

16 March 2022

Ministry for Business, Innovation & Employment
Wellington
Email:

Tēnā koutou

Te Tira Whakamātaki submission on *Te Ara Paerangi – Future Pathways Green Paper*

Te Tira Whakamātaki welcomes the opportunity to provide feedback on the Green Paper – Te Ara Paerangi – Future Pathways and we note that it is timely to explore future possibilities and what sector reform might look like.

The RSI system is vital for helping us understand the current state of our environment, how its changed and how it is changing, and the impacts human activities are having on our environment. Unfortunately, indigenous perspectives are often missing from conversations about biodiversity, climate change and other critical environmental issues, and therefore national level environmental research funding. Despite knowing that indigenous communities, some of whom have lived in harmony with nature for thousands of years, have an intimate knowledge of their environments, and are often better placed than scientists to provide information on local biodiversity and environmental change, we risk accelerating the triple planetary crisis the world faces of climate change, biodiversity loss, and pollution because we exclude and struggle to procure indigenous knowledge in our research, science and innovation system.

Te Tira Whakamātaki is absolutely committed to protecting our natural heritage using indigenous knowledge and solutions. Our team includes mātauranga experts, Māori scientists, policymakers and kaitiaki, and many of our members have provided input into other submissions including that from Te Pūtahitanga, B3, PF2050 and Bioprotection Aotearoa. In all of these discussion our team and our members are clear that the research, science and innovation system must founded in Māori values and knowledge, must be fit-for-purpose, enduring, and of course Tiriti-based. Accordingly, we are making this submission because we believe that the present RSI system is not fit for purpose and does not adequately address Māori interests especially in the environment or conservation spaces.

Principles that have guided the development of Te Tira Whakamātaki submission

In preparing our submission, Te Tira Whakamātaki has been guided by the following principles:

- *Inclusion of te ao Māori* - The current system is failing Māori, it does not understand nor cater for Māori ways of knowing, working and being. Therefore, proposed changes must include Māori worldviews, values and mātauranga (knowledge).
- *Tiriti-based* - Proposed changes must uphold the promise of partnership and the principles of the Treaty of Waitangi/Te Tiriti o Waitangi. The future system must be Tiriti-based and should, in the very least, align with other large reform programmes which aim to 'give effect to the principals of Te Tiriti o Waitangi'.

- *Equitable participation in decision-making* – equitable Tiriti-based decision-making should be considered mandatory in the new system and is vital to protecting Māori infrastructure, including the Māori workforce.
- *Protect Māori infrastructure* - Proposed changes should provide certainty to Māori researchers and research entities who are increasingly choosing to sit outside of the existing system and or are excluded from key leadership roles in the current system. The future system must ringfence and protect investment for Māori infrastructure and Māori leadership.
- *Remove barriers* – it is widely known that the existing system has huge issues with pay and workload inequities and systemic racism. The future system must address these and other barriers and hold major players in the system, including CRIs and Universities, to account for failing to address these issues.
- *Future focused and fit-for-purpose* - As far as practicable, changes should enhance or assist with achieving future focused outcomes and thinking.

Structure of our submission

Te Tira Whakamātaki submission is separated into two parts:

- Part 1 of our submission introduces us and includes some over-arching comments.
- Part 2 of our submission provides feedback to key questions in the consultation document.

Ngā mihi



Tame Malcolm, General Manager

Privacy - 9(2)(a)



Dr Simon Lambert, Chief Scientist

Privacy - 9(2)(a)



Melanie Mark-Shadbolt, Trustee and Director

Privacy - 9(2)(a)

Te Tira Whakamātaki Submission for Te Ara Paerangi – Future Pathways Green Paper

Te Tira Whakamātaki is an indigenous environmental not-for-profit protecting our natural heritage using indigenous solutions. We work to reverse the decline of our biodiversity, to restore balance to our natural world, and re-establish a reciprocal relationship with Papatūānuku. Our work is embedded in our ancestor's knowledge of the environment, our indigenous philosophies, and our science. We recognise indigenous peoples as the best guardians of not only their own lands but of all nature, and we recognise indigenous knowledge (in our case mātauranga Māori) as a legitimate knowledge system that is more complex than science. Working with knowledge holders and using mātauranga to protect Papatūānuku, and all that live with her, is a privilege we share with our communities through our research and education.

On behalf of our Kāhui, board of trustees, board of directors, staff, communities, whānau, and members we make this submission because we believe that the present RSI system is not fit for purpose and in particular does not adequately address Māori interests in the environment or conservation spaces nor does it adequately resource Māori to be participants and masters of their own destiny. Below is a suite of recommendations, all of which should be considered as a complimentary package (not in isolation from each other).

Part 1 – Overarching Comments

The following themes make up the core ideas behind our submission:

Inclusion of te ao Māori and protection of mātauranga - the current system is failing Māori, it does not understand nor cater for Māori ways of knowing, working and being. Therefore, proposed changes must include Māori worldviews, values and mātauranga (knowledge). Additionally protecting mātauranga (and associated taonga including data resources, reo, and indigenous biodiversity), must be central to the new system. Our rongoā research in the kauri dieback space is evidence that mātauranga Māori, and Indigenous knowledge, can drive innovative ways of responding to complex environmental issues. Mātauranga Māori must be valued and protected in the new system.

Creating space for Kaupapa Māori processes and methodologies – there must be provision in the new system for adequate investment in Kaupapa Māori research, research that is led by Māori, for Māori and informed by tikanga and mātauranga Māori. This includes research that is tohunga-led and designed in ways that focus on community aspirations rather than research outputs. Equally the system must be actively encouraged to embed Kaupapa Māori approaches into its own systems and work. The new system should not encourage Crown research entities to consume the space that Kaupapa Māori researchers and research entities are struggling to hold already. The system must work to protect Māori to be leaders in their own research.

Tiriti-based, values-based RSI – Prime Minister the Right Honourable Jacinta Ardern in her 2017 speech from the throne noted that we needed to consider as a nation how to move forward in ways that honour the original treaty promise, a promise of a nation in which Māori values would stand alongside those of European New Zealanders and other more recent arrivals. A nation in which manaakitanga, kaitiakitanga and whanaungatanga informed decision-making. A nation in which fairness and equality of opportunity are not just aspirations but facts, and a nation in which all communities are empowered. The new RSI system must factor this promise into its design, and it must uphold this promise of partnership and be underpinned by Māori values such as those noted above. In addition, it should align with other legislation that aims to give effect to the principles of the Treaty of Waitangi/Te Tiriti o Waitangi.

Equitable participation in decision-making – if the system is to truly embrace Te Tiriti, then it needs to wholeheartedly commit to the partnership intended by Te Tiriti which means its needs to explore how a more equitable relationship, where the Crown doesn't have complete control over all decision-making, all systems of governance, and all resourcing, is achieved in a timely manner. Equitable governance of the RSI system, and associated reforms, should be guaranteed and anchored in the principles of Te Tiriti especially partnership, participation, and active protection. We assert that equitable governance is pertinent as we face increasing environmental degradation, rapid deterioration of freshwater quality across the country, a worsening climate crisis, and the loss of indigenous biodiversity, all of which have a significant impact on hapū/iwi/Māori and all require investment from the RSI system to address. This will not happen without Tiriti-based decision-making. In addition, we recommend that the RSI system moves to follow the approach of many of the National Science Challenges and actively encourage co-governance or equitable governance, with a relational or partnership approach, of key research entities including the MBIE Science Board, CRIs and Universities.

Protect Māori infrastructure & workforce – committing to a partnership approach that gives effect to Te Tiriti provides an opportunity to recognise the history of our Māori-Crown relationship and address capacity, capability and resource constraints that have arisen, in part, from historical Treaty breaches. In an attempt to address capacity and resourcing constraints, as well as systemic racism, many Māori researchers have left mainstream research entities and joined or created independent Māori research entities such as ours. It is our view that the future system should not discriminate against independent Māori RSI entities, as it currently does, and in fact it must ringfence and protect investment for independent Māori RSI entities to thrive and grow.

Independent Māori RSI entities are often place-based and linked to capacity and tohunga on the ground. It is our view that such entities are best placed to identify Māori RSI priorities within each rohe, connect research to local decision-making, champion mātauranga-driven innovation, and protect mana whenua intellectual and cultural property arising from RSI.

Remove barriers – it is widely known that the existing system has huge issues with pay and workload inequities and systemic racism, which we won't relitigate. The future system must address these and other barriers and hold major players in the system, including CRIs and Universities, to account for failing to address these issues. It is our view that a considered approach to removing barriers in the early years will contribute to growth in the workforce, create high-performing agile institutions, promote collaboration and address funding constraints.

Future focused and fit-for-purpose – a Future Pathways approach to RSI must truly be future focused and fit-for-Aotearoa, accordingly it must be able to articulate the future state we want to see and be focused on impact and outcomes not outputs. It must also challenge itself to speculate on the future and make adjustments regularly, but incrementally, to ensure we reach our desired future state. It must be inclusive of the next generation and open to reflection. To that end we suggest an early piece of work be the development of a bold goal, clear vision and commitment to a set of shared values and outcomes, and that this should be supported by iwi, hapū, whānau, communities, as well as Māori business and enterprise, and our Pacific and New Zealand European communities and industries. It should set us all up for success noting that if it works for Māori, it will work for all New Zealanders.

Part 2 – Feedback to **some** of the questions in the consultation document

Research Priorities	
<p>Ngā kōwhiringa hoahoa Whakaarotau Matua</p> <p>Priorities design What principles could be used to determine the scope and focus of national research priorities?</p>	<p>To date Māori have not had the power nor resources to meaningfully influence, let alone determine, sector priorities for research. The current approach to identifying priority issues centres the values of the majority and has significantly disadvantaged Māori to date.</p> <p>Firstly, research missions/priority areas should be clearly set out and existing research should be mapped out and aligned to those priorities. Then a set of values for investment should be developed to underpin the prioritisation of investment.</p> <p>Re values, as a starter for consideration:</p> <p>Rangatiratanga – ensuring Māori are determining their future needs, in ways that utilise their processes and practices.</p> <p>Mauri ora – ensuring the future priorities adopted a holistic approach to investment in areas of significance i.e., investments in research priorities must take into consideration economic, environmental, social, and cultural wellbeing</p> <p>Mana Motuhake – ensuring Māori rights and interests are protected and upheld.</p> <p>Kaitiakitanga – the concept of stewardship implies longevity, and so priorities must be intergenerational.</p> <p>We recommended reviewing the co-design approach the Biological Heritage NSC took to developing the Nga Rakau Taketake investment.</p>
<p>Ngā kōwhiringa hoahoa mō te tukanga tautuhi whakaarotau</p> <p>Priority-setting process What principles should guide a national research priority-setting process? How can the process best give effect to Te Tiriti?</p>	<p>We believe that principles would ideally be co-created with Māori but anticipate they would include some of the key themes noted in part one as well as the following:</p> <ul style="list-style-type: none"> • Promote intergenerational approaches to addressing national issues • Address system racism and structural inequities • Support community empowerment and citizen science • Encourage benefit sharing • Be transparent and accountable • Give effect to the principles of Te Tiriti
<p>Ngā kōwhiringa hoahoa whakahaere matua</p> <p>Operationalising Priorities How should the strategy for each national research priority be set and how do we operationalise them?</p>	<p>If research prioritisation includes full scoping/mapping, is aligned successfully to national priorities and strategies, underpinned by an agreed set of values, then this should have a significant influence on how the research is operationalised. It would ensure the work to be initiated has a clear line of sight to mission.</p> <p>A Tiriti-based framework for setting national research priorities should also be established and flow through to governance and management. Each priority will require independent governance but should be linked though some process that ensures lessons are learned, duplications are removed etc.</p> <p>Some of the NSCs provide excellent examples of how you can and should operationalise mission-led work in the future. Lessons learned include:</p> <ol style="list-style-type: none"> 1. Ensuring governance settings align to Māori-Crown relationship aspirations and honour Te Tiriti. 2. A diverse team is better for delivering mission-led research that's useful. Many NSC's would note a key lesson for them is avoiding the appointment of the 'usual suspects' in governance, management and key technical roles. Diversity

	<p>of experience (including lived experience), discipline and thinking should be actively sought early on.</p> <ol style="list-style-type: none"> 3. Addressing community needs and interests as a way of ensuring you are working towards impact. 4. The notion of a 'host' should be expanded to include entities beyond universities and CRIs. Independent Research Organisations, Wānanga, or iwi research institutes are equally able to host and are often set up better to address complex trans-disciplinary research that is place-based and connected to communities (in our case including our kaitiaki, kaumatua and tohunga). 5. Longevity of research funding is key to achieving joined up, multi-institutional, trans-disciplinary research and innovation. A 10-year window of funding allowed the RSI system to think about impact and community involvement and must be encouraged via long-term funding.
Te Tiriti, Mātauranga Māori and Māori aspirations	
<p>Te e huarahi e marohitia ana</p> <p>Engagement How would you like to be engaged?</p>	<p>The Crown has a Tiriti responsibility to undertake meaningful engagement as articulated in the Public Services Act 2020, the guidelines for engagement with Māori, from Te Arawhiti, and the Cabinet circular 19: Te Tiriti o Waitangi / Treaty of Waitangi Guidance.</p> <p>Our interpretation of these suggests MBIE will take steps to ensure Māori rights, interests and perspectives are considered and provided for in the process going forward via measures such as direct and targeted engagement with hapū and iwi, as well as pan-Māori groups and Māori individuals.</p> <p>We expect Māori to be included in all aspects of the work programme and at all levels. We expect Māori to be resourced for their participation and we expect there to be a diversity of Māori voices at the table. We would be disappointed to see the usual 'go-to' Māori entities dominating the work programme and see this as an opportunity to bring the next generation of researchers to the table. We actively encourage MBIE to make provisions for rangatahi to be engaged and heard.</p> <p>Of course, our kāhui, board, trustees, team, and members are excited to be involved in future work via wananga or targeted consultation.</p>
<p>Te whakamana me te whakahaumarua i te mātauranga Māori</p> <p>Enabling and protecting mātauranga Māori What are your thoughts on how to enable and protect mātauranga Māori in the research system?</p>	<p>In the first instance we acknowledge, as others do, that mātauranga Māori is currently vulnerable to misuse and misappropriation in the RSI space – something seen throughout the VM funding process over the past 15+ years. Without standards for protecting mātauranga and Māori intellectual property rights, tikanga, mātauranga, and Māori are at risk of ongoing and continued exploitation.</p> <p>We would expect Māori to be provided with the space, resourcing, and the opportunity to have a conversation about how we want to protect mātauranga Māori in the RSI system. However, we also see the need for the Crown, probably via Te Pae Tawhiti (TPK – Wai262 programme), to address the need for standards and systems that offer protection internally from their own exploitation.</p> <p>We acknowledge the many entities and people trying to address this right now including Ngā Pae o te Māramatanga Centre of Research Excellence, Aroha Moko-Mead, and Te Mana Raraunga, and support the findings in the 2021 Te Pūtahitanga report and submission of Te Pūtahitanga collective.</p>
<p>Te whakapakari hononga ki te mātauranga Māori ā-rohe</p> <p>Regionally based</p>	<p>Our structure is already based around regional hubs. Our regional leads and kaumatua ensure we are connected to place, and able to identify and work on issues of importance to iwi, hapū and whanau. Research is community-driven, and community knowledge is core to addressing our research questions. This approach has seen us achieve exception results in forest restoration as we access place-based knowledge from kaitiaki, kaumatua and tohunga.</p>

<p>Māori knowledge hubs What are your thoughts on regionally based Māori knowledge hubs?</p>	<p>However, the regional approach only works with strong support from the centre. Accordingly, the hub and spoke approach is central to our future growth strategy. The national hub, or an independent Māori RSI entity, is vital for providing support services and creating efficiencies through shared structures, processes, and the like i.e., ethics approval, access to equipment. However, as noted above the regional spokes are equally or more important for ensuring iwi, hapū and whanau are able to articulate their needs, and have autonomy and authority to address those themselves.</p> <p>We, like others, recommend that RSI hubs are embedded in legislation and enabled via policy instruments. We would also like to see these connected to other regional hub conversations happening in climate, resource management etc.</p>
<p>Funding</p>	
<p>Ngā kōwhiringa matua mō ngā taumahi matua</p> <p>Core functions How should we decide what constitutes a core function and how do we fund them?</p>	<p>Tiriti-based decision-making will help achieve equitable outcomes and as noted earlier must be central to the RSI system i.e., a core function. Developing Tiriti-based guidelines for the RSI system should help determine how we fund core functions, whilst ensuring funding takes into consideration Māori research needs, activities, capacity etc.</p> <p>Relational partnership approaches to decision-making may be useful to consider (see next question).</p>
<p>Ngā kōwhiringa hoahoa mō tētahi tauira tuku pūtea hou</p> <p>Establishing a base grant and base grant design Do you think a base grant funding model will improve stability and resilience for research organisations and how should we go about designing and implementing such a funding model?</p>	<p>The current funding model is unsustainable and must be replaced with one that is fairer and more equitable. Long-term base grants might provide more certainty for research organisations and allow them to keep key skills in the country and keep key infrastructure operational but that must be balanced against the need to realise Māori, Crown and community RSI hopes and aspirations. Base funding must come with hooks and levers to ensure Māori receive an equitable portion of that funding.</p> <p>Equally governance and management of funds must have hooks in place to ensure Māori needs are also prioritised and not forgotten. As noted above a relational partnership approach to designing a funding mechanism could provide the best outcome for both treaty partners. A relational partnership is best designed to ensure Māori are participating meaningfully at all levels of the system i.e., governance, management, participant. It also ensures both views, Crown and Māori, carry equally weight in governance and management discussions, and ensures consensus decision making is practised at all times. While it doesn't promote traditional views of co-governance, i.e., it's not defined by equal numbers at the table, it does promote equity in decision-making which is, in our view, more important. Partnership governance approaches are developed and ensure equal weight is attached to the Māori and Crown views, equal weight is attached to mātauranga Māori and science, and equal weight is attached to other aspects deemed vital to the decision i.e., capacity or values. Creation of a Tiriti-led relational partnership model could and should support the development of the future system including its funding models.</p> <p>Finally, we suggest any future funding models take an 'and-and' approach to funding for Māori, both ring fencing Māori funding and making provisions for Māori in centralised mainstream funds much like the Biological Heritage NSC has. This ensures Māori are able to access more substantial pockets of funding to accelerate Māori innovation, creativity, and commercial potential.</p> <p>We encourage the use of diverse working groups to think of innovative approaches to reducing overheads or repurposing those for investment in key priority areas such as diversity, Treaty, rangatahi. We also encourage those working groups to</p>

	examine how base funding could be used to reduce inequities in the system, address system bias and burnout, especially of Māori researchers who are often doing double-duties.
Institutions	
<p>Te āhua, whakaruruhau me te hanganga o te whakahaere</p> <p>Institution design How do we design collaborative, adaptive, and agile research institutions that will serve current and future needs?</p>	<p>We must agree at a high-level about the underpinning principles institutions must commit to, many of which should drop out of key themes like those in part one including equitable governance and future-focused and fit for purpose which notes institutions need to be agile and high-performing.</p> <p>Agile research comes from places where high performing teams exist. High performing teams operate in spaces where there is high trust, clarity about role and function, fit-for-purpose systems, and processes (including protocols for protecting Māori cultural and intellectual property, tohunga, communities etc.) and accountability and transparency about decision-making. We would encourage MBIE to look at the Biological Heritage NSCs tranche 2 processes where investments were trust based and mission focused, allowing room for teams to flex and move as needed. Equally we encourage MBIE to look at IROs which are often set up to meet specific community, industry, Māori needs not being met with universities and CRI's. IROs are often agile, collaborative, and adaptive because they have to be to survive.</p>
<p>Te whakawhanaketanga me te tautiaki pai ake o te hunga mahi me te rakaha</p> <p>Role of institutions in workforce development How can institutions be designed to better support capability, skills, and workforce development?</p>	<p>A cohesive workforce development plan should be developed and driven centrally, and it should guide the system and institutions workforce development by clearly defining their various roles in the system (e.g., educate/create talent, grow talent) and provide guidance and support for attracting and retaining talent in the system. Building Māori workforce would be core to the plan.</p> <p>While it is important that institutions be required to partner with Māori entities for capability building, it is equally important that the system doesn't overload Māori entities. A careful balance must be found with adequate resourcing to support Māori entities who will increasingly be called on to support institutions grow talent. A good example is the recent work of IRANZ to build an equity programme and the double duties required by the very small group of Māori IRANZ members to guide non-Māori institutes to access funding for Māori.</p> <p>As above institutions that have had success in building RSI workforce have had autonomy and flexibility to do so. Nga Pae o te Maramatanga is a good example of rapid creation of a workforce supported by strong and targeted investment.</p>
<p>Te ruruku pakari ake me te arotautanga o ngā haupū rawa me ngā rawa nunui</p> <p>Better coordinated property and capital investment How should we make decisions on large property and capital investments under a morecoordinated approach?</p>	<p>Significant investment must be made in Māori research property and capital investments including the Māori RSI hubs or our preference the Māori Taiao Policy and Research hubs.</p> <p>Equally though space must be made for conversations about Māori building or managing big infrastructure in ways that support their aspirations. For example, Te Tira Whakamātaki is committed to building a national Māori-led seed bank as well as regional seed hubs. We have already invested over \$100,000 of our own capital into the development of a national seed bank concept plan and supporting regional training of kaitiaki and the purchasing of equipment for our communities.</p> <p>In addition, there should be consideration for improving procurement processes around research infrastructure.</p>
Te tautoko i ngā	Refer to other comments in this document noting that to design a Tiriti-enabled

<p>wawata o te Māori</p> <p>How do we design Tiriti-enabled institutions?</p>	<p>institution we must.</p> <ul style="list-style-type: none"> - share power and decision-making especially as that relates to resource distribution - provide strong hooks and levers in policy to ensure the institution truly is Tiriti-enabled/led. - provide space for conversations with mana whenua about what Tiriti-enables institutions in their rohe should look like. - examine other entities and do a lessons-learned - appoint strong leaders with a track record to design and implement
<p>Ngā pāpātanga pai ake – te whakawhiti mōhiohio me ngā pāpātanga rangahau</p> <p>Knowledge exchange</p> <p>How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?</p>	<p>As noted in part one the future RSI system should be future focused and fit-for-purpose. It must be supported by communities, inclusive of the next generation and be clear in its vision and purpose – this clarity ensures people want to be part of it, that they see themselves as part of the system and how it can benefit them, their community, their business and or industry.</p> <p>Nga Rakau Taketake is an example of a strategic science investment that had to reset the way researchers transferred kauri dieback and myrtle rust research back into the communities of interest after acknowledging that other RSI entities had done that poorly in the past. A focus on mission and commitment to transparency allowed that to happen in ways that are benefiting the research.</p> <p>This approach requires different skills in implementation of research and those skills are lacking in the system currently.</p>
Research Workforce	
<p>General comments</p>	<p>Our RSI workforce is vital to the future success of Aotearoa New Zealand and the longevity of our universities. The current PBRF is not fit-for-purpose and is creating perverse outcomes in the attraction and retention of ‘good’ researchers. This must be removed.</p> <p>Accordingly, we support the views in the Green Paper re base grants and add that levers for addressing fragmentation of research FTE must be explored in the future system, as must mechanisms for funding FTE’s outside of CRI’s, universities and levy based IROs. Independent Māori research entities and Wānanga need to be able to access base grant funding.</p> <p>As with other aspects of the consultation feedback, transparency and accountability is vital in any funding space – again Nga Rākau Taketake and Kauri Dieback investments are a good example of where transparency can undermine funding, staffing and outcomes.</p> <p>Future changes should be underpinned by a commitment to reducing costs to engage with the RSI system especially for communities and businesses, reduce the amount of time researchers spend on applying for unsuccessful research grants, and increase community engagement in the RSI system.</p>
Research Infrastructure	
<p>Ngā kōwhiringa hoahoa matua mō te tuku pūtea ki te hanganga rangahau</p> <p>Funding research</p>	<p>Firstly, we agree to a shared vision of the RSI system and ensure we build mechanisms to support us to get there. However, it is important to consider the definition of infrastructure and how investment in groups outside of traditional RSI infrastructure can occur. Like other responses the current approach favours particular entities and worldviews, places that have already failed Māori.</p>

<p>infrastructure How do we support sustainable, efficient, and enabling investment in research infrastructure?</p>	<p>Regional RSI hubs will provide small amounts of infrastructure to support place-based research and decentralise research infrastructure to Māori communities. However as noted earlier we also support the establishment of, or support of an existing, national RSI entity to support the regional hubs. Though again we reiterate it must be connected to other policy reforms or programmes like RM and climate.</p>
--	--

