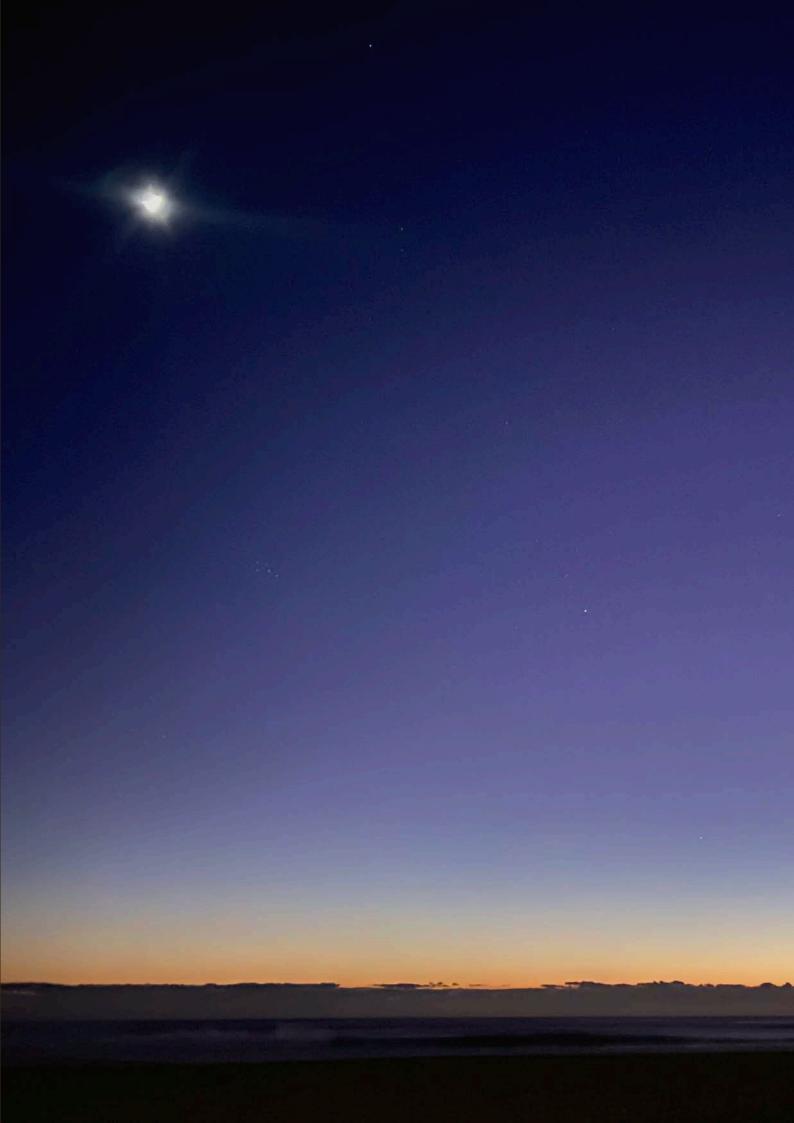


Puta ki Te Ao Tūroa

Te Ao Tūroa Economies





Puta ki Te Ao Tūroa Te Ao Tūroa Economies

SUSTAINABLE SEAS NATIONAL SCIENCE CHALLENGE

Te Ao Māori Synthesis Programme:

Te Ao Tūroa

LEAD AUTHOR:

Te Rerekohu Tuterangiwhiu

Ngā Puhi, Ngāruahine, Ngāti Porou, Ngāti Ranginui, Tainui

CO-AUTHORS:

Kelly Ratano

Ngāti Tūwharetoa, Ngāti Rangiwewehi

Waiaria Rameka

Ngāti Tūwharetoa, Ngāti Raukawa

This work was supported in full by the Sustainable Seas National Science Challenge, established by the Ministry of Business, Innovation and Enterprise, New Zealand. Project no. C01X1901.

Acknolwedgments

KAIĀRAHI - SYNTHESIS STRAND LEADER

Caine Taiapa - Ngāti Ranginui, Ngāi Te Rangi, Ngāti Pūkenga

MĀTĀPUNA - CULTURAL ADVISORY GROUP

Teina Boasa-Dean - Ngāi Tūhoe, Ātiuan

Karl Leonard - Ngāti Rangiwewehi, Te Pahipoto, Ngāti Huri

Ruiha Ruwhiu - Te Whānau a Apanui, Ngāti Awa, Ngā Puhi

Reon Tuanau - Ngāi Te Rangi, Ngāti Ranginui

TE PUNA KŌRERO - TE AO MĀORI COLLECTIVE

- T1: Awhi mai awhi atu: Enacting a kaitiakitanga-based approach to EBM
- T3: Ngā tohu o te ao: Maramataka and marine management
- T4: Te tāhuhu matatau: Empowering kaitiaki of Tangaroa
- 2.3: Indigenising the blue economy in Aotearoa
- 2.14: Whakaika te moana
- 2.15: Thinking outside the can: engineering toheroa aquaculture
- 2.16: A novel approach to aquaculture in Aotearoa NZ
- 3.1: Perceptions of risk and uncertainty
- 3.2: Communicating risk and uncertainty
- 4.1: Tangaroa Ararau: Treaty relationships and EBM
- 4.4: Understanding and communicating the various implications of scale for EBM
- S3: Synthesis of Tangaroa phase one research
- S7: Ki uta ki tai: Estuaries thresholds and values

Puta ki Te Ao Tūroa: Te Ao Tūroa Economies

Prepared and published by Kopare Solutions and Wheiao Whakaaro

ALL RIGHTS RESERVED

Any unauthorised copy, reprint or use of this material is prohibited. No part of this content may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without express written permission from Kōpare Solutions and Wheiao Whakaaro

Professional Disclosure Statement

This report was prepared and published by Kopare Solutions and Wheiao Whakaaro and funded by the National Science Challenge (Sustainable Seas). The findings of this report are based on the research and information available at the date of publication and has been obtained from and is based on sources believed to be reliable and up to date. No responsibility will be accepted for any error of fact or opinion based on such reliance.

PUBLISHER:

Kopare Solutions Tauranga, New Zealand June 2024

DESIGNED BY:

Dixie Yates-Francis -

Te Aitanga-a-Mahaaki, Rongowhakaata, Te Arawa, Ngāti Maniapoto **Matangireia Yates-Francis** -

Te Aitanga-a-Mahaaki, Rongowhakaata, Te Arawa, Ngāti Maniapoto

CITATION:

Tuterangiwhiu, T. R., Ratana, K., Rameka, W., Taiapa, C., Mātāpuna, & Te Puna Kōrero. (2024). Puta ki Te Ao Tūroa: Te Ao Tūroa Economies Guidance. Sustainable Seas National Science Challenge, Te Ao Māori Synthesis Programme, Te Ao Tūroa Report 3. Kopare Solutions



- 8 Kupu Whakataki Introduction
- 10 Te Ao Tūroa Framework
- 12 Ngā Wao
- **16** Ngā Whiri
- 18 Principles of a Te Ao Tūroa Economy
- 20 Strategic Directives
- **20** Wao Atua
- **22** Wao Tūpuna
- 23 Wao Tāngata
- 26 Conclusion

Kupu Whakataki

Introduction

SUSTAINABLE SEAS NATIONAL SCIENCE CHALLENGE

Te Ao Māori Synthesis marks the concluding phase of the MBIE Sustainable Seas Science Challenge (the Challenge).

The Te Ao Tūroa project was one of four synthesis activities within the Te Ao Māori (TAM) synthesis strand. Each of these activities aligned with and contributed to the collective TAM synthesis objectives. The Te Ao Tūroa project aimed to draw from findings across the Sustainable Seas Challenge to develop a greater understanding of Māori ways of knowing, thinking, and doing, specifically in reference to developing Te Ao Tūroa economies.

This synthesis activity is grounded in the enduring principles of Te Ao Tūroa, explored through the application of Te Ao Māori perspectives to the development of Te Ao Tūroa economies. Te Ao Tūroa emphasises the longstanding natural world, advocating for activities that maintain the natural flow of life and resource sustainability.

The primary objective of the Te Ao Tūroa Activity was to advance the theory of Te Ao Tūroa as a concept applied to people's understanding of the 'Blue Economy', using it as a framework to inform the development of strategic directives that would support a sustainable marine economy - a Te Ao Tūroa economy. This TAM synthesis activity sought to:

- 1. Explore Te Ao Tūroa as a guiding framework for Te Ao Tūroa economy development
- 2. Demonstrate how Te Ao Tūroa principles and values can guide Aotearoa's strategic direction and transition to a Te Ao Tūroa aligned.

This is the final report from the Te Ao Tūoa activity of the synthesis programme. Working alongside our Puna Kōrero¹, this synthesis activity aimed to integrate and consolidate the learning and findings from the body of work conducted within the Challenge. By bringing together insights and knowledge generated through various research programmes, this initiative seeks to highlight critical factors for impact and establish strategic directives essential for the sustainable management of Aotearoa's marine and coastal environments.

The role of the Te Ao Māori synthesis was to distil and synthesise the diverse learnings from the Challenge projects, revealing the vital elements that drive effective and impactful outcomes. These directives are sourced directly from the communities, hapū, iwi and research teams engaged in Challenge research, ensuring that the recommendations are deeply rooted in the lived experiences and cultural knowledge of the Māori communities involved. This initiative underscores the importance of integrating mātauranga Māori into environmental management practices, fostering a holistic intergenerational approach to sustainability that aligns with the principles of Te Ao Tūroa.

¹ The Puna Kōrero is a collective of projects whose work in the Challenge were completed within the Tangaroa theme, kaupapa Māori led, or worked with whānau, hapū, iwi or Māori businesses.





WHAT IS A TE AO TŪROA ECONOMY?

A Te Ao Tūroa economy can be defined as an economy that emphasises the regenerative use and preservation of aquatic spaces and resources, as well as language, culture and practice. It works on the premise that when mauri is abundant, an overflow occurs that can provide for wao tangata activities like hao ika (fishing) utu piharau, whakaparu and pā īnanga. A Te Ao Tūroa economy is not limited to the transactions of goods and services. It also opens the way for 'economic value' to mean what it needs to for the whānau, hapū and iwi that it aims to serve. Those benefits may include resources, such as kai (foods), kahu (fibres), rongoa (medicines), rauemi (materials) and clean uninterrupted freshwater, that support a multitude of cultural practices. More benefits may include language development and the continuation of kawa, tikanga and ritenga described in wao tūpuna. These values do not necessitate the accumulation of monetary wealth as a primary bottom line or parameter for success.

The general concept of a Blue Economy has not been fully framed in a context that acknowledges the unique circumstances of Aotearoa and Te Tiriti o Waitangi. The Challenge has made it timely for iwi, hapū and whānau to shape this context, aiming for a tangible outcomes. This activity aimed to elevate Te Ao Māori perspectives by presenting alternative indigenous views of a blue economy through the lens of Te Ao Tūroa. The hope is that the insights gained will provide government, marine-based businesses, policymakers and the public with a deeper understanding of these principles as essential drivers for transitioning towards a Te Ao Tūroa economy.



Te Ao Tūroa Framework

The Te Ao Tūroa framework outlines the relationship of Māori with the natural world, rooted in a deep understanding and respect for natural circular systems. It encompasses both guiding principles and practices already considered that ensure the fulfilment of responsibilities and obligations — through whakapapa — to atua, tūpuna and mokopuna. This framework explores the interconnectedness of nature, humans and spirituality, anchored by three pou (pillars) that must be balanced and maintained to innovate without compromising the environment, epistemology, ontology, and intergenerational legacy within Aotearoa.

Purpose and Vision

Within the Te Ao Tūroa activity, the framework seeks to recalibrate thinking into a Māori paradigm, which is essential for planning a Te Ao Tūroa economy that is culturally relevant and intergenerational. The framework positions itself firmly within a Te Ao Māori perspective, where environmental sustainability is inherently intergenerational and cyclic in nature.

Incorporating the principles of Te Ao Tūroa into conceptualising an economy begins with a reflection on the desired endpoint of a regenerative and thriving ocean. This endpoint must be able to support flourishing communities as well as the various indicators, tools and perspectives that can foster, advance or perpetuate the vision of Te Ao Tūroa into the future. The concepts within this framework have been pulled from work completed in the Challenge research, alongside learnings from the Puna Kōrero and collaborative exploration with the Mātāpuna throughout the synthesis programme.

While not entirely new concepts, they outline three core distinct yet interconnected organic systems:

- **1. Wao Atua** (The Divine Natural Domains) natural space and time
- 2. Wao Tūpuna (The Ancestral Domains) — intergenerational knowledge and ancestral legacies
- 3. Wao Tāngata (The Human Domain) current communities, social circumstances, cultures and economic practices.

Positionality of the Framework

The Te Ao Tūroa framework posits that, from a Te Ao Māori and whakapapa perspective, environmental sustainability is inherently intergenerational. Whakapapa serves as both the mechanism and the parameter that interweaves the core values of the environment, economy, social wellbeing, cultural respect, intelligent best practices, and mokopuna succession.

The framework highlights that

- growth and change require adequate space and time
- knowledge is needed to optimise the use of space and time
- access to the necessary practices and resources requires enablers.

Given this, the interdependence of these elements is pivotal to achieving the vision of a sustainable environment. This section of the report lays out the foundational aspects of the Te Ao Tūroa approach, illustrating how these critical points are essential for advancing the goals of Te Ao Tūroa and shaping a sustainable future for Aotearoa's seas.

Ngā Wao

DOMAINS OF INFLUENCE

Noted below are the three domains of influence that help navigate the Te Ao Tūroa framework to build an authentic profile of Māori impact. The domains focus decision-making effort, value weighting and practical real-world impact in areas that have authentic Te Ao Māori philosophical and intellectual grounding.



Wao Atua

Space and time are the fundamental resources of **Wao Atua**. The fundamental nature of Wao Atua identifies the origin of life energy or mauri, generated in spaces where all living organisms used for resources manifest naturally within the taiao (environment). This underscores the human dependence on the natural world and the need to continually safeguard these sacred spaces (sacred because life and resources occur there).

This concept intertwines with the recognition of space and time as critical enablers, providing the necessary physical spaces and time for taonga species and mātauranga Māori to grow, reproduce, and thrive. This provision, in turn, respects and preserves natural cycles and habitats essential for Māori ecological and cultural and economic wealth. The dimension of space and time, as highlighted by Wao Atua, further encapsulates the idea that space is created and defined by life over time. This idea highlights the cyclical and regenerative nature of the environment, which allows it to grow natural resources, where each organic component continuously contributes to the creation and recreation of space, time and resource availability through natural processes.

In the context of a Te Ao Tūroa economy, this idea and approach emphasises that building an economy is impossible without ecology contributing mauri through which natural resources are activated with space and time. Generating wealth is impossible because nothing is left to sell. This situation illustrates that the necessary and tangible skeletal structure of a regenerative and sustainable economy is a healthy, intergenerational and reproductive ecology.





Wao Tūpuna references the flow of mātauranga tuku iho (intergenerational knowledge) that has been retained from ancestral practices, history, and the authentic perspectives and wisdom of Te Ao Māori taketake. The purpose of this knowledge in the framework is to draw on the insights and wisdoms developed by our tūpuna (ancestors) to better guide our actions, efforts and aspirations for the future. This ancestral wisdom informs the modern understanding and application of kawa (protocols), tikanga (customs), and ritenga (ceremonial practices). Wao Tūpuna holds both the mātauranga (knowledge) passed down through generations and the knowledge being generated by whānau, hapū and iwi today.

When looking at Te Ao Tūroaeconomies, this perspective strives to build a balanced future in a holistic, intergenerational way. The pivot into mātauranga and mohiotanga (practice) delves into the wisdom and practices of the tūpuna, exploring their epistemology and ontology to harness these ancestral insights for tangible impacts within Te Ao Tūroa. This pivot particularly influences iwi and hapū, supporting localised whānau who act as repositories of mātauranga.

In the context of economies driven by Te Ao Tūroa, the perspective described above ensures that two things happen. First, mātauranga Māori gets significant applied 'ground truthing' (information known to be real or true by direct observation or measurement) and time under tension (space and time to be applied and tested). Second, intergenerational wisdom is generated, adapted and integrated into modern environmental management approaches while birthing more opportunities for the reclamation and innovation of our indigenous knowledge. The perspective also supports the retention of cultural identity and legacy, te reo, history, and cultural practices, acknowledging that we are the next generation of tūpuna — and that all these aspects are part of a thriving economy.



Wao Tāngata

Wao Tāngata focuses on implementing mātauranga into practice. It incorporates the ways that tāngata (people) interact with, manage, protect and live within Wao Atua, guided by Wao Tūpuna. It also encompasses how tāngata bring together mainstream contexts while maintaining the intergenerational sustainability of Wao Atua and Wao Tūpuna, crucial for preserving an authentic Māori identity and a long-term regenerative economy.

Tāngata are the recipients of the assets, opportunities and value systems and environment (both social and natural) inherited from their ancestors, and today's iwi, hapū and whānau are responsible for upholding the mauri of Wao Atua and Wao Tūpuna. This highlights the role of people in preserving their heritage for future generations.

Enabling mechanisms support the integration of a Te Ao Tūroa perspective in research and in the application of blue economies in Aotearoa, and encompass tools like funding, legislation and policies. These mechanisms are vital for determining how spaces are used and managed, which influences the effectiveness of initiatives aimed at sustaining Te Ao Tūroa. By fostering opportunities for the reclamation and innovation of indigenous knowledge, and retaining cultural identity and practices, these mechanisms strive to build a balanced, holistic future.



Ngā Whiri

KEY INTEGRITY MARKERS

Mauri

Mauri is the fertile life force - the organic nutrients that exist in and between all things in the natural world. In addition, a dimension of mauri underscores the interdependence of the physical and spiritual realms. Mauri is a key integrity marker in the context of a Te Ao Tūroa economy. Mauri binds elements in the natural world through the ways each life form both contributes to, and uses, mauri within an environment, impacting the overall mauri ora (wellbeing) of a particular Wao Atua. This transfer of mauri is facilitated by water, which acts as a conduit for this life-giving energy. The potency of mauri can be observed in the fertility of a space: areas with more māori (native/endemic) contributors of mauri exhibit higher potency (for instance, a native forest compared to a forest of pine or blue gum). Mauri helps with understanding when parts of the natural order and logic of an ecosystem are out of balance.

The health of any economy, including a Te Ao Tūroa economy, is intricately linked to understanding and maintaining mauri in the natural environment. Recognising and enhancing mauri ensures the resilience and wellbeing of ecosystems and communities, making it fundamental to the sustainability and success of a Te Ao Tūroa economy.

Mana

Mana is another key integrity marker because it embodies the structural integrity and value of a living environment, organism, or thing. Mana represents the essence and inherent strength of a space, reflecting the contribution that individual environments, organisms or things make to it. Mana also signifies the inherent strength and resilience of an environment, ensuring its stability and continuity. In a Māori context, mana reflects the capacity of an organism or entity to self-determine its existence, maintaining biodiversity and ensuring that each species can thrive within its natural habitat. In this context, mana also respects the autonomy and unique characteristics of each life form. Mana is also deeply tied to cultural identity and heritage, encompassing the spiritual and ancestral connections to the land and natural resources.

Whakapapa

Whakapapa, or genealogy, is a fundamental integrity marker in the context of a Te Ao economy. From a Te Ao Tūroa perspective, Māori aquatic cultivation is not only about raising fish; it is also about cultivating source points, or Wao Atua, and therefore mauri. Cultivating source points requires an intimate awareness of all aspects of whakapapa tied to, and reliant on, that space. Whakapapa, as a core component of this management system, emphasises the interrelationships — the ancestral and genealogical connections between all things.

Whakapapa contextualises the relationships between humans, natural resources and the environment, tracing connections back to Wao Atua. This ancestral framework helps define and understand the elements of historic cause and effect, and biotic and abiotic requirements essential for any natural resource-based economy and its practices. The Puna Kōrero research identifies these elements at three scales of whakapapa: atua, tipua, and tāngata.

By recognising whakapapa as an integral part of a Te Ao Tūroa economy, tāngata acknowledge the deep connections between all forms of life and the environment. This perspective ensures that all economic practices are sustainable, culturally respectful, and grounded in the intergenerational wisdom of tūpuna, and responsibility to the mokopuna still to come.







Principles of a Te Ao Tūroa Economy

One of the research projects within the Challenge – Whakaika Te Moana² – explored hapū-based economies. While the following principles were derived from a hapū context, they are also applicable at the broader scale of a Te Ao Tūroa economy as these economies are inherently based on the same concept.

Hapū economies are circular and closed-loop systems, where circular ecology is integral to the circular economy. Any marine economy must adhere to this principle, emphasising regenerative use and preservation of aquatic spaces and resources. A Te Ao Tūroa economy operates on the premise that abundant mauri creates an overflow, supporting cultural practice and harvest of food and materials that might form the basis of an economy.

The principles outlined below redefine 'economic value' in a way that aligns with the needs of the environment and whānau, hapū and iwi. They encompass resources such as:

- taonga species (for instance, food, medicinal, and textile resources)
- clean fresh water and clean saltwater
- language development
- the continuation of kawa, tikanga and ritenga, as described in Wao Tūpuna.

Success or wealth is then measured by the vitality of these cultural and ecological assets as well as money, rather than money alone.

² For more information about this research, visit the 'Whaikaika te Moana' webpage on the Sustainable Seas Challenge website: https://www.sustainableseaschallenge.co.nz/our-research/ whakaika-te-moana/



Wainuiätea

Below we describe the **Key Principles** of a Te Ao Tūroa Economy:

- 1. Recognises mauri as invaluable 'energy capital': Mauri, the most potent and usable form of energy gifted by Wao Atua, is vital. A healthier ecosystem generates more potent mauri, fostering resilience and regeneration.
- 2. Understanding water as the currency of mauri exchange: Clean, natural sources of water from uninterrupted natural catchment systems is essential for all life forms, and acts as the currency for mauri exchange. These sources of water facilitate the movement of mauri ora (lifegiving capacity) through whakapapa lines, promoting interdependence and mutual sustenance.
- Interventions to enhance mauri: Wao Tangata ritenga or cultural ceremonies or practices of intervention replenish and, where needed, restore and enhance mauri, promoting the regenerative growth of food and natural resources. Sustainable and mindful harvesting practices are guided by the health and availability of mauri, ensuring this vital energy source is not depleted.
- 4. Localisation of the benefit structure: Resources grown through the flow of mauri from within a localise environment and community support the needs of local communities, their whānau, hapū, and iwi, providing food, natural materials, language development, cultural maintenance and economic opportunities. Benefits must be self-sustaining and prioritised for local communities before being shared externally. This approach is necessary to avoid compromising the sustainability of the whakapapa economy between the Wao Atua, the taonga or resource and the people and communities that rely on it.
- 5. Enabler of intergenerational viability: Ensuring intergenerational viability through all scales of whakapapa (Wao Atua, taonga species, and tangata tiaki) is crucial for regenerative outcomes. This economy focuses on preserving and enhancing mauri, ensuring the ecosystem thrives and provides for future generations. The goals is for succession planning now so that future mokopuna are enabled into current realities.

20 Strategic Directives

This section aims to provide some strategic direction to the continued development and implementation of a Te Ao Tūroa economy in Aotearoa. As the country looks to transition into the future, some fundamental directives speak to the things that a regenerative ecology needs to support a thriving economy. Although, these concepts are still being explored, further strategic directives are provided that speak to the structures and research required to continue to grow Aotearoa's ability to explore and innovate within the guiding concepts of the Te Ao Tūroa framework.

The hope from implementing these strategic directives is that a Te Ao Tūroa economy can create purpose-built strategic approaches that are:

- ecologically, socially and culturally responsive,
- support a regenerative Te Ao Tūroa economy,
- respect and value Te Ao Māori perspectives and approaches.

The goal of such approaches is to ensure intergenerational success and resilience.

Wao-Atua

Integrating Te Ao Māori understanding of ecosystems and Atua domains

Directive: Incorporate a Te Ao Māori understanding of ecosystems and atua (deities) domains. This action is vital for a Te Ao Tūroa Economy to work within a Te Ao Māori and Te Tiriti Partnership context, and ensures the correct execution of Māori disciplines such as Kaitiakitanga.

Example: Develop ecosystem management plans that recognise and respect the different atua domains and their unique manifestations, incorporating Māori knowledge of ecosystem services and products.

"Introducing this concept of wao atua to our discussion and looking at wao atua as source points. They are energy source points of different manifestations of atua domains – they manifest those unique points – Kiwa, Tangaroa, Moana Tānoni, Ikatere, Rongomatane, Haumietiketike, Tanemahuta for example. Understanding that with all of these different wao atua we have ecosystem services and products that cascade through the trophic levels, and that enable and give a richness to the diversity but also to the functionality of life." ³

Explanation: This directive ensures that marine economies are deeply rooted in Māori ecological perspectives, promoting a holistic approach to environmental management that respects and integrates indigenous knowledge.

³ Note: Unless stated otherwise, all quotations in this report are from the Puna Körero, 2023

Kawa Ora: Obligation to cultivate before harvesting

Directive: Establish the principle of kawa ora, where a harvesting right is preceded by an obligation to cultivate first. All harvesting practices must have this principle integrated to ensure sustainable use of resources.

Example: Develop community-based projects that focus on cultivating and replenishing natural resources before any harvesting takes place, ensuring that ecosystems are healthy and productive.

"One kauri or kahawai produces another kauri or Kahawai, and that kauri or Kahawai produces another kauri or Kahawai. So you have a multitude of generation within the same Wao Atua. It is their interactions that creates that density of genetic wealth, ecological wealth, products and services, that gives the taiao a richness."

Explanation: This directive ensures that harvesting practices are sustainable and regenerative, prioritising the health and productivity of ecosystems through a cycle of cultivation and replenishment.

Quality of Taonga depends on environmental conditions

Directive: Recognise that the quality of taonga species or products depends directly on the environment in which they are grown. Regenerative environmental practices must be prioritised to ensure high-quality outputs.

Example: Implement regenerative farming and harvesting practices that maintain and improve the quality of the environment, resulting in high-quality taonga and products.

"The quality of the taonga or product depends on the environment it was grown in."

Explanation: This directive underscores the importance of maintaining a healthy environment to produce high-quality products, linking environmental stewardship directly to economic outcomes.

²² Wao-Tūpuna

Species-specific whakapapa is a measure of sustainability

Directive: Use species-specific whakapapa as a definitive measure of sustainability and the resilience of the intergenerational ecosystem. This approach emphasises the importance of maintaining genetic and ecological wealth through generations.

Example: Implement monitoring programmes that track the whakapapa of key species, ensuring their populations are healthy and sustainable over multiple generations. Use Māori methodologies, understandings and baselines, such as maramataka Māori, as the basis for such monitoring.

"The image that you showed spoke to ... te ao ināianei with the... paru awa and the Te Ao Tūroa, and you said that we can't expect the quality of mauri to be the same in both spaces... therefore we can't expect the products and the services to be the same."

Explanation: This directive highlights the importance of understanding and maintaining the whakapapa of species as a measure of ecosystem health and sustainability, ensuring long-term resilience.

Respecting Mātauranga Māori as its own discipline

Directive: Establish Mātauranga Māori as a respected discipline with its key areas, such as te reo (language), whakapapa (genealogy) and tikanga (customs), integrated into case studies and projects. This approach should highlight cultural revitalisation and its impact.

Example: Develop research projects where the methodology and outcomes are framed within the context of Mātauranga Māori, showcasing how traditional knowledge systems can inform modern practices and innovations.

"I guess from some of the case studies in our project ... it was really interesting to see when their unique reo ... came through ... you were able to better understand their worldview, which is so beautiful. It was really cool to see how it shaped their understanding of what ... their fisheries should be like, relative to their social structure, relative to the wellbeing of the people. And how important that whakapapa and that connection is."

Explanation: This directive ensures that Mātauranga Māori is not only acknowledged but actively practised and embedded in research, leading to genuine cultural revitalisation and sustainable development.

Wao-Tāngata

RESEARCH LEADERSHIP AND INNOVATION

Continued research leadership and innovation is a fundamental requirement for us to make gains towards a Te Ao Tūroa economy.

Proper planning of research time, space, taonga and environments

Directive: Ensure that research plans comprehensively consider the time, space and environments needed to conduct meaningful research. This includes planning for contextual factors and creating environments conducive to qualitative research.

Example: Design research proposals that explicitly outline the time needed for preparatory work, community engagement, and fieldwork, ensuring that all aspects of the research context are considered and planned for.

"Partly because of a meeting that I was at on Monday. And this wasn't researchers, it was kind of policy people from various organisations. And the big thing that they were making was the point that they don't have time to do things properly. They don't have time to sit there and think about what they should be doing rather than what they've been taught to do in the past. Because everything is being time compressed at the moment."

Explanation: This directive addresses the need for thorough and thoughtful planning in research, allowing researchers to consider and integrate all relevant contextual factors, leading to more robust and impactful outcomes.

Enhancing research through leadership

Directive: Foster project leadership that enables deeper intellectual engagement with Māori perspectives in research, science and innovation (RS&I) spaces. Address the lack of capable personnel to offer critical intellect on Māori perspectives in science.

Example: Establish mentorship and training programmes for emerging Māori leaders in science, to equip them with the skills and knowledge needed to integrate Māori perspectives into research.

"One of the clear dimensions that the sector has not thought about particularly much — they acknowledge, but they haven't thought about it particularly much — is how do you bring in Māori perspectives, not just give voice to Māori, but how do you begin to internalise the thinking that we've had outlined to us this morning?"

Explanation: This directive focuses on building leadership capacity that is well-versed in both scientific and Māori knowledge systems, promoting a more inclusive and insightful research environment.

24 ORGANISATION AND GOVERNANCE

The strategic directives of a Te Ao Tūroa framework necessitate purpose-built social and cultural structures that support a transition to a Te Ao Tūroa economy and to inform the concept of Blue Economy. This can be achieved by integrating Māori values and tikanga-aligned practices into organisations and governance. This approach helps to strengthen community resilience, preserve cultural identity, and ensure sustainable use of natural resources.

Addressing the clash of Māori values and capitalism

Directive: Acknowledge and address the tensions between Māori values and capitalist approaches. Develop realistic and truthful planning that reconciles these differences without compromising cultural integrity.

Example: Facilitate discussions and workshops that explore the intersections and conflicts between Te Ao Māori and capitalist approaches, seeking pathways that honour both perspectives.

"Our whanau are indoctrinated into a capitalist type of approach. And so, as contestation with a Te Ao Tūroa focused approach and a capitalist approach towards looking after our whenua. So, we have to reconcile that within our own kind of hapū and iwi before we can start engaging with the Crown on a collective action."

Explanation: This directive highlights the importance of navigating the complex relationship between traditional Māori values and modern economic systems, ensuring that cultural practices are not compromised when pursuing economic goals.

Building systemic enablers for Te Ao Tūroa Framework

Directive: Implement systemic enablers that integrate the Te Ao Tūroa framework into planning and large-scale operational work within the sector. This includes engaging with planners and policymakers to ensure shared outcomes.

Example: Develop policy guidelines that incorporate Te Ao Tūroa principles into regional planning documents and marine spatial plans, ensuring these principles are understood and respected at all levels.

"You have to have mechanisms at all levels and stages of the policy or the plan that you're engaging with, that you are intersecting with...capability building that's required in order to get their understanding around acknowledging that it is a valid worldview."

Explanation: This directive ensures that Te Ao Tūroa principles are embedded in policy and planning processes, promoting a holistic and inclusive approach to environmental management and economic development.

TE TIRITI PARTNERSHIP DIRECTIVES FOR TRANSITIONING TO A TE AO TŪROA ECONOMY

The following are Te Tiriti partnership strategic directives from the Puna Kōrero on how Aotearoa can use the Te Ao Tūroa framework to support the transition to a Te Ao Tūroa Economy by ensuring equitable collaboration, honouring Māori sovereignty, and integrating traditional knowledge into sustainable economic practices. This fosters a balanced and inclusive approach to resource management and economic development.

Fostering Te Tiriti partnerships and upskilling iwi and hapū

Directive: Support iwi and hapū in getting upskilled, to implement critical worldview factors effectively. This includes providing resources and capability development to enable meaningful engagement with the Crown.

Example: Create funding and training programmes that empower iwi and hapū to develop their own frameworks and engage in effective partnership with government agencies.

"The other conversation that's required to enable the implementation of these types of frameworks is the resourcing and capability development part for hapū and iwi... leaning more towards our responsibility of our iwi to do that now."

Explanation: This directive emphasises the need for self-reliance and capacity-building within Māori communities, ensuring they are well-prepared to engage in, and benefit from, Te Tiriti partnerships.

Service to whānau, hapū, and iwi scales within local communities

Directive: Ensure that research and development efforts serve the needs and aspirations of whānau, hapū, and iwi scales of community, in ways that contextualise service within their cultural and intellectual frameworks.

Example: Implement projects like the pātaka kōrero (knowledge repository) that directly benefit whānau and hapū by providing accessible information to inform their decision-making and actions.

"We need to make sure there is service to the whānau who [the research] have been developed for and/or the Wao Atua spaces that those whānau are working in... For example, we need the pātaka kōrero up and running, and all the digital information and data they've collected stored. Once that is done and ...it can be viewed and accessed by others in their hapū, to inform decisions and actions, that's a clear line of service from the pātaka kōrero project to Wao Tangata."

Explanation: This directive focuses on making research outputs practically useful and accessible to the communities involved, ensuring that they benefit directly from the knowledge generated.

Conclusion

26

Te Ao Tūroa concepts are an example of some deeply rooted Te Ao Māori values, principles, culture and worldviews of whānau, hapū, iwi, and the communities they serve. This work provided a unique opportunity to delve into the perspective on Te Ao Tūroa concepts and practices exemplified through the Challenge projects.

Te Ao Tūroa highlights the importance of the natural regenerative cycle. It centres the importance of the flow of mauri from the source points of atua domains (e.g. Wao tapu nui a Tāne — the sacred expansive places of the atua Tāne) to the generation of usable resources (e.g. a tōtara tree). It notes that when Wao Atua is flourishing, it is able to provide spillover benefits allowing for human-centred activities. These human-centred activities must in turn, nurture and enhance the return of mauri ora back to these source points.

This report aimed to build on the understanding of the various shapes and forms that would encompass a Te Ao

Tūroa economy. This report sits alongside ideas discussed in the complementary podcasts and within the framework of Te Ao Tūroa. Intergenerational mauri, whakapapa and mana are all at the core of an economy driven by Te Ao Tūroa. A Te Ao Tūroa economy comprises many more components such as - cultural practice, te reo, intergenerational knowledge, regenerative and abundant resources, and multi-generational planning scales.

This report helps us to understand that only by prioritising the natural logic of the environment that generates life, will the aspiration of a thriving Te Ao Tūroa economy be realised.

It is hoped that this report has demonstrated a Te Ao Tūroa approach to economies that emphasises and supports a regenerative, balanced ecosystem between people and environments, while providing for wellbeing and wealth in all its forms.





PUTA KI TE AO TŪROA Te Ao Tūroa Economies

SUSTAINABLE SEAS NATIONAL SCIENCE CHALLENGE

Te Ao Māori Synthesis Programme: Te Ao Tūroa

CITATION:

Tuterangiwhiu, T. R., Ratana, K., Rameka, W., Taiapa, C., Mātāpuna, & Te Puna Kōrero. (2024). Puta ki Te Ao Tūroa: Te Ao Tūroa Economies Guidance. Sustainable Seas National Science Challenge, Te Ao Māori Synthesis Programme. Te Ao Tūroa Report 3. Kopare Solutions.