Framing and building a Blue Economy in Aotearoa New Zealand

Nicolas Lewis University of Auckland Sustainable Seas National Science Challenge

# Explore the latest marine guidance and research.

Access to over 100 research summaries from the Sustainable Seas National Science Challenge.

Find research >

₩ TOHORĀ

https://tohora.org.nz/



# Blue economy: A global moment

Humanity's future depends on the oceans - vast opportunities but oceans need protection/restoration

Utilisation MUST be built on ecologically and socially sustainable foundations

Challenge is to balance resource use with safeguarding the delicate ecological and community relationships from which ocean resources derive their values





## Meanwhile, in New Zealand



Marine economy on policy agenda: degradation, growth, competing interests

Sustainable Seas National Science Challenge (10yrs, \$80m, 100 projects)

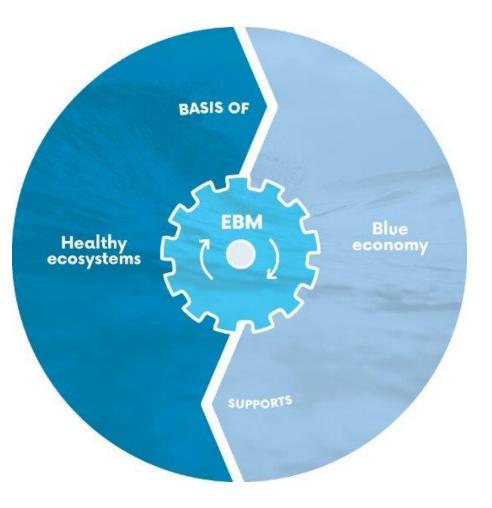
- 'Enhance the utilisation of marine resources within environmental and biological limits'
- mandate to be disruptive
- dominance of ecologists

Māori increasingly prominent force – economically, politically ... and for intergenerational/holistic thinking, centring of ocean health





# The blue economy research theme



- A blue economy is an aspiration
- Growth cannot be sole/primary objective
- Need to transition towards resource uses that will safeguard oceans and support 'their' communities intergenerationally
- We have to do economy better EBM as starting point
- Transitioning will not happen by itself

"marine activities that generate economic value and contribute positively to social, cultural and ecological well-being"



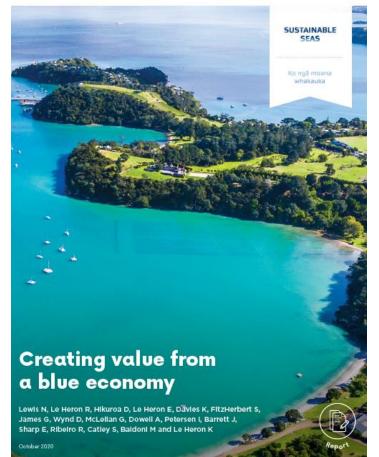
# Framing work

Starting points – from marine to blue economy:

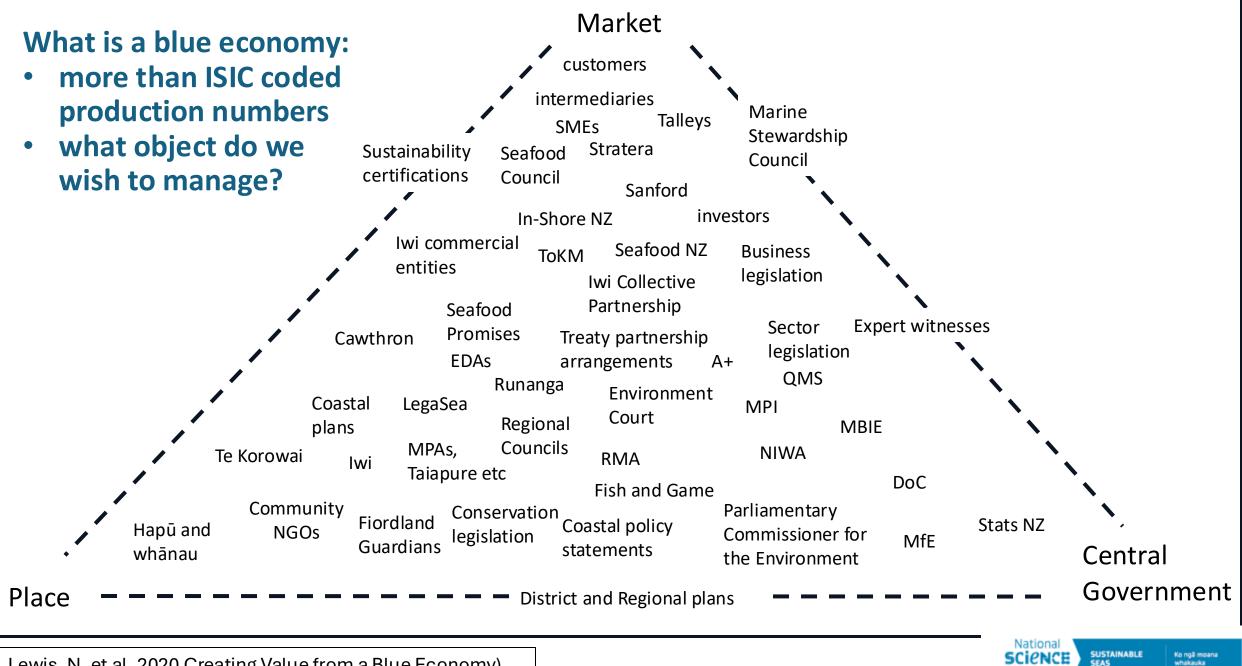
- Economy is practice/process of stewarding and mobilising resources to generate livelihoods
- Need to think seriously about objects of management
- Make a blue economy imaginable, visible and investable
- Multiple examples of doing things differently in the midst of a largely commodity economy

Aim: be aspirational, reframe the development debate, create/socialise knowledge /artefacts to advance transitions





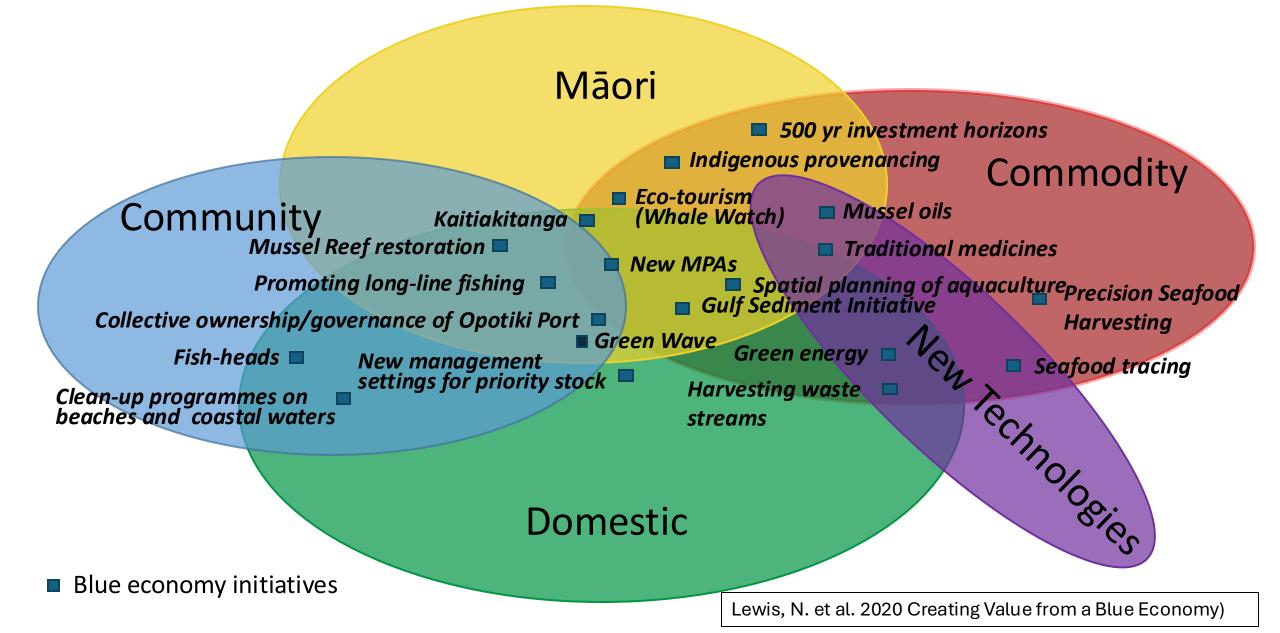




Challenges

Lewis, N. et al. 2020 Creating Value from a Blue Economy)

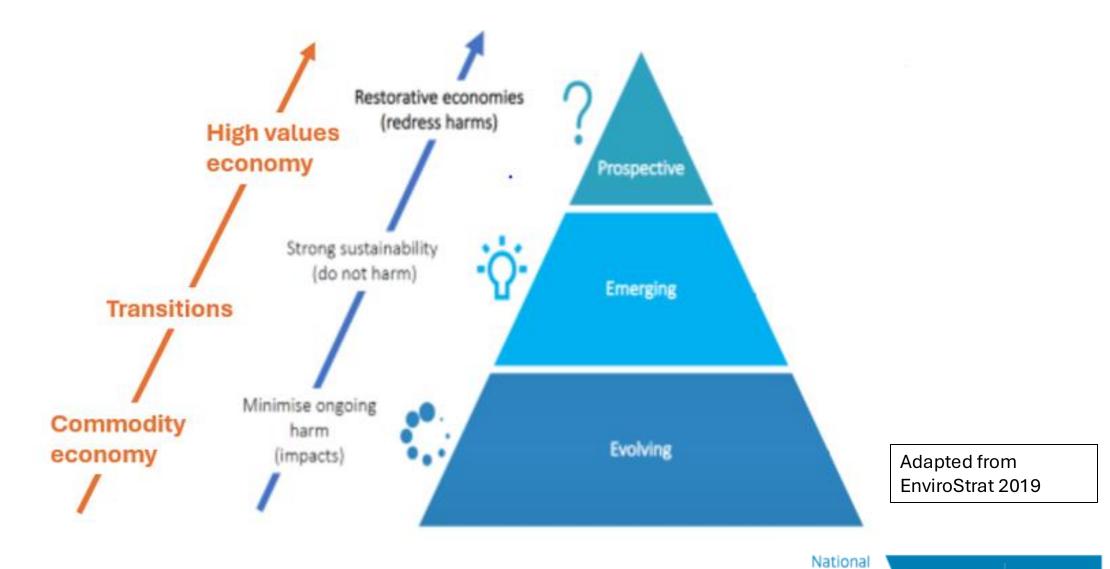
## Diverse economic activities, diverse business models: baseline for transitioning



## **Broad-based transitions models**



## **Sustainability-led transitions**



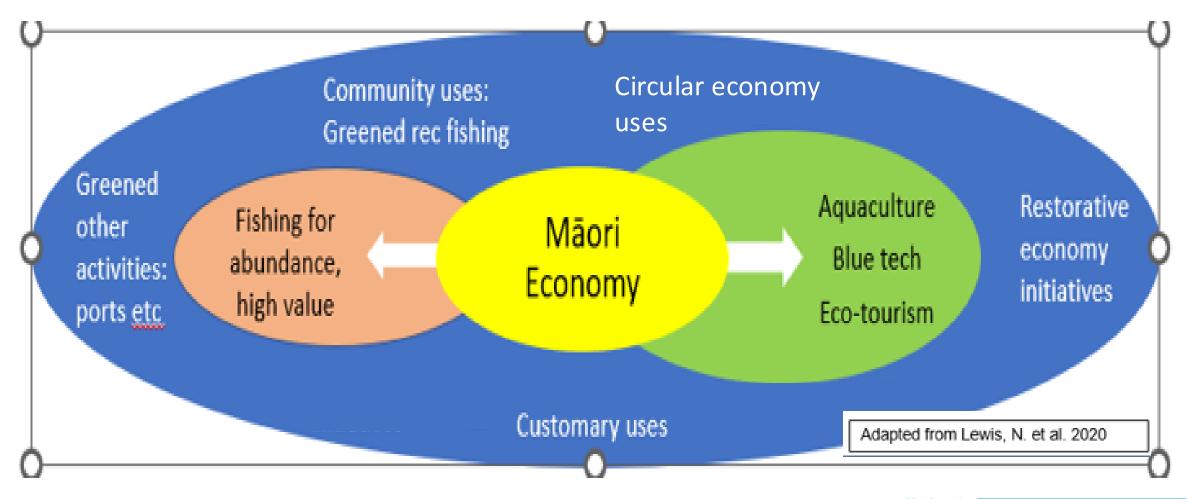
SUSTAINABLE SEAS

Ko ngā moana whakauka

SCIENCE

Challenges

# **Targeting sectors**





## **Research-led transitioning: Core Projects**



## Shaping the seaweed sector



Image: Scott Sinton, Greenwave NZ.





Sustainable Konga moana wakauka

Encouraging restorative economies in Aotearoa New Zealand's marine and coastal space Cortés Acosta S, Stancu C, Brown J & Bridger T Auahatanga from Authenticity: Maximising opportunities for Akaroa Salmon and Ōnuku Rūnanga

Jay Whitehead, Matthew Rout, Jason Mika, John Reid, Fiona Wiremu, Annemarie Gillies, Georgia McLellan, Corey Ruha, Rik Tainui

2023



# **Reimagining innovation**



Energy from tidal currents - Kick-starting a new marine industry with huge potential

We investigated whether generating electricity from the strong tidal currents within Cook Strait is viable for Aotearoa New Zealand.



Quantifying seafloor contact

Investigating and reducing interactions between commercial fishing gear and the seafloor

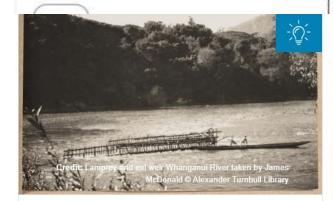
Active project



Kohunga Kutai



Creating a sustainable supply of seed mussels using matauranga Māori



## Whakaika te Moana



Exploring traditional aquaculture practices to inform a hapū-based blue economy

MORE



Pātangaroa hua rau: the bioactive potential of sea stars

Active project

Investigating the economic potential of collagen and bioactives from 11-armed sea-stars to manage overpopulations



A novel approach to aquaculture in Aotearoa New Zealand



Growing community wellbeing with pātiki tōtara/yellowbelly flounder



## What would it take to kickstart (make investable) a blue economy

## Te Mana o te Moana

Prioritising the health and wellbeing of the moana informed by a Tiriti o Waitangi-led approach where the rights and responsibilities of tangata whenua are provided for.

## Accountable

Adopting decision making and reporting frameworks that consider natural, social, and cultural effects of all proposed and actual uses of ocean resources.





#### Regenerative

Adopting practices that actively support and restore marine ecosystem health.

## Blue economy principles

## A blue economy for Aotearoa

Marine activities that generate economic value and contribute positively to ecological, cultural, and social well-being.

### Inclusive

Engaging with communities to achieve multiple benefits for people and the environment.





### Intergenerational

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



#### Prosperous

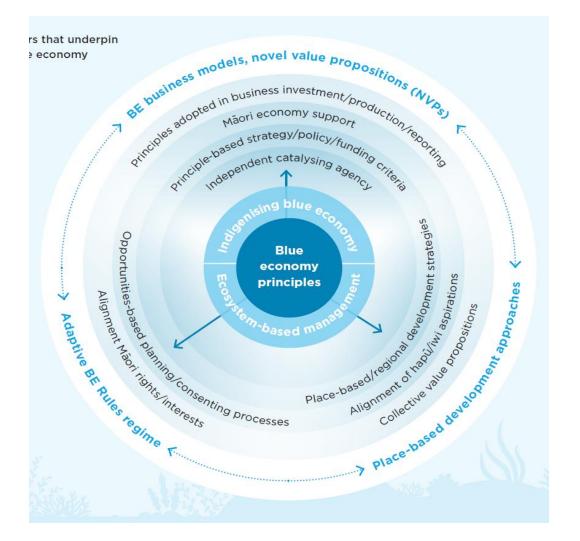
Actively transitioning towards resource use that is productive, sustainable, resilient and enhances the ocean and ocean-dependent livelihoods.

Ko ngã moana

whakauka



# **BE Principles at Work**



Produced guidelines for use in practice

Socialised via regional road trips: government agencies, businesses

Guide policy (economic development, science, resource management)

Underpin novel business models and collective value propositions for place-based strategies and goals

Inform regulatory implementation / reform: planning, consenting, research funding criteria

Socialise adoption of nature-related disclosures and derisk business from related demands

Support Māori -led economy



## Place-based development platforms

- Explored exemplars of community-led BE development to identify diverse potential BE assets and development platforms
- Worked with community organisations diverse agencies to action elements, deepen linkages, foster place-based development
- Funded and supported independent cluster/catalyser aiming to accelerate a BE via innovation, creating networks, forging domestic and international partnerships, and smoothing commercialisation pipelines





# Recommendations to government

- Adopt BE principles to guide national, sectoral, regional economic development strategies
- Embed BE principles in economic development, research, and resource management policy and decision making
- Support Māori blue economy capability and initiatives and align all BE policy with Māori aspirations and institutions.
- Prioritise place-based economic development
- Fund a specialist and independent BE development organisation(s) e.g. Moananui.