policies need address root causes and need to centre the voices, needs and leadership of the people most impacted by the crisis.⁸ That colonialism and capitalism have laid the groundwork for carbon-intensive economics is well documented.⁹
24. A focus on resilience suggests that communities, including indigenous, must be stronger, tougher and take on more responsibility for their survival in the face on ongoing colonial structures. The Indigenous Climate Report notes that this focus on resilience is misplaced, and that genuine, transformative change will come when policy makers have the courage to shift the focus to the corporate drivers of climate change, and on adapting extractive and exploitative practices.¹⁰
25. An indigenous worldview requires an iterative and climate-informed approach to risk management, integrating and responding to climate risks, impacts, vulnerabilities and risk-mitigation considerations. Climate solutions must implement integrated risk assessments that identify, differentiate, and respond to simple, cumulative, systemic (cross-cutting, cross border, complex) and cascading risks and impacts.
26. Climate change policy needs to develop and use relevant localised scenarios (problem based, solution-based, reflexive-iterative) to explore the problem and generate alternative solutions. An holistic worldview will require that analysis to be able to apply and explain a range of climate risk assessment processes, tools, techniques, strategies tailored to the identified risks and the national, community and/or regional context. This modelling should inform decisions under uncertainty, and integrate knowledge from multiple sources and domains, including prioritising matauranga Maori in leading indigenous science.
27. A view to the entire system and social justice perspective needs to be employed when assessing cause and effect of risks, and key to this will be engaging relevant partners from different sectors, contexts, and communities, including hapu/iwi leadership.
28. Coupled with future oriented thinking that pulls the interconnection lens and pairs it with the intergenerational lens within an indigenous worldview enables the leveraging of synergies between disaster risk reduction, climate mitigation and climate adaptation and incorporates feedback loops and critical (particularly cultural) tipping points. It enables the identification of patterns, events, and interconnections between various systems across multiple scales (individual, community, regional, social) and time and

⁷ Adaptation Framework Paper

⁸ Indigenous Climate Action Phase I Report, p5.

⁹ Whyte, 2017

¹⁰ Indigenous Climate Action Phase I Report, p42.

therefore equips decision makers with the best quality information from which to chart pathways for the future.

29. An indigenous led worldview enables the generation of a NAP that will maximise long-term cultural, social and ecological preparedness and enable targeted investment into community. The additional application of internationally recognized standards, like those in UN Declaration on the Rights of Indigenous Peoples, will also further inform policy development. Critically, for indigenous populations, it contains the expectation that they will be actively involved in national and local policy design/decision making which will impact upon their survival, upon the integrity of their traditional life-sustaining territories or their wellbeing.
30. At its crux an indigenous worldview enables national policy to champion the value and significance of the natural environment, position our collective survival within the integral relationship we have with the eco system, and implores eco system-based, sustainable and responsible approach to development within the limits required to restore abundance and ensure intergenerational equity.

Engagement Synopsis

31. Engagement within the timeframe has, naturally, been limited. Ihirangi was tasked with both articulating in writing a major conceptual shift, and then testing it with iwi leadership and/or leadership of key iwi/Maori national bodies. Ihirangi have been concerned to ensure engagement is genuine, and also contextualised within emergent wider and longer-term relationships that MFE is still building with iwi Maori. Strengthening this has been a key theme of the Ihirangi-MFE relationship, and further conversations, between the parties, around the need to greater, deeper and more meaningful engagement with iwi/hapu formed the backdrop to this contract. It is a known area of challenge for the Crown and one that Ihirangi continues to be committed to assisting with by way of advice and insight.
32. For Ihirangi's part, it needs to engage with hapu/iwi to retain its own social license. It does this regularly through hui (local, regional and national) and via the Pou Take Ahuarangi (Climate Iwi Chairs) and the National Iwi Chairs Forum (NCIF) and its constituent subject specific Iwi Leaders Groups (ILGs).
33. On 3 June the Pou Take Ahuarangi, Climate Iwi Chairs Mike Smith and Lisa Tumahai, hosted an urgent meeting with national iwi chairs to discuss the two significant planning programmes that will set out the direction and speed of the turn for climate change;
34. 1) The Emissions Reduction Plan (ERP) - This will contain the specifics of how, where, when to reduce emissions across the entire economy and whole of society.
35. 2) The National Adaptation Plan (NAP) - This will provide the pathways of managing the unavoidable social upheaval, that will result from unavoidable initial impacts of climate change, including the managed retreat of an estimated 250,000 members of coastal communities in coming decades.
36. The anchoring of New Zealand's climate policy in an indigenous world view is supported and iwi leadership is signalling clearly their expectation that they will be fully engaged in progressing both the NAP and the ERP.