





















National

SCIPNCE

Challenges

SUSTAINABLE

SEAS



Cultivating value from a 'blue economy'

Sustainable Seas Annual Research Meeting Wellington May 2-3 2017

Entrepreneurialism The Economy Returns Investment **Firms GDP** Exports Jobs

Blue economy?

- Problematic term: from radical sustainability to capitalising the oceans as new frontier for growth
- A presumed connectivity economically, politically, environmentally, socially ... clearly a 'zone' of concern
- Captures diverse practices: from mountain to oceans?
- Proliferating (Winder and Le Heron, DIHG, 2017)
- Untapped opportunities to build upon and enhance national resourcefulness?



Different starting points

Blue Economy: Doing economy differently

- *Economy* is a set of practices and processes of stewarding resources to make livelihoods ... *an economy* is what emerges
- Blue economy entrepreneurial, investment and management initiatives that draw on marine environments to create economic and social values that sustain or enhance the resourcefulness of those environments and their communities
 - all about resourcefulness
 - begins with socio-ecological knowledge: ecosystem based management
 - requires innovations in thinking, investment, production and regulation

Economy as process/practice

- What ideas do enterprising New Zealanders have for working with marine resources to create cultural, use and exchange values and thereby making lives and livelihoods?
 - What ideas will allow environments to thrive?
 - What activities do we want in *our* oceans/coasts?
 - What will capital invest in, banks lend on, consumers pay for, competitors do less well?
 - How do we stimulate these activities, and what do we need to know to do so?
 - A 21st Century framework for economic research
- Challenge is to stimulate new set of investment rationalities and practices, with altered ethical coordinates

Conceptual (3): From Marine to Blue Economy



Support in unlikely places





'The Economist' (2015): Sustainability requires:

- Common (read new) understanding of the blue economy
- Institutional support and capacity for a balanced approach to the governance of ocean space: a clear policy and planning framework is essential but not sufficient (read do economy differently)
- Reform of governance institutions
- Better economic data and science (read different measures / non-measures)— to give confidence in the metrics
- Innovative finance to generate investment into activities that will enhance ocean health (read do economy differently)





- 102,400 jobs (47% in shipping, 46% in F&A)
- Underestimates marine tourism and recreation (\$43 million to GDP, 960 jobs – ISIC issues); other studies suggest 1 million people p.a. take to water in 900,000 craft, spending \$1b and catching \$180m fish
- Not included
 - education and training (est. \$10.2 million: 1170 students in maritime engineering and technology, and fisheries studies)
 - cruise ship visits (est. \$411.8 million in 2011/12 season)
 - scientific research?
 - sink for urban / rural pollution

RQs: How helpful/complete is current knowledge of marine economies, what is missing, and how is BE represented?



2007-13

New Zealand's marine economy:



What we do know?

There is a big marine economy that we know little about

Includes multiple activities

Marine economies are diverse and difficult to separate from other economies – the measures are not great

We ought to be interested in different parts of this marine economy for different reasons – jobs, royalties etc

What we ought to know?

Do we really capture these economies with that data?

What about their inter-relationships / connections, why cluster them into marine economy, does it make sense?

Know differently – types of economy, connectivity, dynamics, investment decision frameworks all matter

Is there a better way of framing them that might help us to identify, highlight and stimulate the blue economy?

Phase 2: Knowing blue economy (focus on BE initiatives)



Objective: Enhancing national resourcefulness

- Identifying, typologising, mapping BE initiatives, their ethical co-ordinates, and connectivities among BE initiatives and with wider economy
- Research Questions:
 - What BE initiatives exist and what new ones are being launched?
 - Where do these initiatives come from, how blue are they, what does it take to make them fly?
 - What drives BE how are investment decisions made, what investment trajectories exist?
 - What connectivities exist among BE initiatives and between them and wider marine economy?

Initial sketch of economies

	Size	Practice	Market Orientation	Ethical Co- ordinates	Labour relation	Investment structure
lwi / hapu	From taniwha economy to marae	Extractive to customary	Varied	Kaupapa Maori	Varied: from Iwi-capitalist to customary	Hapu to Iwi Trust Board
Commodity	Large	Extractive	Exports	Accumulation	Fully capitalist	Global corporation
Techno	High capital / low employees	Creative	Export / enabling	Knowledge economy	Relational / immaterial	IP / angels / government
Small- Medium Business	Less than 20 employees	Non-strategic		Survival	Varied	Owner-manager Family
Community	Varied: family- collective	Use values	Non-market	Collective Environmental	Unpaid / cooperative reciprocity	Family / social collective

Promisingly blue initiatives

	Iwi / Hapu	Commodity	Techno	SME	Community
lwi / Hapu	Kaitiakitanga as practice Taiapure	'500 yr' investment horizons Customary branding Social licence	Traditional medicines	Indigenous firms operating on iwi- capitalist kaupapa Akaroa Taiapure enterprise	Hapu economies Collective / cooperative practice New ethics of recreation
Commodity		Greening Provenancing Forestry replanting accords	Green innovation: mussel oils, nutriceuticals Skretting Finfish research facility	Salmon farming guidelines O'Kains Bay seafood tracing	Community ownership (Opotiki Port)
Techno			Green solutions New products	Specialised green firms (harvesting waste- streams)	
Small-Medium Enterprises				Provenancing Eco-tourism Pacific Harvest: Algae harvesting	Clean-up programmes Seeding the mussel commons
Community					Green collectives Green recreational takes / education

Thinking more hopefully about Blue Economy: Proliferate the initiatives

Hapu / iwi 🖕

Community

Commodity rechno.science

Small-Medium **Business**

Blue economy initiatives

Phase 2: Knowing blue economy (focus on BE initiatives)

 The team: Nick Lewis, Dan Hikuroa, Erena Le Heron, Richard Le Heron, Stephen FitzHerbert, Kate Davies, Gillian James

 Today's challenge: Three minutes to identify candidates for the blue squares











Phase 3: Stimulating/growing blue economy

SUSTAINABLI

Developing tools to encourage new blue economy initiatives (modelling, workshops, visualisation, hui)

Research Questions:

- How can existing initiatives and connectivity be supported, stimulated, encouraged to proliferate?
- What further BE initiatives are imaginable?
- Are there practical tools that might enhance and grow a resourceful blue economy?