

Emissions Budgets 4

Advice Report - s5Mf considerations

Prepared by Dr Acushla Sciascia, Māpuna Consultants Ltd
16 October, 2023

Background

1. In September 2022 the Board had an initial reflections discussion on the upcoming work to prepare advice on the fourth emissions budget period.
2. In November 2022 the Board then workshopped with staff how the analysis and advice required to deliver this project interacts with the other deliverables due in December 2024. The Board gave feedback to staff about the changes in context since the last advice on budgets in 2021, and highlighted areas where improvements on the previous analysis could be made including on the treatment of uncertainty, understanding the costs of mitigations and better estimation of the impacts of budgets.
3. The report *Final scoping for the next Emissions Budgets advice (EB4 2036-2040)* provides 20 recommendations to the Board for the purpose of agreeing a scope to ensure all work done going forward is aligned with the intended outcomes for the advice.
4. Recommendation 2 specifically notes the form of advice which must be provided as matters that He Pou a Rangi must consider including how to apply the considerations listed in sections 5M.¹
5. He Pou a Rangi are required to provide specific advice to the Minister regarding Section 5Mf and 5N regarding the IAS Review. Specifically, this report seeks to understand;
 - 5.1. the implications for Crown-Māori relationship and partnerships
 - 5.2. specific interest areas and potential impacts for iwi/Māori
 - 5.3. considerations of Te Ao Māori to address emissions
6. He Pou a Rangi are cognisant that Iwi/Māori are particularly vulnerable to a low emissions transition because:
 - 6.1. Māori are disproportionately represented among low-income earners (potentially exposing them to higher electricity and petrol prices and making it more difficult to invest in low emissions alternatives)
 - 6.2. Māori businesses are disproportionately represented in some high-emitting or climate-exposed sectors e.g. sheep, beef, and dairy farming account for 72.4% of Māori economy emissions, compared to 53.4% of the whole New Zealand economy ²
 - 6.3. Māori also make up a smaller proportion of the workforce in low-emissions industries (14%), whereas the group 'European or other' have a comparatively high representation in these industries ³

¹ The report does not mention section 5N in any of its recommendations

² McMillan, Andrew. Hannah Riley and Hugh Dixon. "Māori economy emissions profile. Climate Change mitigation impact on the Māori economy". Website accessed: <https://www.mbie.govt.nz/dmsdocument/17448-maori-economy-emissions-profile> (2021)

³ Te Tai Ōhanga. "Ngā Kōrero Āhua Me Te Ōhanga. Climate Economic and Fiscal Assessment 2023". Website accessed: <https://www.treasury.govt.nz/sites/default/files/2023-04/cefa23.pdf> (2023)

- 6.4. Land use characteristics of Māori freehold land mean that these landowners may have more limited options and face challenges in terms of land use change
7. He Pou a Rangi are exploring different pathways for reducing emissions, some of which involve more structural change to the economy vs technological change, for example:
 - 7.1. Using more or less forestry removals to meet budget
 - 7.2. Using different technologies or pricing options for addressing agriculture
 - 7.3. More energy efficiency & conversion of energy sources eg., to hydrogen
 - 7.4. More EVs vs public transport
8. In *Ināia tonu nei* Report, He Pou a Rangi sets out that “In the context of the transition to a low-emissions society, we recommend that central and local government work with Iwi/Māori to develop a mechanism to build authentic and enduring partnerships that results in:
 - 8.1. Recognition and active protection of Iwi/Māori rights and interests.
 - 8.2. Equitable decision-making with Iwi/Māori at all levels, through Māori representation on local, regional, and national bodies, and robust engagement and consultation process with Iwi/Māori.
 - 8.3. Equitable access for Iwi/Māori to information, resources, services, and funding.
 - 8.4. The development of climate change policy that draws on mātauranga Māori as well as western science.
 - 8.5. Equitable outcomes for Iwi/Māori in alignment with Iwi/Māori aspirations for intergenerational wellbeing.
 - 8.6. The embedding of the He Ara Waiora Framework throughout the development of climate change related policies”⁴
9. The report also provides a series of submissions to support policy advice. One of these in particular in box 19.1 (page 337) states “put marae and hapū at the heart of solutions and policy design” which will be highlighted further in this report as a key area for inquiry in this advice.
10. Furthermore, this report will provide some additional context around the following areas (identified in *Ināia Tonu Nei* Report) to support the scope of the advice;
 - 10.1. Te Tiriti led approaches and partnerships
 - 10.2. Marae and hapū led solutions
 - 10.3. Mātauranga Māori
 - 10.4. Recognition of iwi/Māori efforts around climate change and adaptation to lower emissions
11. Specifically, He Pou a Rangi have sought advice on the fourth Emissions Budgets to understand key considerations when advising the Crown on the next carbon budget and how emissions transition for iwi/Māori are *fair & equitable*.

Advice

⁴ Ināia Tonu Nei – A low emissions future for Aotearoa. Website accessed: <https://www.climatecommission.govt.nz/public/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa.pdf> (2021)

12. Māpuna Consultants provides a guiding framework (Appendix 1) to inform all advice specifically regarding to sections 5Mf and the corresponding intersections of section 5Mf with 5N related to the Emissions Budgets (4) paper.
 - 12.1. Section 5Mf – *the Crown-Māori relationship, te ao Māori (as defined in [section 5H\(2\)](#)), and specific effects on iwi and Māori;*
 - 12.2. Section 5N – *5N Consultation*
 - 12.2.1. *(1) In performing its functions and duties and exercising its powers under this Act, the Commission must.*
 - 12.2.1.1. *(a) proactively engage with persons the Commission considers relevant to the functions, duties, and powers; and*
 - 12.2.1.2. *(b) where the Commission considers it is necessary, provide for participation by the public.*
 - 12.2.2. *(2) The Commission may—*
 - 12.2.2.1. *(a) make publicly available, and invite submissions on, discussion papers and draft reports; and*
 - 12.2.2.2. *(b) undertake any other type of consultation that it considers necessary for the performance of its functions and duties under this Act.*
13. The framework provides three guiding pou (pillars) to anchor the basis and lens to which advice is being provided and ensures that methodologically, He Pou a Rangi understands the philosophies, values and practices that underpin advice being provided by Māpuna Consultants and should be read before reading this Advice Report.
14. The advice provided in this report is to advise and support He Pou a Rangi to understand broad themes and considerations related section 5M(f), including relating to Te Ao Māori, Te Tiriti o Waitangi and Tikanga Māori. Subject matter experts should be engaged where appropriate to further support specialised advice and analysis on key areas outlined.
15. Māpuna Consultants provides advice on the following components related to the paper, *Final scoping for the next Emissions Budgets advice (2036-2040)* and specifically in the following areas as agreed with the lead sponsor;
 - 15.1. Crown-Maori relationship – Section 5Mf**
 - 15.1.1. Key considerations related to Te Tiriti o Waitangi
 - 15.1.2. Key considerations that recognise equity
 - 15.1.3. Recommendations
 - 15.2. Te Ao Maori – Māori worldview**
 - 15.2.1. General and specific guidance to knowledge development of Te Ao Māori
 - 15.2.2. Key considerations that relate to tikanga
 - 15.2.3. Recommendations or actions
 - 15.3. Specific effects**
 - 15.3.1. Nuanced advice relative to the *Emissions Budgets (4) advice*
 - 15.3.2. Recommendations or actions

Crown Māori relationship – Section 5Mf

16. Key considerations that relate to Te Tiriti o Waitangi

- 16.1. He Pou a Rangi is not a Crown entity and are therefore not directly responsible within the Treaty partnership (between the Crown and iwi/Māori), however legal advice indicates that He Pou a Rangi must still consider this dynamic and in particular, the Treaty principles.
- 16.2. In addition, it is recognised that the importance of Te Tiriti o Waitangi underpins and informs the advice that is given to the Crown and therefore it is necessary to closely elevate Te Tiriti principles and consider advice which is cognisant of appropriate Crown/Māori partnerships.
- 16.3. Māori are a Treaty partner and as such, Māori interests for any emissions reductions and therefore, subsequent changes to any industries as a result of emissions should consider Te Tiriti o Waitangi, the principles and articles when understanding the types of impacts that iwi/Māori may experience. It is from that framework that we are able to unpack and interrogate particular solutions that will see us lowering emissions and therefore, preparing advice to the Crown.
- 16.4. Māori require early and considered engagement to inform assessment/analysis, review and recommendations and should draw on a range of repositories and information to dive deeper into subject matter by and through a Māori lens and perspective, in particular, through mātauranga ā iwi, ā hapū (knowledge systems deriving from an iwi and/or hapū basis) as well as Māori interests, investment areas and industries that prioritise and promote Māori culture, language, identity and connection to environment.
- 16.5. Article 2 of Te Tiriti o Waitangi recognises the concept of tino rangatiratanga (unqualified exercise of Māori chieftainship) that which Māori had over their lands and taonga – in this way, He Pou a Rangi ought to consider the range of interests and potential impacts that iwi, hapū and whānau will experience by and through any emissions budget adjustment.
- 16.6. Some of these areas of interests include social, economic, and cultural considerations where Māori interests are either directly or indirectly impacted. These include industries such as agriculture, primary industries, transport, tourism, construction, manufacturing and indirectly, employment and skills development.
- 16.7. While information will already be known around key Māori interests related to the emissions budget, it is acknowledged that these industries will have experienced notable changes over the past 12-18 months given a 6.0% inflation increase, Cyclone Gabrielle, a new government elect (as at 14 October 2023), and other local and global events and occasions having an impact on industries, business owners, landowners, Māori households and communities.
- 16.8. These events should be widely considered when it comes to setting the fourth emissions budgets and whether or not those decisions will support iwi/Māori aspirations of reducing their emissions or further create inequity and disadvantage on top of historical and contemporary challenges already faced by iwi/Māori.

17. Recommended resources

- 17.1. It is important to have an understanding on the relevance and importance of Te Tiriti o Waitangi and the Treaty of Waitangi with regards to Māori and the Crown. He Pou a Rangi does not have a legislative obligation to give effect to the Treaty or Te Tiriti, however in line with section 5Mf, it must consider the wider implications of its advice to Māori who are a partner to Te Tiriti o Waitangi and the Treaty of Waitangi.
- 17.2. The following resources may provide He Pou a Rangi with wider context and understanding related to The Treaty of Waitangi, Te Tiriti o Waitangi and the principles including historical contexts to contemporary applications of te Tiriti. This list is not exhaustive and should be supplemented with additional resources and Māori expertise to better inform Te Tiriti implications around this advice.
 - 17.2.1. Mutu, Margaret, Veronica Tawhai, Tayla Cook, and Safari Hynes. "Dreaming Together for Constitutional Transformation." *Counter futures* 12 (2021): 37-52.
 - 17.2.2. Orange, Claudia. *The treaty of Waitangi*. Bridget Williams Books, 2015.
 - 17.2.3. Ruru, Jacinta, and Jacobi Kohu-Morris. "'Maranga Ake Ai' The Heroics of Constitutionalising Te Tiriti O Waitangi/The Treaty of Waitangi in Aotearoa New Zealand." *Federal Law Review* 48, no. 4 (2020): 556-569.
 - 17.2.4. Te Aho, Linda. "Indigenous Peoples and the State-International Perspectives on the Treaty of Waitangi." *The Journal of New Zealand Studies* NS29 (2019).

18. Key considerations that relate to equity

- 18.1. Equity for Māori requires a conversation around the needs and aspirations for Māori culture, values, and identity to be prioritised, recognised and elevated.
- 18.2. Although it is important not to revert to understanding Iwi/Māori from a "deficit perspective" it is important to research this concept of "deficit thinking" and the balance between properly acknowledging disparities as a result of historical inequities, whilst maintaining due recognition and respect of Māori excellence and Māori autonomous rights to self-determination.
- 18.3. Equitable outcomes for Māori begin with an understanding of historic inequities where Māori have been disadvantaged. Māori inequities across the system (social, cultural, political, and economic) and lived realities of iwi, hapū and whānau should be better acknowledged to better understand the struggles that Māori have endured. This will better inform He Pou a Rangi to ensure its advice to the Crown does not further add to these inequities and disadvantages.
- 18.4. For these reasons, it is important to research and understand the context wherein "equality is not equity" and as such, greater investment and resourcing may be required for Iwi/Māori in some contexts where equal treatment may result or further entrench inequitable outcomes. Health is a common area where equity discussions have advanced into the policy space

- and even though out of scope of the 2050 Target discussion, the health equity policy discussions provide practical insights into these dynamics.
- 18.5. Some of these areas will include social, cultural, political, and economic inequities where Māori are amongst the worst to experience health inequities, employment inequities, inequities around access to education and support, historical inequities and intergenerational inequities.
 - 18.6. These inequities represent a spectrum of inequitable outcomes for Māori resulting in disadvantages and unfair circumstances where opportunities are not fully realised because the starting point for Māori differs to that of non-Māori. The point of inequity for Māori is steeped in historical discrimination, subjugation, marginalisation, and racism that comes as a result and continually felt impact of colonisation.
 - 18.7. Therefore, colonisation is an important consideration when thinking about the inequities that Māori face and how any changes made to lower the emissions budget even further may exacerbate an already inequitable and disadvantaged Māori community.
 - 18.8. As stated in *Ināia Tonu Nei* Report, an equitable approach to emissions reductions is “a just transition that is fair, inclusive and equitable”. In Aotearoa, this means:
 - 18.8.1. Honouring and giving effect to the principles of Te Tiriti o Waitangi /The Treaty of Waitangi
 - 18.8.2. Working collaboratively and inclusively when planning the transition and taking a co-design approach to policy, in line with kotahitanga and tikanga. This includes working with local Iwi/ Māori along with community, including local government, regional economic development agencies, businesses, workers, unions, people with disabilities, and community groups
 - 18.8.3. Ensuring the low-emissions transition takes opportunities to reduce inequities, builds strong communities, and meets the needs of current and future generations over time
 - 18.8.4. Prioritising support to those most adversely impacted and least able to adjust
 - 18.8.5. Sending clear and stable policy signals to provide predictability for communities and businesses and allow time to plan and respond
 - 18.8.6. Investing in people, their skills, and providing opportunities for viable work that is environmentally and socially sustainable
 - 18.8.7. Acting now to ensure a thriving, productive and climate-resilient economy
 - 18.9. He Pou a Rangi must consider what inequities Māori continue to face (since the last engagements with Māori to inform *Ināia Tonu Nei*) as there have been significant weather and climate change events where iwi/Māori communities were adversely affected, often moreso than non-Māori populations. Similarly, the response to some of these events including Cyclone Gabrielle in February 2023 further highlighted the inequities that Māori communities are faced with and continue to be faced with.⁵

⁵ Taonui, Rawiri. How the rain falls differently upon Māori. Waatea News. Website Accessed: <https://waateanews.com/2023/03/28/how-the-rain-falls-differently-upon->

- 18.10. To ensure that the emissions reduction is equitable for iwi/Māori, the past weather and climate events (in the last 3-5 years) provide an indication of the types of inequities that have been experienced by iwi/Māori which we must learn from and address in the Emissions Budget (4).

19. Recommended resources

- 19.1. Came, H. A., Sarah Herbert, and T. McCreanor. "Representations of Māori in colonial health policy in Aotearoa from 2006-2016: a barrier to the pursuit of health equity." *Critical Public Health* 31, no. 3 (2021): 338-348.
- 19.2. Mutu, Margaret. "'To honour the treaty, we must first settle colonisation' (Moana Jackson 2015): the long road from colonial devastation to balance, peace and harmony." *Journal of the Royal Society of New Zealand* 49, no. sup1 (2019): 4-18.
- 19.3. Simmons-Donaldson, Lana, and Donna Cormack. "Addressing racism to eliminate Maori health inequity." *Public Sector* 44, no. 3 (2021): 18-19.

20. Recommendations

- 20.1. Based on the above considerations, it is recommended that;
 - 20.1.1. He Pou a Rangi critically reviews how they are weaving Te Tiriti into the broader context in the advice they are providing and how Māori are being enabled to participate in decision-making, with particular regard to emissions budgets that are fair and equitable for iwi/Māori.
 - 20.1.2. He Pou a Rangi sponsor and advisors engage in the above recommended readings and supplementary resources that may provide greater context and understanding into the Crown Māori relationship and partnership space that is premised on Te Tiriti o Waitangi as well as recommended readings around the concept of whakapapa and the intrinsic connection between tangata (people) and taiao (environment).
 - 20.1.3. He Pou a Rangi consider the list (Appendix 2) of potential individuals, groups, and communities to meet and discuss the implications of fair and equitable emissions reductions to iwi/Māori to gain more context and understanding.

Te Ao Māori – Māori worldview

21. General guidance

- 21.1. First and foremost, an understanding (at least at an introductory level) of Te Ao Māori is critical in understanding the importance of the environment to iwi, hapū and whānau.
- 21.2. A Te Ao Māori lens to the environment is represented through whakapapa (genealogy) where all living things are connected.
- 21.3. It is through this whakapapa connection that Māori locate themselves within the environment – inextricably connected and identified through the mountains, rivers, streams and lakes. This connection is ancestral that

[maori/#:~:text=Regarding%20urban%20areas%2C%20Otago%2Dbased,r%20mainly%20P%20C%2081keh%20hilltop%20areas.&text=M%20C%2081ori%20also%20encounter%20greater%20difficulties%20in%20recovery. \(2023\)](#)

genealogically connects people to a common ancestor of that geographical area.

- 21.4. The importance of identity has recently been recognised through legislation where mountains and rivers have gained legal personhood, symbolising the intrinsic and deep whakapapa connection between people and place. ⁶
- 21.5. This mātauranga forms the basis to understand the relationship that Māori have with the environment.
- 21.6. To understand Te Ao Māori it is important to acknowledge both the past, present and future through conceptual thinking and ideas as well as practical application and lived experiences.

22. Specific guidance

- 22.1. A central idea to Te Ao Māori is the ability to think multiple generations ahead when considering future impacts of today's actions. Mokopuna (grandchildren) have long been the focus of iwi and hapū to guide decision making and in many ways, be the decision-making framework that ensures the future is one of legacy for those unborn generations. Jones (2017)⁷ writes about a mokopuna approach to constitutional reform as shared by Nin Tomas in a debate series in 2012. Fundamentally, Jones reflects on Māori values and principles as central and critical to understanding constitutional reform and therefore, the importance of mokopuna being at the centre of all decisions that are made;
 - 22.1.1. Aroha ki ngā mokopuna requires us to extend our thinking framework into the future – to accept that we have intergenerational obligations to our grandchildren and their children – to provide a durable legacy for them. To do without so that they can have more. It reverses the current trend of short-term gratification being okay.
- 22.2. This simplistic understanding of respect and love for a grandchild is reflected from a Te Ao Māori point of view that all things are connected. The flow of mauri from one generation to another, whether through living objects or the decisions that are made for a people that have an impact on the future – these are expressions of aroha ki ngā mokopuna (love for a grandchild).
- 22.3. Coupled with the importance of intergenerational decision-making models is the importance of our marae – our cultural bastions and gathering places for practicing rituals. Marae have been and remain integral spaces for Māori culture to live and thrive. ⁸
- 22.4. Equally, understanding Māori values is an important part of better understanding Te Ao Māori. Through understanding a Māori values system and rationale, He Pou a Rangi will better understand how Māori prioritise kaupapa like the health of our environment, the importance of sustainable practices and products that will remain for generations to come, and Māori culture, language and identity that showcases who we are.

⁶ Geddis, Andrew, and Jacinta Ruru. "Places as persons: Creating a new framework for Māori-Crown relations." *The Frontiers of Public Law* (Hart Publishing, 2019) (2019).

⁷ Jones. Carwy. "THIS IS NANA NIN TALKING ON BEHALF OF MY MOKOPUNA AND YOURS": A MĀORI VISION OF CONSTITUTIONAL REFORM". Te Tai Haruru .Journal 5. (2017)

⁸ Tapsell, Paul. "Marae and tribal identity in urban Aotearoa/New Zealand." *Pacific Studies* 25 (2002): 31-31.

- 22.5. These ideals and ways of thinking and behaving are what shapes Māori decisions, and indeed, supports iwi/Māori to enter industries and economies at both local and global scales with intention, respect to our environment and cognisance of future-proofing access to natural resources and taonga for generations to come.
- 22.6. As an example, the concept of mokopuna is an important guiding value for Māori. Mokopuna are the future of our whakapapa lies within our generations of tamariki, mokopuna and those yet to be born. All decisions are geared towards our greatest legacy, our mokopuna. By ensuring that the decisions made are focused on mokopuna, we are naturally committing ourselves to preserving, protecting and enhancing the wellbeing of our environment. That includes making decisions around emissions for the betterment of our mokopuna.
- 22.7. The importance of the marae when it comes to climate change is evident in the role that marae take on whenever there is a natural disaster, the need for community to be looked after, a wellbeing hub for emergency responders to operate from and a place of safety, security and aroha (love) for all those who require support.
- 22.8. Our marae (and the hapū who are caretakers and tangata whenua of those marae) have been the lifeline for many response efforts of extreme weather events and natural disasters. Many marae that have taken on this role in previous events have done so by themselves i.e., without government support or coordination. Out of an important need from the community, marae demonstrate their resilience and aroha to take care of people and mobilise themselves to stand up communities in times of their greatest need
9 10
- 22.9. More recently during Cyclone Gabrielle, marae on the East Coast of the North Island were severely impacted, many rendered inhabitable and not able to be accessed for a period of time.¹¹ What does a community do during an extreme weather event or natural disaster if their local marae is not accessible? Where will they go? Who will take care of them?
- 22.10. The importance of marae to community (Māori and non-Māori) cannot be overstated. They are critical infrastructure at times when community support is most needed. There is much to be learned from our marae, the ways in which they operate, how they serve a community, what they represent and the critical role they play in Māori communities and Aotearoa in general.
- 22.11. Providing life and wellbeing to a hapū and their marae, will, in turn provide life and wellbeing to *all*. Centring emissions solutions around marae and hapū interests speaks directly to Māori interests. It is therefore recommended that He Pou a Rangi consider how hapū and marae can frame their next emissions budget and advice that speaks directly to transitions for iwi/Māori.

⁹ Ngāi Tahu. "Marae Manaaki" Website accessed; https://ngaitahu.iwi.nz/our_stories/tk72-marae-manaaki/ (2016)

¹⁰ Botting, Susan. "Cyclone spurs govt to support marae better for disaster recovery work:." Website accessed: <https://www.rnz.co.nz/news/ldr/485036/cyclone-spurs-govt-to-support-marae-better-for-disaster-recovery-work> (2023)

¹¹ Johnstone, Shannon. "Cyclone Gabrielle locals say Tanoio Marae protected its people from the impacts of the storm" Website accessed: <https://www.nzherald.co.nz/hawkes-bay-today/news/cyclone-gabrielle-locals-say-tangoio-marae-protected-its-people-from-the-impacts-of-the-storm/G5HOGGOOT5C53K6MUFVSVNWNUXE/> (2023)

23. Key considerations that relate to tikanga

- 23.1. In line with the importance of whakapapa and connection to the taiao, iwi, hapū and whānau have long been protectors and caretakers of their environment.
- 23.2. Inter-generational transmission of knowledge and practices are prioritised to ensure that traditions are carried on and the taiao remains intact for generations to come.
- 23.3. Of equal importance is grasping an understanding of Māori histories, oral traditions and narratives that inform mātauranga ā iwi, ā hapū. Through these knowledge repositories, He Pou a Rangi will gain greater insight into understanding the main pillars of Te Ao Māori.
- 23.4. Following on, Te Reo Māori me ōna tikanga plays an important role as the Māori language unpacks complex Māori concepts, philosophies, ideologies, and narratives – the Māori language is the key to unlocking the Māori world and should be given due respect and acknowledgement within and throughout any advice when considering Te Ao Māori, mātauranga and Māori interests
- 23.5. Māori are future-focused, often planning and considering the impacts on generations 100 – 500 years into the future. This forward-thinking approach ensures that the key driver of decisions made around the environment are made on behalf of our tamariki mokopuna (children and grandchildren, and so on).
- 23.6. Marae are places in which tikanga Māori is practiced and elevated. Knowledge of marae (local and neighbouring) is important to consider when He Pou a Rangi considers its emissions advice and considers marae at the centre of future solutions and decisions. Knowing the connection of marae to hapū/hau kāinga and their connection to mountains, rivers, waterways, etc and the names of their main ancestors are key areas of information when better understanding and connecting with marae.

24. Recommended resources

- 24.1. The following resources may provide more in-depth discussions around the inextricable connections between people and place – tangata to taiao. Understanding these concepts will enable He Pou a Rangi to consider the implications of its advice on philosophical and ethical standpoint with regards to the taiao.
 - 24.1.1. Burgess, Hana, and Te Kahuratai Moko-Painting. "Ōnamata, ānamata: A whakapapa perspective of Māori futurisms." *Whose futures?* (2020).
 - 24.1.2. Rangiwai, Byron. "Ko au ko te taiao, ko te taiao ko au—I am the environment, and the environment is me: A Māori theology of the environment." *Te Kaharoa* 11, no. 1 (2018).
 - 24.1.3. Salmond, Anne, Gary Brierley, and Dan Hikuroa. "Let the rivers speak: Thinking about waterways in Aotearoa New Zealand." *Policy Quarterly* 15, no. 3 (2019).

- 24.1.4. Wakefield, Benita, Tai Stirling, and Miriama Kahu. "Haumanu taiao ihumanea." In *MĀTAURANGA TAKETAKE: TRADITIONAL KNOWLEDGE CONFERENCE*, p. 173. 2006.

Specific effects

25. *Operating context for specific effects*

26. Chapter 9 of *Ināia Tonu Nei* refers to three key recommendations for an equitable transition for iwi/Māori. Those recommendations are;
- 26.1. Government to work in partnership with iwi/Māori and local government to develop a strategy to ensure the principles of the Treaty are embedded in subsequent emissions reduction plans
 - 26.2. Central and local government work in partnership with iwi/Māori to develop a mechanism to build authentic and enduring partnerships that result in equitable outcomes for iwi/Māori
 - 26.3. Government work with iwi/Māori to develop a strategy, including timebound measures for progress, to advance a Māori-led approach to an equitable transition to a low-emissions society for iwi/Māori and the Māori economy.
27. Aotearoa's First Emissions Reduction Plan¹² also states the following key actions; The Government will work with Māori to:
- 27.1. embed partnership and representation – to uphold Te Tiriti principles, processes and mechanisms will be resourced and designed alongside Māori to help tangata whenua to actively participate in the climate response
 - 27.2. support Māori-led strategy and alignment – to elevate te ao Māori within the climate response, Māori will be supported to define, measure and implement a Māori climate strategy and action plan
 - 27.3. activate kaupapa Māori, tangata Māori solutions – to enable community action, kaupapa Māori, tangata Māori actions and solutions for the climate emergency will be funded
28. As a result of this advice, in November 2022, government established a Māori Climate Change Platform in partnership with tangata whenua to enable Māori-led climate action, planning and solutions to build climate resilience. However, a Māori climate change strategy is yet to be co-developed with iwi/Māori and remains an outstanding action.
29. As part of the strategy development, it is recommended that marae and hapū are afforded a central foci within the strategy. Firstly, to ensure that as cultural bastions, marae are resourced and supported through risk resilience, preparedness, planning and response/recovery.
30. Secondly, where marae are centralised in future government emissions solutions that ensures Māori interests are at the fore and that decisions made are done so in a Te Tiriti partnership model that recognises that what is good for the marae and hapū, is good for the our community.
31. Marae wellbeing as a guiding principle would provide He Pou a Rangi a potential framework to addressing inequities for Māori as they transition to low-emissions.
32. Furthermore, the following frameworks could benefit the emissions budgets consideration in light of mātauranga Māori-led solutions that are premised on our holistic view of the taiao.

¹² Aotearoa's First Emissions Reduction Plan. Website accessed:
<https://environment.govt.nz/assets/publications/Aotearoa-New-Zealands-first-emissions-reduction-plan.pdf> (2022)

- 32.1. Te Huringa ki te Rangi – He Rautaki Tāwariwari. Adapting to Climate Change – An 8-step decision-making model for Indigenous Peoples to support indigenous and coastal communities who are grappling to understand evaluate climate change impacts and risks, and how to integrate these into their development plans (NIWA, website accessed 28 August).
 - 32.1.1. The 8-step model covers off; clarifying vision and objectives to guide outcomes (1); understanding risks both past, present and future (2); Identifying options that speak to community objectives (purposeful and led by the needs of the community) to avoid future risk (3); Development of potential pathways that are assessed against their viability to achieve community vision and objectives (4); Further evaluate the pathways against a set of criteria/questions (5); Select the best pathway based on the process of previous steps (6); Implementation (7); and finally, monitor and review the adaptation pathway to ensure effectiveness, timeliness and new knowledge generated or understood as a result of the process.
 - 32.1.2. This model has been utilised with Māori communities and provides evidence of a straightforward approach to decision-making that prioritises wānanga through each of the steps. To wānanga is to unpack, discuss, debate and interrogate topics in order to reach a well-considered and thought-out outcome or approach. By incorporating wānanga into the decision-making process, whānau involvement is at the centre and decisions are made through problem-solving, rangahau and inquiry rather than a silver-bullet or off-the-shelf approach to adapting to climate changes and decision making.
- 32.2. The second model is the Mauriora Systems Framework (Matunga, 1993) which represents a decision-making framework grounded in Te Ao Māori focused on protection, maintaining, and enhancing mauri (life force) and regeneration of taonga through resource governance, management, policy and planning (Manaaki Whenua website, accessed 20 October)
- 32.3. While the framework has been utilised in the farming sector, at the core of it are Māori concepts that could be applied to any industry as it is the mauri (life force) as the central element that binds the framework
 - 32.3.1. The Mauriora Systems Framework is geared towards building a collaborative knowledge approach that acknowledges the benefits of utilising Mātauranga Māori, western science, and other knowledge systems (e.g., community knowledge) to various problems in the farming sector.
 - 32.3.2. The framework is based on the interaction between four key concepts: taonga, kaitiaki, tikanga, and ritenga and has an emphasis on the connection between taonga as demonstrated by the philosophy of ki uta, ki tai (from land to sea) and potential flow-on effects of our actions on the natural environment. The framework highlights the intrinsic interconnectedness of all innate things within our taiao.

- 32.3.3. The framework describes a process of addressing a problematic (or issue) by first identifying the taonga in question – this then begs the question, whose taonga is it and ensures that the right people are being engaged regarding the taonga (i.e., tangata whenua) and if they are not already involved in that discussion then that is a clear signal to engage the right parties into the decision making framework and process. From there, values, principles and practices (tikanga) are then incorporated into the wānanga that occurs at this point. Discussions are had and decisions are made that are unpinned by tikanga. From here, the decision and pathway is realised for addressing the problematic.
- 32.3.4. While this is a simple decision-making model, the central component of mauri represents the health and wellbeing of the environment with the overall objective to achieve health, wellbeing and balance of taiao. When the taiao is well, the people will flourish.
- 32.4. What can be understood by analysing the above two frameworks as well as the value and concept of aroha mentioned earlier, there are three main points that can be observed across all three decision-making frameworks
 - 32.4.1. Values are used to inform and underpin decision-making
 - 32.4.2. Wānanga (discuss, debate and interrogate) is a process used to develop thoughts, ideas and pathways
 - 32.4.3. Mokopuna are the future of our whakapapa lies within our generations of tamariki, mokopuna and those yet to be born. All decisions are geared towards our greatest legacy, our mokopuna. By ensuring that the decisions made are focused on mokopuna, we are naturally committing ourselves to preserving, protecting and enhancing the wellbeing of our environment. That includes making decisions around climate adaptation for the betterment of our mokopuna
- 32.5. He Pou a Rangi are aware of the Māori economy emissions profile are the industries that are likely to be impacted as a result of emissions budgets.
- 32.6. To supplement data already known, the following context provided in the 2050 Target Review 5Mf advice report is provided as additional context in understanding Māori economic impacts;
- 32.7. 1.47 million hectares of Māori freehold land makes up roughly five percent of all land in Aotearoa New Zealand.
- 32.8. Stats NZ reports that “In 2016, 450,593 hectares (ha) of Māori land were recorded in the survey as farms used for primary production. Nearly half the total was in grassland or pasture (217,933 ha), followed by forest plantation (110,393 ha), bush and scrub (75,351 ha), and horticulture (2,668 ha). Agriculture is estimated to account for around 1 in 5 Māori authority enterprises” (Statistics NZ, 2016)¹³
- 32.9. Māori Agribusiness received a \$34.5 million budget investment in Budget 2022 over four years to expand support to help Māori agribusinesses lift

¹³ Stats NZ. Change in use of Māori land for primary production. Website accessed: <https://www.stats.govt.nz/indicators/change-in-use-of-maori-land-for-primary-production/> (2018)

productivity of whenua (land). If emission budgets change, this may have adverse effects on the Māori agribusiness sector. It is important to further analyse the data around the use of whenua across Ahu Whenua and Māori agribusiness and how they are tracking towards a low-carbon emissions economy and therefore what further impacts would a change to the target made

- 32.10. Te Tumu Paeroa – Office of the Māori Trustee provides specific information and data on Māori land ownership, trusts (including commercial trusts i.e., agriculture and primary industries) which will provide some key insights into Māori-owned land and how it is being used
- 32.11. A recent report (2021) conducted by BERL for the Ministry of Business Innovation and Employment and Ministry for Primary Industries found;
 - 32.11.1. Māori collectives (this includes both collectives constituted under Te Ture Whenua Māori and iwi) are heavily invested in agriculture, especially sheep and beef, and dairy. Since collectives are responsible for managing assets for the benefit of their members, challenges they face in the transition to a low emissions economy may negatively impact Māori whānau
 - 32.11.2. Land use characteristics of Māori freehold land mean that these landowners may have more limited options and face challenges in terms of land use change
 - 32.11.3. Māori freehold land has high forest coverage, but a large portion was planted before 1990, rendering this land ineligible for earning emissions trading units. The landowner is also likely to be liable to pay carbon credits if deforestation occurs and the area is not replanted into forest. The implication is that it may be expensive to change the land use of pre-1990 forest land
 - 32.11.4. Māori are overrepresented in lower-skilled jobs, which are likely to be lower-income. This may provide a barrier for transition to the low emissions economy
 - 32.11.5. Māori SMEs make up almost all of the Māori asset base for transport, construction, and manufacturing. The transition towards a low emissions economy is likely to require significant capital expenditure for these Māori SMEs, which also face access to capital barriers.¹⁴
- 32.12. Rural vs urban Māori households, marae, churches and community gathering spaces will require a nuanced approach when considering emissions budgets and how these may affect rural or isolated communities with limited access to resources such as heating and transport (shipping/access of goods and services). A focus on areas and regions that are predominantly Māori communities (population) could provide some key insights into the importance of access to regular transport for shipping goods, travelling to and from work into the city (for example) and other requirements that isolated communities experience (i.e., Wairoa, Kawerau, Tūhoe, etc) may be key points of inquiry and analysis that He Pou a Rangi investigates.

¹⁴ McMillan, Andrew, Hannah Riley, and Hugh Dixon. Māori economy emissions profile. Climate change mitigation impact on the Māori economy. <https://www.mbie.govt.nz/dmsdocument/17448-maori-economy-emissions-profile> (2021)

- 32.13. Through all of the potentially impacted industries, Māori employment rates may be impacted as an indirect result of emissions budget changes (i.e., forestry. With 34 per cent of the forestry workforce made up of Māori, any changes to the target that impacts the forestry industry will have a significant impact on Māori employment in that industry).
- 32.14. As has been identified in the scoping paper for the IAS Review, there are several industries that will be impacted if emissions reduction are to take effect for international shipping and aviation. These can include (but are not limited to);
- 32.14.1. Fishing and seafood industries
Iwi/Māori are dependent on healthy oceans. Kai gathering is an essential part of our culture and economy. Pollution and climate change resulting from shipping emissions can harm marine ecosystems, affecting fish stocks and the seafood industry, impacting both commercial and customary fishing practices which not only impacts Māori, but New Zealanders
 - 32.14.2. Coastal marae, wāhi tapu and community infrastructure
As has been witnessed in the February Floods on the East Coast, coastal marae were severely impacted by the cyclone. Coastal Māori communities are consistently faced with challenges as a result of climate change and extreme weather.
Wāhi tapu and sites of cultural significance are increasingly becoming harder to preserve and protect from climate change – where Māori culture is utilised within an industry (e.g., eco-tourism), these activities are at risk due to the degradation of natural environments caused by emissions.
 - 32.14.3. Māori tourism
Tourism is an important industry for Māori, providing employment opportunities and showcasing Māori culture to the world. Climate change, influenced by shipping and aviation emissions, can lead to environmental degradation. This has a significant impact on that industry if the natural environments are not protected and preserved.
 - 32.14.4. Māori Agribusiness
Changes in climate patterns due to emissions can affect Māori agribusiness and horticulture activities and while agriculture in particular is a significant Māori economic activity, there are some Māori organisations and entities who are actively moving away from agriculture as a mainstay for land use (as the impacts of farming for example on whenua is devastating). Despite this, Māori agribusiness remains a key economy for Māori and altered weather patterns, such as droughts or heavy rainfall, can impact crop yields and agricultural productivity.
 - 32.14.5. Māori export & trade
In all industries that require exporting offshore, iwi/Māori will be impacted by any emission reductions and strategies that may be implemented for shipping and aviation. However, and in line with

subsequent advice that will be developed made up of the knowledge products noted in the IAS final report, technology, innovations and strategies will be required if emissions from shipping and aviation are to be included in the 2050 Target.

32.14.6. Māori arts

Māori arts as an industry is world-recognised and may be impacted if materials used for creating works are depleted or scarce. Pounamu, tōtara and other key materials that are not as accessible as it once was or available will be impacted and as a result of wider climate change impacts, these natural resources will be affected.

32.15. We recognise the importance of climate change and the importance of reductions emissions whereby iwi are already strategically positioning themselves to be active in combating climate change impacts. Some iwi across the motu are actively working towards reducing emissions within their iwi strategic plans which would be important context for understanding how iwi are positioning themselves to address emissions within their own strategic plans and actions.

32.15.1. “We have no choice but to develop a response and show leadership, in the effort to reduce the impacts of climate change, and in the crucial adaptation work for the ongoing wellbeing of our people and our communities” (Ngāi Tahu Climate Change Strategy, 2018)

32.15.2. “Development of mitigation plans with marae whānau for those marae critically impacted by climate change” (Whakatupuranga 2050, Five Year Plan 2024)

32.15.3. “The use of best practice farming methods and emissions reducing technologies in the dairy industry” (Te Uru Taiao o Ngāruahine – Ngāruahine Kaitiaki Plan (2021).

32.16. Māori diaspora records indicate 1 in 5 Māori are living overseas (namely Australia). This is an important consideration of the importance of Māori being able to return to their whenua when required but particularly for urgent cultural activities e.g., tangihanga (funerals). Emissions reductions for the aviation sector, while important to ensure we are taking care of our environment, may have an impact on the Māori diaspora being able to regularly and actively return home depending on how potential increases of costs to the aviation industry may impact whānau Māori diaspora

32.17. Addressing emissions is crucial to mitigating these potential impacts on Māori economic areas. Sustainable practices, renewable energy adoption, and international cooperation are essential to safeguarding both the Māori economy and the taiao.

33. *Recommended resources*

33.1. Meade, Richard. Role of Māori in the Transition to a Low-Emissions Economy. Cognitus Economic Insight. Website accessed:
https://environment.govt.nz/assets/publications/Cognitus-Maori-Role-in-Low-Emissions-Transition-2021_06_05.pdf (2021)

- 33.2. Harmsworth, G. Report on the Incorporation of Traditional Values/Tikanga into Contemporary Māori Business Organisation and Process, Landcare Research Report: LC/0405/058. (2005)
- 33.3. Barnes, Helen & Harmsworth, Garth & Tipa, Gail & Henwood, Wendy & McCreanor, Tim. Indigenous-led environmental research in Aotearoa New Zealand: beyond a transdisciplinary model for best practice, empowerment and action. *AlterNative: An International Journal of Indigenous Peoples*. 17. 117718012110193. 10.1177/11771801211019397. (2021)
- 33.4. Cherrington, Majka, David Airehrou, Ihaka Dunn, Qiang Xu, and David Cameron-Brown. "Learning to mitigate emissions: relevance of research with Maori hapu and iwi." (2020).
- 33.5. Ministry for Primary Industries. Rautaki mō te Taurikura. Embracing change for prosperity. Website accessed: <https://www.mpi.govt.nz/dmsdocument/54376> (2022)
- 33.6. Awatere, Shaun, Darren Ngaru King, John Reid, Lewis Williams, Bridgette Masters-Awatere, P. Harris, Natasha Tassell-Matamua et al. "*He huringa āhuarangi, he huringa ao: A changing climate, a changing world.*" (2021): 1-12.
- 33.7. Barnes, Helen & Harmsworth, Garth & Tipa, Gail & Henwood, Wendy & McCreanor, Tim. Indigenous-led environmental research in Aotearoa New Zealand: beyond a transdisciplinary model for best practice, empowerment and action. *AlterNative: An International Journal of Indigenous Peoples*. 17. 117718012110193. 10.1177/11771801211019397. (2021)
- 33.8. Cherrington, Majka, David Airehrou, Ihaka Dunn, Qiang Xu, and David Cameron-Brown. "Learning to mitigate emissions: relevance of research with Maori hapu and iwi." (2020).
- 33.9. Harmsworth, G. Report on the Incorporation of Traditional Values/Tikanga into Contemporary Māori Business Organisation and Process, Landcare Research Report: LC/0405/058. (2005)
- 33.10. MBIE. He Kai Kei Aku Ringa – The Crown Māori Economic Growth Partnership 2023. <https://www.mbie.govt.nz/dmsdocument/27308-he-kai-kei-aku-ringa-maori-crown-economic-growth-partnership-2023-briefing-proactiverelase-pdf> (2023)
- 33.11. Meade, Richard. Role of Māori in the Transition to a Low-Emissions Economy. Cognitus Economic Insight. Website accessed: https://environment.govt.nz/assets/publications/Cognitus-Maori-Role-in-Low-Emissions-Transition-2021_06_05.pdf (2021)
- 33.12. Ministry for Primary Industries. Rautaki mō te Taurikura. Embracing change for prosperity. Website accessed: <https://www.mpi.govt.nz/dmsdocument/54376> (2022)

34. Recommendations

- 1.1. Explore and consider marae and hapū as central foci in the fourth emissions budget advice to the Crown requiring further analysis
- 1.2. Centralise marae and hapū in the Māori Climate Change strategy that is yet to be developed, anchoring Māori aspirations and priorities for climate change on the

future of marae as bastions of cultural practice and beacons of community safety and wellbeing.

APPENDIX 1: Guiding Framework to underpin external advice provided by Māpuna Consultants

He Pou a Rangi – Climate Change Commission

Guiding Framework

Prepared by Dr Acushla Sciascia, Māpuna Consultants

This framework has been developed specifically to provide advice on 5Mf and 5N sections regarding Target Review 2050; Monitoring; NAP; EB4 and; IAS.¹⁵

Framework

The framework provides three guiding pou when preparing advice back to He Pou a Rangi that will then inform advice to the Crown on climate issues. The three pou anchors the basis and lens to which the advice is being provided to ensure that methodologically, He Pou a Rangi understands the philosophies, values and practices that underpin advice being provided by Māpuna Consultants.

Using this framework

This document will support the reader to explore a Māori cultural mindset that underpins Te Ao Māori. We have intentionally kept framework components as conceptual (and not overly reduced or explained) and invite you to consider how these concepts connect to you, your work and your understanding of Te Ao Māori. We recognise people are at different points of walking their own Te Ao Māori journey and acknowledge the levels of proficiency, understanding and knowledge will vary. We hope this framework provides you with a foundation to understanding the knowledge base and philosophies that inform the advice provided by Māpuna Consultants.

Pou 1: Te Tiriti o Waitangi

We recognise that He Pou a Rangi is not a Crown entity and therefore not obligated to the responsibilities of being a Treaty Partner. Despite this, as a responsible organisation charged with giving independent, evidence-based advice to the Crown on climate issues we recognise the importance of Te Tiriti o Waitangi in our work, and in the advice that we give that elevates the Treaty partnership between the Crown and Māori. In this way, we acknowledge the importance of Te Tiriti o Waitangi in the advice that we give to the Crown that is reflective of Treaty principles and giving effect to these. The following principles are referenced in Te Tiriti o Waitangi and inform the advice that is being provided.

¹⁵ Please note that the framework has been designed by Māpuna Consultants for the purposes of providing advice to He Pou a Rangi regarding five separate pieces of advice around 5Mf and 5N sections regarding Target Review 2050; Monitoring; NAP; EB4 and; IAS and should not be used, reproduced or copied for any other purposes without the express permission of the author.

- **Partnership** – recognition of partnership that is reasonable, honourable and in good fair
- **Participation** - actively participate in a mutual and mana-enhancing relationship
- **Protection** – recognition of Māori interests and their protection
- **Recognition of Cultural Values** – recognition Māori perspectives and values
- **Mana Enhancing Processes** – recognition of an appropriate process to engage that is timely, early and ongoing

Pou 2: Mātāpono (guiding principles)

These guiding principles represent the basis of knowledge, worldview and understanding that sits behind the advice being provided.

- **Te Ao Māori** – Te Ao Māori as a philosophy and knowledge system is the basis for all advice that is provided
- **Taiao ora** – The collective belief that tangata and taiao are inextricable and connected. If our taiao thrives, our people thrive
- **Mātauranga ake** – Recognition of iwi, hapū and whānau knowledge systems and practices that have always protected our taiao
- **Ki tua** – A firm focus on the future to ensure our taiao remains thriving for generations to come

Pou 3: Tikanga (protocols)

These tikanga represent a set of protocols that should be considered when interpreting, understanding and utilising the advice that is being provided

- **Whakaute** – Respect in how advice is framed should reflect Māori histories, realities and futures with due respect to those iwi, hapū and whānau who have long been kaitiaki of our taiao
- **Whakamahi** – Advice is geared towards tangible actions that supports the above principles and mātāpono
- **Whakamana**– Advice should reflect iwi, hapū and whānau interests and prioritises and elevates these interests
- **Whakaiti** – Humility is expressed towards the taiao and tangata as inextricably connected and at balance with each other

APPENDIX 2: Individuals with subject matter expertise and technical expertise

- Dr Mahinaarangi Baker (Independent iwi scientist and mātauranga Māori practitioner)
- Dr Shaun Awatere (Mātauranga Māori practitioner and scientist; Manaaki Whenua)
- Dr Daniel Hikuroa (Mātauranga Māori practitioner and scientist; University of Auckland)
- Veronica Tāwhai (Treaty expert and trainer; Massey University)
- Tuhi Ao Bailey (Climate change activist & iwi leader, Parihaka)
- *More names shall be added to this list as they come to hand