



Report for Sustainable Seas National Science Challenges Project BE 2: Applying BE Principles (MBIE Contract Number: C01X1901)

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For more information on the blue economy, visit: https://www.sustainableseaschallenge.co.nz/our-research/blue-economy/

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About Sustainable Seas National Science Challenge

Our vision is for Aotearoa New Zealand to have healthy marine ecosystems that provide value for all New Zealanders. We have 60+ research projects that bring together around 250 scientists, social scientists, economists, and experts in mātauranga Māori and policy from across Aotearoa New Zealand. We are one of 11 National Science Challenges, funded by Ministry of Business, Innovation & Employment.

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Acronyms

ANZ Australia New Zealand Bank

ASB Auckland Savings Bank

BNZ Bank of New Zealand

EBM Ecosystem-Based Management

EDS Environmental Defence Society

IUCN International Union for the Conservation of Nature

SDG Sustainable Development Goals

UNEP FI United Nations Environment Programme Finance Initiative

SBE Sustainable Blue Economy

TCFD Taskforce on Climate-related Financial Disclosures

TNFD Taskforce on Nature-related Financial Disclosures

WWF, formerly known as the World Wide Fund for Nature, now goes by WWF, the

conservation organisation globally except in Canada and the US where it is still called

The World Wildlife Fund.

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1. Executive Summary

The Sustainable Seas National Science Challenge (the Challenge) was established to research how to *enhance* the utilisation of marine resources within environmental and biological constraints and is therefore developing blue economy principles to support Aotearoa New Zealand marine businesses to thrive and to improve the health of the marine environment and people's well-being. The Challenge has defined a blue economy for Aotearoa New Zealand as "marine activities that generate economic value and contribute positively to ecological, cultural, and social well-being."

Purpose

The purpose of this report is to document and review the state of blue economy principles internationally to inform the development of Aotearoa New Zealand blue economy principles that reflect our unique context.

Key Findings

Internationally, driven by WWF in civil society, and by the United Nations Environment Programme Finance Initiative (UNEP FI) for the finance sector, many nations are using blue economy principles to shape marine governance and management, guide marine spatial planning, enable multi-stakeholder involvement, and improve marine business performance. Commonwealth developing world countries have the greatest momentum in establishing blue economy principle-based ocean economies, funded by aid agencies and multi-lateral finance. Globally blue economy implementation varies significantly with 33 countries with explicit blue economy agendas (Africa 8, Asia 8, Latin America and the Caribbean 9, Europe 2, Pacific 6), 11 developing policies, plans or strategies with 10 in place, 2 developing legislation with 1 having legislation in place, and 10 with relevant Ministries and/or departments. The Artic has a clear blue economy principle guided agenda that also explicitly integrates indigenous perspectives and the High-Level Panel on the Oceans, Stockholm Resilience Centre and Blue Pacific Ocean programme have adopted blue economy principle-like approaches. Furthermore, blue economy principle implementation enables Sustainable Development Goal (SDG) implementation.

Proposed Aotearoa New Zealand Blue Economy Principles

Taking account of the global review, the following Aotearoa New Zealand blue economy principles are proposed:

Intergenerational	Empowering holistic and long-term governance and management that support the moana
	(the ocean) to provide for economic, social, cultural, and environmental well-being.

Treaty-led Providing for the application of Te Tiriti o Waitangi, the Treaty of Waitangi principles, tikanga

(protocols to do what is right), and mātauranga Māori (Māori knowledge).

Sustainable Adopting approaches to resource management that improve marine ecosystem health.

Prosperous Generating economic success and actively transitioning towards resource use that is

productive, resilient and enhances ocean-dependent livelihoods and coastal communities.

Inclusive Engaging communities to realise benefit from marine resources to align with, deliver upon

and balance multiple values and uses (both commercial and non-commercial).

Accountable Making transparent decisions that reflect the value of and impact upon the ocean's natural,

social, and cultural capital.

Refining and Adopting Aotearoa New Zealand Blue Economy Principles

The second stage of this project will use targeted engagement of Aotearoa New Zealand marine businesses undertaking blue economy activities in shipping, ports, seafood, telecommunications, marine energy generation and engineering, recreation, tourism, and where appropriate their representative organisations to refine the proposed principles. These will then be available to be adopted, implemented, and reported upon by marine businesses.

If widely endorsed and applied, the final Aotearoa New Zealand Blue Economy Principles will enable transformation in the way marine businesses interact with our seas and enhance the resilience of the ocean and people.

2. Introduction

Principles encapsulate our values and guide us in what is right. In te ao Māori, the Māori world view, this is known as Tikanga. The Sustainable Seas National Science Challenge was established to research how to *enhance the utilisation of marine resources within environmental and biological constraints*. A major research theme has been developing ecosystem-based management (EBM) for Aotearoa New Zealand. The Challenge is developing blue economy principles to support Aotearoa New Zealand marine business to transition to a blue economy that will improve the health of the marine environment and people's well-being. The Challenge has defined blue economy for Aotearoa New Zealand as "marine activities that generate economic value and contribute positively to ecological, cultural, and social well-being." The goal for EBM implementation is to create a regenerative, self-perpetuating, upward trajectory in environmental and human health. The Challenge has sought the development of blue economy principles to enable marine business in Aotearoa New Zealand to transition to operate within EBM.

This report documents project $BE\ 2$ – $Applying\ BE\ Principles$ which has reviewed blue economy principles and their implementation internationally. This report proposes draft blue economy principles for Aotearoa New Zealand for consideration and refinement.

Any work to implement standards, principles, ethics, or new ways of working is a continuum of iterative effort, which in business is often embedded in formal management systems. It is important to acknowledge that the nation, it's institutions, organisations, people, and businesses are all on journeys in relation to Te Tiriti o Waitangi, The Treaty of Waitangi, in learning about te ao Māori, in its appropriate integration, and in pursuing sustainability to better care for the environment. Other pressures arising from national and international commitments to improved environmental performance are being brought to bear on business practice and its regulation by investors, markets, and regulators internationally and domestically. The set of core blue economy principles for Aotearoa New Zealand can support these journeys.

Methodology

This research report has been developed through:

- reviewing literature on international blue economy principles and their implementation.
- reviewing literature documenting indigenous approaches in blue economy contexts.
- interviewing leaders¹ with professional roles relevant to the blue economy.
- analysing lessons learnt and summarizing key cautions from the use of blue economy principles internationally.
- proposing draft blue economy principles for Aotearoa New Zealand to be socialized and refined with those in the blue economy.

The Blue Economy

The United Nations² emphasises the importance of the ocean in covering 72% of our planet's surface and constituting more than 95% of the biosphere noting that the oceans "provide a substantial portion of the global population with food and livelihoods and are the means of transport for 80% of global trade". The UN also notes that blue economy approaches better support the desired outcome of "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities and endorse the principles of low carbon, resource efficiency and social inclusion".

A significant contributor to the development of blue economy principles globally, WWF, the conservation organisation, notes "that the "Blue" part of any economy is the part directly dependent on large bodies of water: oceans, seas, and large inland lakes. For smaller island nations, most of their economies are inevitably "Blue" – dependent on fishing, shipping, marine-based tourism, other marine-based economic activity (such as aquaculture), but also, increasingly on the extraction of resources such as oil, gas, or minerals from the sea floor. For countries with coastlines, whose land-based resources are increasingly seen as becoming scarce or depleted,

¹ James Palmer, Hawkes Bay Regional Council CEO, Volker Kuntzsch, Cawrthon Institute CEO, My Therese Blank, Maersk Head of Oceania Export Market Regional Ocean Management.

² United Nations (2012). <u>Blue Economy Concept Paper</u>.

the resources located in or under the water look increasingly attractive to governments and commercial interests around the world. That is why nearly every country with a coastline now has some form of blue economy or Blue Growth policy, program, or declaration³."

At over 4 million square kilometres Aotearoa New Zealand has responsibility for a significant marine area. Being an isolated, distant, island nation, the marine-based industries of shipping and telecommunications are essential to connect Aotearoa New Zealand to the world. Challenge research to date has identified opportunities to help Aotearoa New Zealand transition to a blue economy by encouraging activities that are sustainable, resilient to climate change, minimise waste, and have positive impacts on society and culture. Challenge research focuses on helping to grow these activities and develop a blue economy made up of activities that:

- 1. Arise from ecologically and socially responsible investment.
- 2. Use ecologically and culturally appropriate technologies to create economic values from marine activities.
- 3. Reduce ecological risks and restore harms.
- 4. Respond to, and encourage, ecologically and culturally responsible consumer behaviour.
- 5. Contribute directly to ecological, cultural, and social well-being. Enable Te Tiriti o Waitangi, the Treaty of Waitangi and understanding of te ao Māori perspectives on the blue economy given the importance and interdependence of the moana to iwi/Māori.

Ecosystem-based Management and the Blue Economy

Aotearoa New Zealand has complex legal and regulatory marine management with more than 25 relevant legislative acts. State of the Environment reporting is documenting the decline of marine environmental and ecological health⁴. In response ecosystem-based management (EBM) has been proposed as an approach to address the complex challenges of marine management in a climate changing world. EBM enables a more holistic and inclusive approach that aims to reconcile uses, halt further degradation and where possible enable marine ecosystems to recover. Around the world EBM is the management framework underpinning a thriving, sustainable blue economy.

In Aotearoa New Zealand, the Sustainable Seas National Science Challenge has adopted EBM as a platform for its research programme. It has developed a set of principles for applying EBM in the Aotearoa New Zealand context which emphasise both universal environmental principles, Te Ao Māori principles and mātauranga Māori-based management approaches (Figure 1).

EBM can be seen as pivotal for creating and steering a blue economy. In the simplest of terms, if environmental management is a fundamental part of economy in resource economies, then EBM can be seen as the most appropriate form of resource management for a blue economy for all the reasons that Hewitt et al. (2018) argue make it the most appropriate form of environmental management for marine spaces. Furthermore, if we understand economy holistically as the processes and practices by which we steward resources to support livelihoods and values, then the holistic, inclusive, and place-based emphases of EBM are mirrored in a blue economy approach to resource use.

³ WWF Arctic Blue Economy Report 2018

⁴ Our Marine Environment. Ministry for the Environment and Stats NZ. 2022



Figure 1. Sustainable Seas Science Challenge EBM Framework

3. International Review of Blue Economy Principles

Blue economy principles have largely arisen from civil society (e.g. WWF) and in finance (e.g. UNEP FI). The UNEP FI is a partnership of UN agencies and partners globally including Climate Action, Global Canopy and the Principles for Responsible Investment. It operates across banking, insurance, investment, climate change, nature, social and human rights, and pollution, as well as the circular economy, globally and regionally. The UNEP FI Blue Economy Principles are being used by nations to shape governance, guide marine spatial planning and marine business and industry development, and to improve marine business and industry performance. The greatest momentum for this is in Commonwealth, developing-world countries. Tables 1 and 2. overleaf review and summarise the major blue economy principles globally as well as several related principle sets that business, investors, and finance are increasingly taking account of.

Table. 1. Blue Economy Principles				
Principles	Scope	Process of Principle Development	Implementation (stage/phase/status)	
WWF Sustainable Blue Economy Principles (2015)	Developed as guiding principles, these principles offer a definition of blue economy (BE), guidance on governance (suggests processes and governance), and a set of necessary actions (measurement, planning, communication, standards, cooperation etc). WWF later co-developed the Sustainable Blue Economy Finance Principles with UNEP FI (below), the European Commission, the Prince of Wales International Sustainability Unit, and the European Investment Bank.	The principles were developed by collaborators in a series of workshops.	These principles are positioned as guidance for voluntary uptake. WWF co-developed the Sustainable Blue Economy Finance principles with other collaborators to promote Principles uptake of (see below). An example of the application of these principles can be seen in the All Hands on Deck: setting a course towards a sustainable blue economy (2015) report which invited actors in the Baltic Sea region to 'raise the bar on collective actions'. ⁵	
UNEP FI Sustainable Blue Economy Finance Principles (2018)	These 14 principles are a foundation for investment in the ocean economy allowing the financial industry to mainstream sustainability of ocean-based sectors. ⁶	Lead organisations (the European Commission, WWF, and World Resources Institute) gathered input from a range of stakeholders so the principles reflected their knowledge and needs. Gap analysis on existing sustainable finance initiatives was undertaken. ⁷	Over 70 institutions have joined the Sustainable Blue Economy Finance Initiative as members or signatories to the principles, representing over USD 11 trillion in total assets. UNEP FI is the host organisation, and they track and publish the progress reports of signatories.	
Stewardship Code for Aotearoa New Zealand (2022)	Although not marine focussed, these new principles provide an investor-led framework which aims to create and preserve intergenerational value, directing capital to create a resilient economy. The development for the Code was a commitment of the Sustainable Finance Forum – Roadmap for Action (The Aotearoa Circle).	The Code was developed through a consultative process with legal, industry and academic representatives. The process took 1.5 years.	The code has several founding signatories but has yet to be widely adopted. The code is expected to be adopted on a 'comply or explain' basis, i.e., all requirements of the code are expected to be met, and if they cannot be met, the signatory is expected to explain why not. The Code will be managed (hosted) by the Centre for Sustainable Finance. There are members of this (ANZ Bank) who are bankers to some 60% of the seafood sector, and that the Aotearoa Circle has a Seafood Sector Climate Change Adaptation Taskforce, which makes consideration of this code relevant to the emerging Aotearoa New Zealand Blue Economy.	
High-Quality Blue Carbon Principles and Guidance	These principles were developed to align stakeholders in a shared vision for high-quality blue carbon credits. It outlines five principles	The principles were developed through a global consultative process, informed by existing knowledge and best practice to	Launched in November 2022 implementation is still early. However, key Blue Carbon sector players support the framework include the IUCN, Plan Vivo, Silvestrum Climate Associates, the Blue Carbon	

Principles	Scope	Process of Principle Development	Implementation (stage/phase/status)	
(2022)	with guidance, and seven considerations in blue carbon ecosystems. ¹¹	provide a shared vision for achieving high-quality blue carbon projects and credits. 12 The work was sponsored by the World Economic Forum's Friends of Ocean Action, Salesforce, Ocean Risk and Resilience Action Alliance, Conservation International, and The Nature Conservancy with support from Meridian Institute.	Initiative, and others. The Conservation International Aotearoa New Zealand and Pacific Hinemoana's Halo ¹³ initiative provides a close to home opportunity to track implementation.	
Whai rawa, Whai mana, Whai oranga Māori Marine Economy Values & Principles	These principles and values reflect the Māori marine economy from a te ao Māori perspective. Whai rawa, whai mana, whai oranga is the holistic indigenous view of the blue economy. 14	The principles and values are reflective of te ao Māori and proposed by Sustainable Seas Challenge Māori researchers to inform indigenising the blue economy. Iwi and stakeholders were involved and consulted.	Elements of these values & principles are implemented by a range of Māori organisations in Aotearoa. Implementation is not tracked explicitly.	

⁵ https://wwwwfbalticorg.cdn.triggerfish.cloud/uploads/2019/10/15 6802 all hands on deck Ir 151008.pdf

⁶ https://www.unepfi.org/blue-finance/the-principles/

⁷ https://www.wwf.org.uk/sites/default/files/2018-03/Introducing%20the%20Sustainable%20Blue%20Economy%20Finance%20Principles 2018%20Brochure.pdf

⁸ https://www.unepfi.org/blue-finance/our-members/

⁹ https://www.sustainablefinance.nz/changing-norms-standards-projects/stewardship-code-for-aotearoa

¹⁰ https://stewardshipcode.nz/signatories

¹¹ https://oceanriskalliance.org/wp-content/uploads/High-Quality-Blue-Carbon-PG FINAL 11.9.2022.pdf

¹² https://oceanriskalliance.org/news/high-quality-blue-carbon-principles-and-guidance-seeks-to-drive-sustainability-and-equity-in-the-blue-carbon-market/

¹³ https://www.conservation.org/aotearoa/hinemoana-halo

¹⁴ https://www.sustainableseaschallenge.co.nz/assets/dms/Tools-resources/Maori-marine-economy-lts-definition-principles-and-structure/Maori-Marine-Economy-Definition-Principles-Structure-Summary-Booklet.pdf

Table 2: Summary of Blue Economy and Related Principles

UNEP FI Sustainable Blue Economy Finance Principles	WWF Principles for a Sustainable Blue Economy	Stewardship Code for Aotearoa New Zealand	High-quality Blue Carbon principles and Guidance	Whai rawa, whai manae, whai orange Māori marine economy
These principles are a guiding framework for banks, insurers, and investors to finance a sustainable blue economy. The principles are:	These principles sought to define what a blue economy is and provide a framework for governance, and necessary actions to create a sustainable blue economy.	The code provides a principles-based framework for achieving the 3 interconnected goals of effective stewardship for investors.	These principles provide guideposts for ensuring high-quality blue carbon projects, and for credits that optimize outcomes for people, nature, and climate.	These values and principles are reflective of te ao Māori and are applied beyond the blue economy. It is a holistic indigenous view of the blue economy for Aotearoa.
 Protective Compliant Risk-aware Systematic Inclusive Cooperative Transparent Purposeful Impactful Precautionary Diversified Solution-driven Partnering Science-led 	 a marine-based economy that provides benefits, restores diversity, and is based on clean technology. governed by public/private processes that are inclusive, well-informed, and accountable. underpinned by economy public/private actors measuring, assessing, and planning it. 	 Be committed. Establish and maintain policies. Incorporate material ESG matters. Be engaged. Vote responsibly. Manage conflicts of interes.t Collaborate and advocate for change. Measure and report Educate and improve 	 Safeguard nature. Empower people. Employ the best information, interventions, and carbon accounting practices. Operate locally and contextually. Mobilize high-integrity capital. 	 Mātauranga Māori – Māori knowledge Tikanga Māori - Māori culture Kaitiakitanga – guardianship Whanaungatanga – relationships Tapu & noa – sacred & profane Whenua & wai – land & water Mana moana – authority from the sea Mana & utu – Authority & reciprocity

International Blue Economy Principle Implementation

In addition to the principles reviewed in Tables 1. and 2. the High Level Panel on the Oceans, Stockholm Resilience Centre and Office of the Pacific Ocean Commissioner have adopted blue economy principle-like activity themes and reflections. Blue economy principles can also enable delivery against Sustainable Development Goals 7, 8, 12, 13, 14, 15 & 17 as shown below by their relationship to the Commonwealth Blue Charter (Voyer et al 2022)¹⁵ (Figure 2).

15: life on land*
G 15.9 references linking decision making to ecosystem and biodiversity value which is the closest reference to natural capital in the SDGs
8: decent work and economic growth
7: affordable and clean energy
12: responsible consumption and production
13: climate action
17.6: global partnerships for technology transfer science and innovation
14.a: increase knowledge, research capacity and technology transfer
14: conserve and sustainably use of the ocean, sea, and marine resources for sustainable development

Figure 2. Commonwealth Blue Charter blue economy Characteristics in relation to the Sustainable Development Goals

Momentum for using blue economy approaches is strong in the Western Pacific (funded by multiple government aid agencies) and in the Caribbean (World Bank supported). Implementation varies significantly with 33 countries with blue economy agendas (Africa 8, Asia 8, Latin America and the Caribbean 9, Europe 2, Pacific 6), 11 developing policies, plans or strategies with 10 in place, 2 developing legislation with 1 having legislation in place, and 10 with relevant Ministries and/or departments. The Artic has a clear Blue Economy Principle guided agenda which also integrates indigenous perspectives.

Closer to home, the Office of the Pacific Ocean Commissioner¹⁶ comments: The Blue Pacific Ocean programme notes the Pacific Ocean is an endowment fund inherited from ancestors, to be passed on to future generations and that as its custodians, we must care for it. To continue to benefit from it, we need to invest in it and nurture

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¹⁵ Institutionalizing the Blue Economy: an examination of variations and consistencies among Commonwealth countries Michelle Voyer, Dominique Benzaken and Constance Rambourg (2022)

¹⁶ https://opocbluepacific.org/publications/#blue-pacific-ocean-report

it through wise and sustainable management. Like an endowment fund, a part of it ought to be left aside to grow and reap benefits year after year, decade after decade. Such measured management will enable us to address the most pressing challenges we face, starting with finding the right equilibrium between conservation and development (or sustainable management and use).

Pacific leaders have a guiding vision "for a region of peace, harmony, security, social inclusion, and prosperity. A region where Pacific people can lead free, healthy, and productive lives". However, a siloed and sectoral approach will not unlock sustainable growth. A holistic and inclusive approach will; based on transparency, best available scientific information, relevant traditional knowledge of Indigenous Peoples and local communities, ecosystem approach, and rooted in inter-generational equity and precaution.

Furthermore WWF's 2022 Living Planet Report argues that rights-based approaches and indigenous knowledge and leadership can empower us all and must be at the heart of shaping a better future for people and planet through recognizing and valuing multiple ways of knowing, being, and acting to help us heal our broken relationship with nature, and each other¹⁷.

This was reinforced at the June 2022 UN Ocean Conference where the World Economic Forum noted¹⁸ "the sustainable blue economy offers lucrative returns on investment and a promising future while centering indigenous and local communities."

Reviewing global blue economy examples, the prevailing view is that blue economy approaches promote social and environmental justice, including caring for the planet and incorporating indigenous rights. This aligns with and underscores the importance of Te Tiriti o Waitangi, The Treaty of Waitangi as well as the unique context of te ao Māori, the Māori world view as a foundation for blue economy in Aotearoa New Zealand¹⁹.

Table 3 below has been developed through reviewing the implementation of blue economy principles internationally and documents identified opportunities and risks to inform the development of blue economy principles for Aotearoa New Zealand.

Table 3. Lessons from global initiatives for how to develop blue economy principles			
Opportunities	Risks		
They can create a common playing field for all.	Care is needed with blue economy and blue growth agenda to not try to pack as much activity into every kilometre of marine area as possible.		
They can enable resetting of our relationship with the marine realm.	Marine governance reform is essential to enable a thriving, sustainable blue economy.		
They can be a foundation for transparency and disclosure.	Climate resilience must be a foundation for management goals.		
When adopted they can shape finance, investment, lending and underwriting in marine industries.	Requires careful marine spatial planning.		
They can directly enable SDG 14 implementation.	Attention is needed in designing new governance and management to try to reconcile any conflicts.		
They can shape the direct economic activity that occurs in the marine area.	Incorporating indigenous perspectives must be done by indigenous peoples.		
They can be efficiently advanced through establishing a dedicated agency to advance blue economy.			
They can harmonise objectives across the full range of marine stakeholders.			

¹⁷ https://medium.com/wwftogetherpossible/recognizing-and-valuing-multiple-ways-of-knowing-being-and-acting-can-help-us-heal-our-broken-ad2287c360b0

¹⁸ The blue economy is a historic opportunity. Here's how we seize it. Aug 5th 2022. World Economic Forum.

 $[\]frac{19}{\text{https://www.sustainableseaschallenge.co.nz/assets/dms/Tools-resources/Maori-marine-economy-Its-definition-principles-and-structure/Maori-Marine-Economy-Definition-Principles-Structure-Summary-Booklet.pdf}$

Global Blue Economy Implementation Summary Insights

Process

Reviewing blue economy principle implementation shows the common use and importance of multi-stakeholder processes in their development, i.e. taking every opportunity to socialise and build momentum, buy-in and ownership from affected sectors, and other stakeholders such as coastal communities. These were largely initially civil society driven with momentum growing through multi-lateral and multi-stakeholder processes including in international finance.

Reflecting Indigenous Perspectives

Indigenising the blue economy has become an explicit agenda in several countries internationally and there is great potential to shape this further in Aotearoa New Zealand. Section 4. The Aotearoa New Zealand Context below reviews the Challenge's research into Māori blue economy perspectives. Blue economy principles can also support harmonising objectives across the full range of interests and stakeholders, civil society, and business. Multi-lateral initiatives to design and implement ecosystem-based approaches, and secure marine protected areas have sought to explicitly engage with indigenous communities (e.g., in the Arctic regarding EBM and in the Fiji Locally Managed Marine Areas).

Models for Adoption

Within the research scope it has not been possible to delve into any one country's blue economy principle journey from start to present. This journey often begins with a nation developing an ocean policy, plan, or strategy, followed by legislation, and has included establishing dedicated ministries or departments responsible for ocean related programmes of work. For example, the Seychelles has established a Ministry of Fisheries and blue economy²⁰, the Union for the Mediterranean has a collaboration to implement a blue economy²¹ and the UK has both a domestic blue economy programme and a £500 million Blue Planet Fund for developing countries, including British International Overseas Territories²².

Financing

The World Bank PROBLUE Multi-Party Trust Fund and Commonwealth Blue Charter are collaborative international programmes financing blue economy development and which are underpinned by the UNEP FI Sustainable Blue Economy (UNEP FI SBE) programme. These guide those financing marine industries to rebuild ocean prosperity and regenerate ocean health. One of the approaches UNEP FI uses is to track, document and advise upon specific activities to *not* invest in. These are called exclusions and the material risks of specific activities in the avoid category are documented in two UNEP reports²³. Not investing in excluded activities lowers the risk to financial institutions making financing decisions. The UNEP FI SBE reasoning behind each recommended exclusion guides blue economy businesses in how to develop for the future so that they align with a blue economy and are therefore investible.

This financial context is important as business takes greater responsibility for environmental matters. This was reinforced in the recent Kunming – Montreal Agreement on the Global Biodiversity Framework with the Institutional Investors Group on Climate Change²⁴ noting:

The new Global Biodiversity Framework known as the Kunming-Montreal Agreement (December 2022) provides much-needed guidance, and together with the Taskforce for Nature-related Financial Disclosures it will form the basis of investor action on nature.

The biggest points for investor consideration include:

- Nature disclosures for businesses
- Conserve 30% of earth by the end of the decade
- Reforming harmful subsidies

²⁰ http://www.mofbe.gov.sc/blue-economy/

²¹ https://ufmsecretariat.org/news-ministerial-meeting-blue-economy-2021/

²² https://www.gov.uk/government/publications/blue-planet-fund/blue-planet-fund

²³ <u>Turning the Tide: How to Finance a Sustainable Ocean Recovery</u> and <u>Diving Deep: Finance, Ocean Pollution and Coastal</u> Resilience.

https://www.iigcc.org/news/leaders-sign-landmark-deal-to-stop-global-biodiversity-loss-by-2030/

4. The Aotearoa New Zealand Context

Te ao Māori

Te ao Māori, the Māori worldview, is a foundational world view for Aotearoa New Zealand. Respect for this is enshrined in Te Tiriti o Waitangi, The Treaty of Waitangi. Te ao Māori underpins the essential importance of Māori leading Māori, i.e., tino rangatiratanga (self-determination) which is essential for Māori survival and wellbeing. Furthermore, the challenges to the planet and people created from environmentally damaging economic development, climate change and biodiversity loss require seeking alternatives and modifications in unusual places, one of them being in indigenous paradigms. The Treaty provides a constitutional anchor to look back and forward to te ao Māori as a framework for understanding the world, however it is largely presently treated as a compliance-driven imperative of obligations rather than as something that is followed as morally persuasive i.e., doing so is the right thing to do. (Jason Mika *pers. comm.*)

Māori blue economy perspecties have been explored in the Sustainable Seas National Science Challenge research Whai Rawa, Whai Mana, Whai Oranga (Mika et al, 2022) and involved iwi and stakeholders. Whai rawa, whai mana, whai oranga is the holistic indigenous view of the blue economy. ²⁵ These principles and values reflect the Māori marine economy from a te ao Māori perspective. Elements of these values and principles are implemented by a range of Māori organisations in the Aotearoa New Zealand blue economy including Moana New Zealand, Ngāi Tahu Seafoods, Open Ocean — Whakatōhea Mussels Ōpōtiki Ltd, and Kono.

Business

Globally blue economy business is big business with many company-level, sectoral and multi-stakeholder initiatives underway. Increasingly the impacts of environmental change are becoming operational risks to business. The Stockholm Resilience Institute Ocean 100 study (Virdin et al. 2021, *Science Advances*)²⁶ has catalysed the largest companies dependent upon the blue economy to create the Ocean 100 Dialogues in partnership with the Friends of Ocean Action and World Economic Forum, It focusses on Climate, Biodiversity and Equity (Figure 3.).

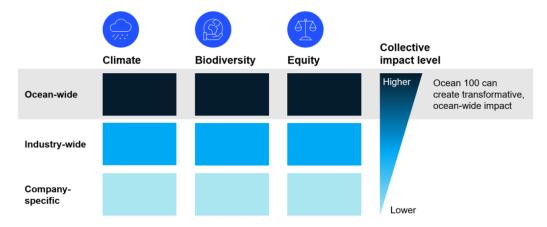


Figure 3. The Ocean 100 Dialogues Framework

The impacts of climate change are increasingly being felt by business including in the finance and insurance sectors. The Financial Stability Board created the Taskforce on Climate-related Financial Disclosures (TCFD) in 2015 to set the stage for embedding business' climate change action, responsibility, and accountability.

UNEP FI is a founding member of the newer, related Taskforce on Nature-related Financial Disclosures (TNFD). In December 2022, an estimated 2000 representatives from business and finance strongly supported doing similarly for nature including over 300 major companies sending a letter to governments calling on them to make nature disclosure mandatory by 2030 at the Convention on Biological Diversity negotiations in Montreal. The final Kunming-Montreal Global Biodiversity Framework negotiated states that governments must use legislation

²⁵ https://www.sustainableseaschallenge.co.nz/assets/dms/Tools-resources/Maori-marine-economy-Its-definition-principles-and-structure/Maori-Marine-Economy-Definition-Principles-Structure-Summary-Booklet.pdf

²⁶ https://www.science.org/doi/10.1126/sciadv.abc8041

or policy to enable the private sector to regularly monitor, assess and disclose risks, dependencies and impacts on nature, "including with requirements" for large companies and financial institutions across their operations, supply chains and portfolios. ²⁷

In Aotearoa New Zealand ASB, ANZ, BNZ banks are members of the UNEP FI and ANZ has published Environment Social Governance reports since 2020²⁸. Aotearoa New Zealand has made TCFD reporting mandatory under the Carbon Zero Act (2021) and which is described in the accompanying report *Sustainability Disclosures in the Blue Economy*²⁹. In relation to the blue economy, ANZ are bankers to ~60% of the seafood sector in Aotearoa New Zealand and BNZ and Westpac are bankers to Moana New Zealand, with all also publishing sustainability reports. Blue economy principles are therefore an important foundation underpinning responsible business strategy and operations as well as for transparency against which their activities can be reviewed. Developing blue economy principles also supports and builds on current marine sector sustainability initiatives nationally including:

- AgriSea³⁰ and Greenwave³¹ incorporating environmental and community-oriented goals and principles into their business practices and seeking to deliver upon the national Seaweed Sector Framework.³²
- sector-based initiatives such as Seafood NZ's Promises campaign and Aquaculture New Zealand's A+ audit scheme.
- the Aotearoa Circle Seafood Sector Climate Change Adaptation Strategy³³.
- the Moana New Zealand³⁴ kaitiakitanga (stewardship) journey and 2040 Carbon Neutral commitment.
- Sealord, owned 50% by Moana New Zealand, sustainability journey³⁵ and via Nissui 50% ownership, working with SeaBOS³⁶, the group of globally leading sustainable seafood companies.
- Sanford's sustainability agenda and annual reporting³⁷.
- Maersk Oceania supporting re-establishing coastal shipping in Aotearoa New Zealand and has a strong eco-shipping programme.
- BlueFloat Energy and Elemental Group are exploring offshore wind energy farm developments off
 Taranaki and Waikato.

Policy

Aotearoa New Zealand has had several ocean policy processes since the early 2000s seeking to modernise the complex legal, regulatory and policy marine management context. Challenge research is understanding the obligations, implications, and opportunities of both Te Tiriti o Waitangi, the Treaty of Waitangi and te ao Māori in shaping future fit ocean governance for Aotearoa New Zealand. (Joseph, R. (2022))³⁸ as well as indigenising the blue economy³⁹.

The Government recognised the need to reform ocean governance establishing a Ministry of Oceans and Fisheries with an Ocean Vision (June 2021) of:

²⁷ https://impact.economist.com/sustainability/circular-economies/cop15-dispatch-what-does-the-global-deal-for-nature-mean-for-business

²⁸ https://media.anz.com/posts/2022/11/anz-releases-2022-annual-report--annual-review--and-esg-suppleme

²⁹ Sustainability Disclosures in the Blue Economy. Peacocke, L., Stancu, C., Diplock, J., & Short, K. (2023) Sustainable Seas National Science Challenge.

³⁰ https://www.sustainableseaschallenge.co.nz/tools-and-resources/agrisea-a-blue-economy-success-story/

³¹ https://envirostrat.co.nz/category/coastal-marine-blue-economy/

³² https://www.sustainableseaschallenge.co.nz/tools-and-resources/seaweed-sector-framework/

³³ https://www.theaotearoacircle.nz/reports-resources/seafood-sector-adaptation-strategy

³⁴ www.ar.moana.co.nz

³⁵ https://www.sealord.com/sustainability/

³⁶ https://seabos.org/

³⁷ https://www.sanford.co.nz/investors/reports-1/company-reports/2021/annual-report-2021/

³⁷ https://www.sustainableseaschallenge.co.nz/our-research/indigenising-the-blue-economy/

Ensuring the long-term health and resilience of ocean and coastal ecosystems, including the role of fisheries.

This is serviced by an Oceans Secretariat and the Natural Resource Sector⁴⁰ Marine Hub. These are being informed by major government and non-government policy and science research that have many common findings including:

- The regular *Our Marine Environment* reporting by the Ministry for the Environment and Stats New Zealand (2022)⁴¹.
- The Future of Commercial Fisheries by the Prime Minister's Chief Science Advisor (2021) which includes significant strategic ocean action plan recommendations⁴².
- The Environmental Defence Society (EDS) Breaking Wave Report on Oceans Reform in New Zealand⁴³.

 This was Government funded and built on their Voices from the Sea (2018) fisheries report⁴⁴.
- The 10-year Sustainable Seas Science Challenge, along with the other related aspects of the other relevant science challenges, Land and Water, Deep South, Resilience to Nature's Challenges and Science and Technology.
- The Parliamentary Commissioner for the Environment's Managing our Estuaries report⁴⁵ (2020).

Policy initiatives that seek to shape resource use, ocean futures, and the shape of ocean governance for Aotearoa are subject to the obligations, implications, and opportunities of both Te Tiriti o Waitangi, the Treaty of Waitangi and te ao Māori. (Joseph, R. (2022))⁴⁶ lwi/Māori recognise the importance of urgently establishing an lwi Leaders Māori Ocean Sector Working Group to enable this. (*Harry Burkhardt and Ta Mark Solomon pers. comm.*).

Preliminary interviews conducted for this project with marine leaders concur with the need to lay modern foundations for ocean governance reform and that the time is right to develop blue economy principles for Aotearoa New Zealand. Respondents highlighted the importance of marine environmental monitoring noting that this tends to be more expensive in the marine environment and hence the need to create new data collection and information sharing collaborations.

It is also important to recognize that the marine area is of interest to all New Zealanders directly and indirectly, and not only of value to economic sectors. Figure 4. is an initial characterization of stakeholders with interests in Aotearoa New Zealand having blue economy principles. Amongst other opportunities, data collection can occur and be integrated across most if not all of these including through citizen science and mātauranga Māori.

⁴⁰ – Ministry for the Environment – Ministry for Primary Industries – Ministry of Business, Innovation and Employment – Land Information New Zealand – Department of Conservation – Te Puni Kōkiri – Department of Internal Affairs – Ministry of Transport

⁴¹ https://environment.govt.nz/publications/our-marine-environment-2022/

⁴² https://www.pmcsa.ac.nz/topics/fish/

⁴³ https://eds.org.nz/wp-content/uploads/2022/06/1.-FINAL-REPORT.pdf

https://eds.org.nz/wp-content/uploads/2018/05/Voices-from-the-Sea LO-RES.pdf

⁴⁵ https://pce.parliament.nz/publications/managing-our-estuaries

⁴⁶ Joseph, R. (2022). <u>Treaty-based governance & EBM over the marine estate in Aotearoa.</u>



Figure 4. Blue Economy Stakeholders

5. Draft Blue Economy Principles for Aotearoa New Zealand

Analysing international blue economy principles, their implementation and the unique Aotearoa New Zealand Te Tiriti o Waitangi, The Treaty of Waitangi context, the following draft blue economy principles are proposed for Aotearoa New Zealand for socialisation, testing and refinement.

Intergenerational Empowering holistic and long-term governance and management that support the moana (the ocean) to provide for economic, social, cultural, and environmental well-being.

Treaty-led Providing for the application of Te Tiriti o Waitangi, the Treaty of Waitangi principles, tikanga

(protocols to do what is right), and mātauranga Māori (Māori knowledge).

Sustainable Adopting approaches to resource management that improve marine ecosystem health.

Prosperous Generating economic success and actively transitioning towards resource use that is productive, resilient and enhances ocean-dependent livelihoods and coastal communities.

Inclusive Engaging communities to realise benefit from marine resources to align with, deliver upon

and balance multiple values and uses (both commercial and non-commercial).

Accountable Making transparent decisions that reflect the value of and impact upon the ocean's natural,

social, and cultural capital.

6. Where to From Here

Blue economy principles are designed to guide behaviour of all those engaged in decision making in and around our ocean. Specifically, they will guide businesses operating in the marine economy to carry out their activities in ways that incorporate Aotearoa New Zealand's ambition to better care for the ocean so the ocean can continue to care for us. This is akin to the Māori value of utu, reciprocity.

The uptake of blue economy principles has gained momentum in Commonwealth nations, in Arctic regional cooperation arrangements, and in developing countries where their implementation is often tightly tied to community rights and development initiatives and supported by international funding. They have also been developed internationally to guide investment in marine business.

The recommendations of the WWF Arctic Blue Economy Report, which prioritises the challenge of integrating indigenous world views into management, gives us some guidance for proceeding in developing blue economy principles for Aotearoa New Zealand. It calls for an approach that encourages all stakeholders to take responsibility for:

improved decision making; addressing climate risks; preserving biodiversity; adopting inclusive and knowledge-based approaches (including indigenous knowledge) to decision making; emphasising indigenous rights and interests; prioritising the utilisation of renewable resources; diversifying and developing rural economies and adopting ecosystem-based management in their decision making.

Most importantly, a blue economy principles-based journey must support people to better care for the ocean.