

Our Land and Water National Science Challenge

Toitū te Whenua Toiora te Wai

STRATEGY AND THEMATIC STRUCTURE

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THIS

is where you run away screaming like a scared little scientist

Some starting principles

- **Co-design/co-innovation**
 - Stakeholders embedded in programmes
 - Advantages (accessible, relevant, more robust outcomes)
 - Disadvantages (time/fatigue, value proposition vs business as usual?)
- **Additionality**
 - Transdisciplinarity
 - Across disciplines & institutions
 - Partnerships
- **Idea generation and testing**
 - “Fast fail”
 - “Left field” ideas

The beginning

“To enhance primary sector production and productivity while maintaining and improving our land and water quality for future generations”



Meeting societal requirements

More value from primary sector chains

Land and water management to limits

Better primary production systems

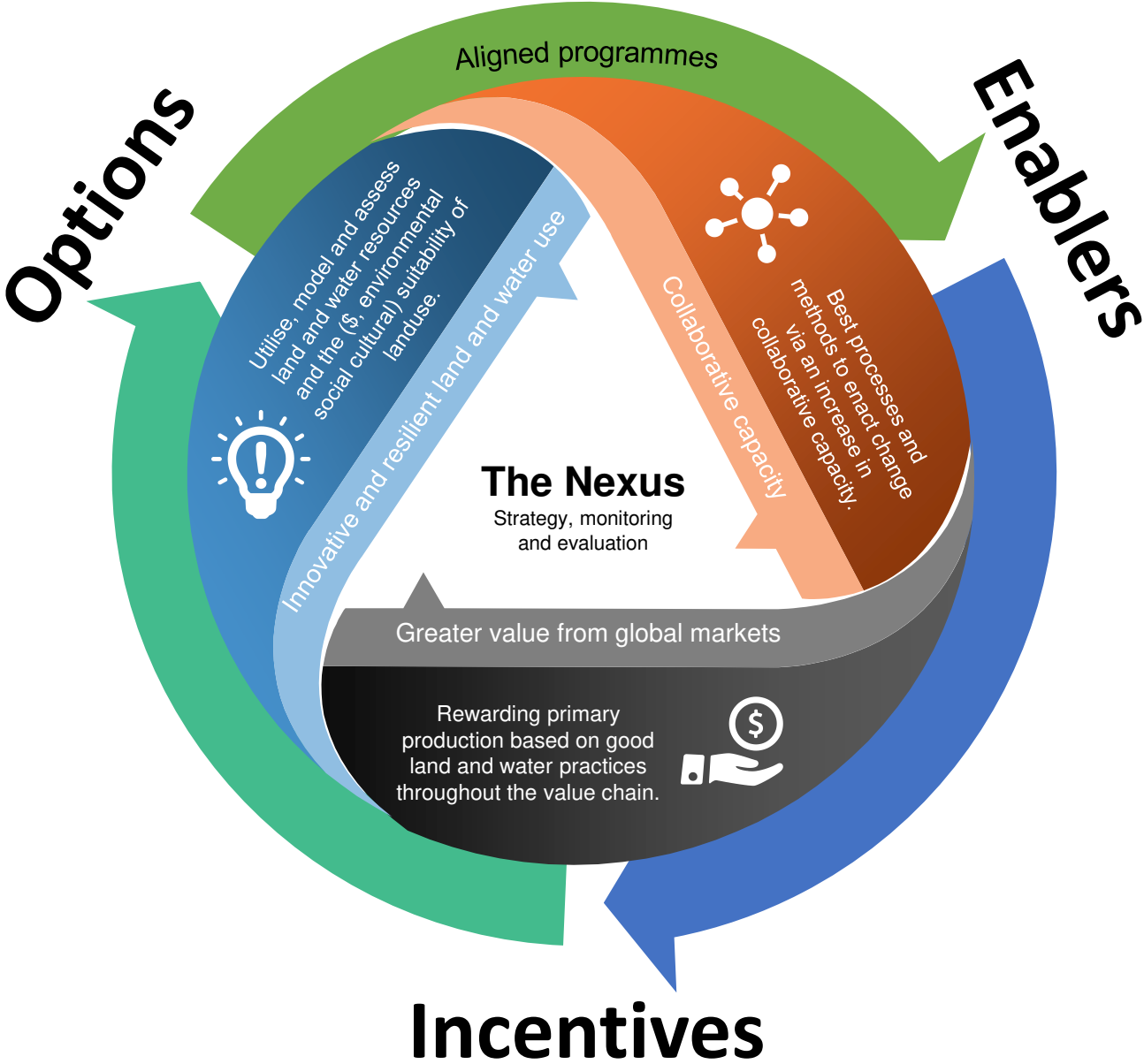
Research landscape map

What's being done?

How well is it being done?

What is missing?

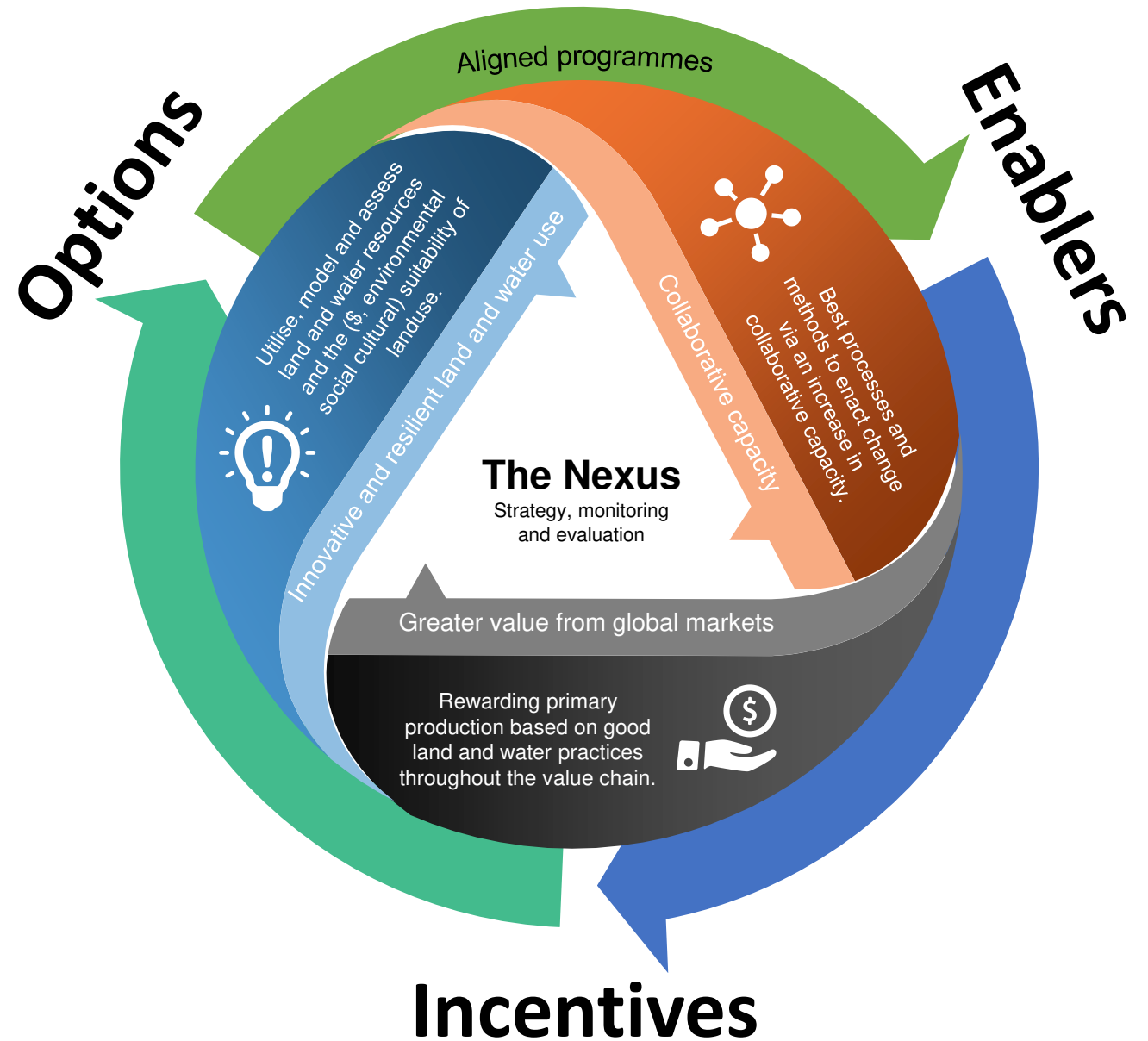
Thematic structure



The Nexus

Strategy

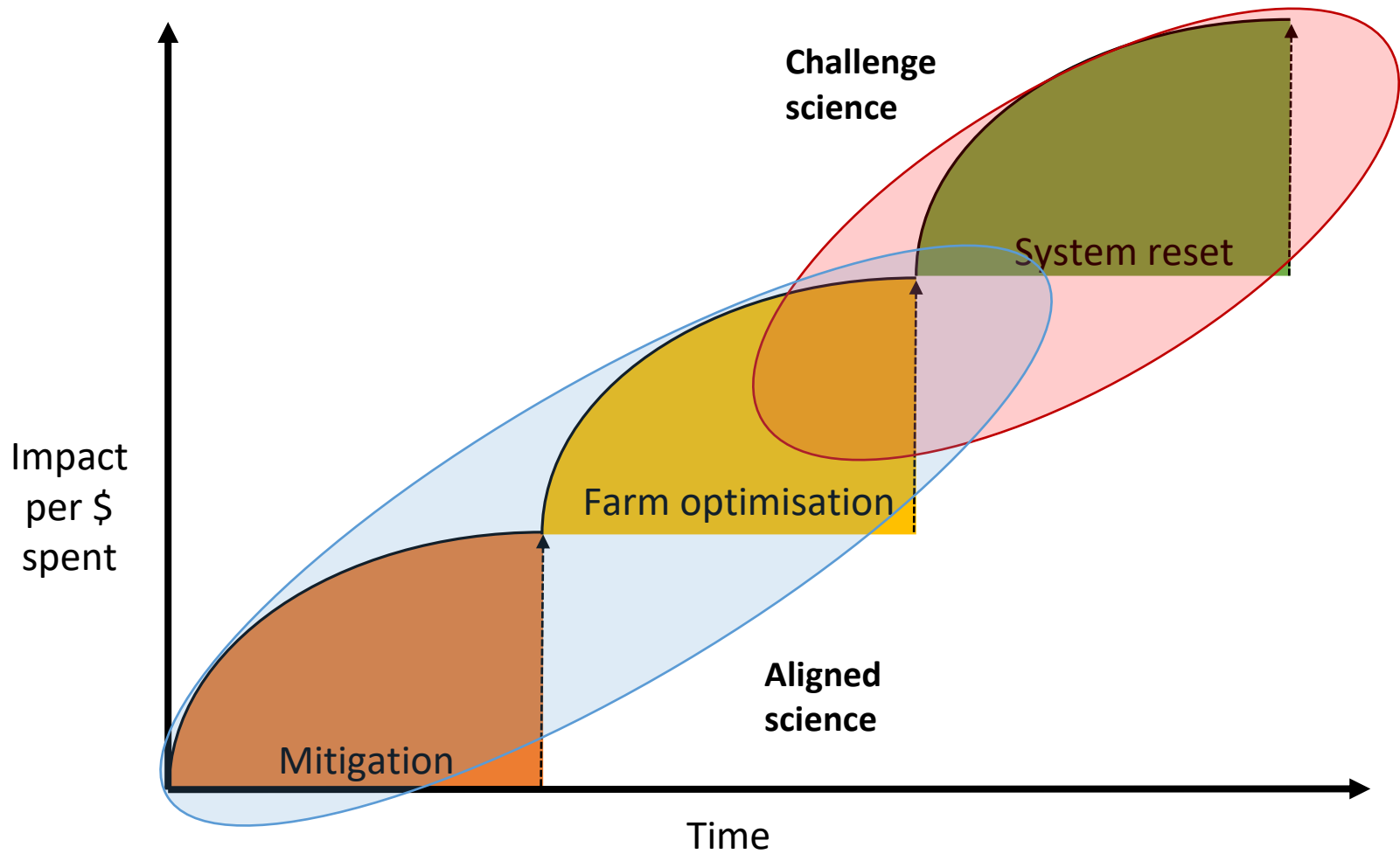
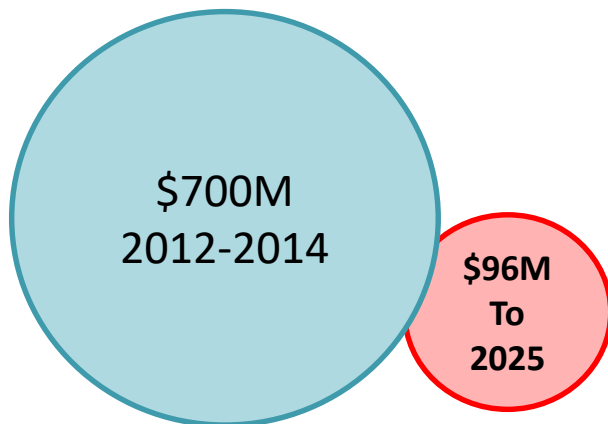
Monitoring & Evaluation
(KPIs, engagement)



The niche for challenge-funded science

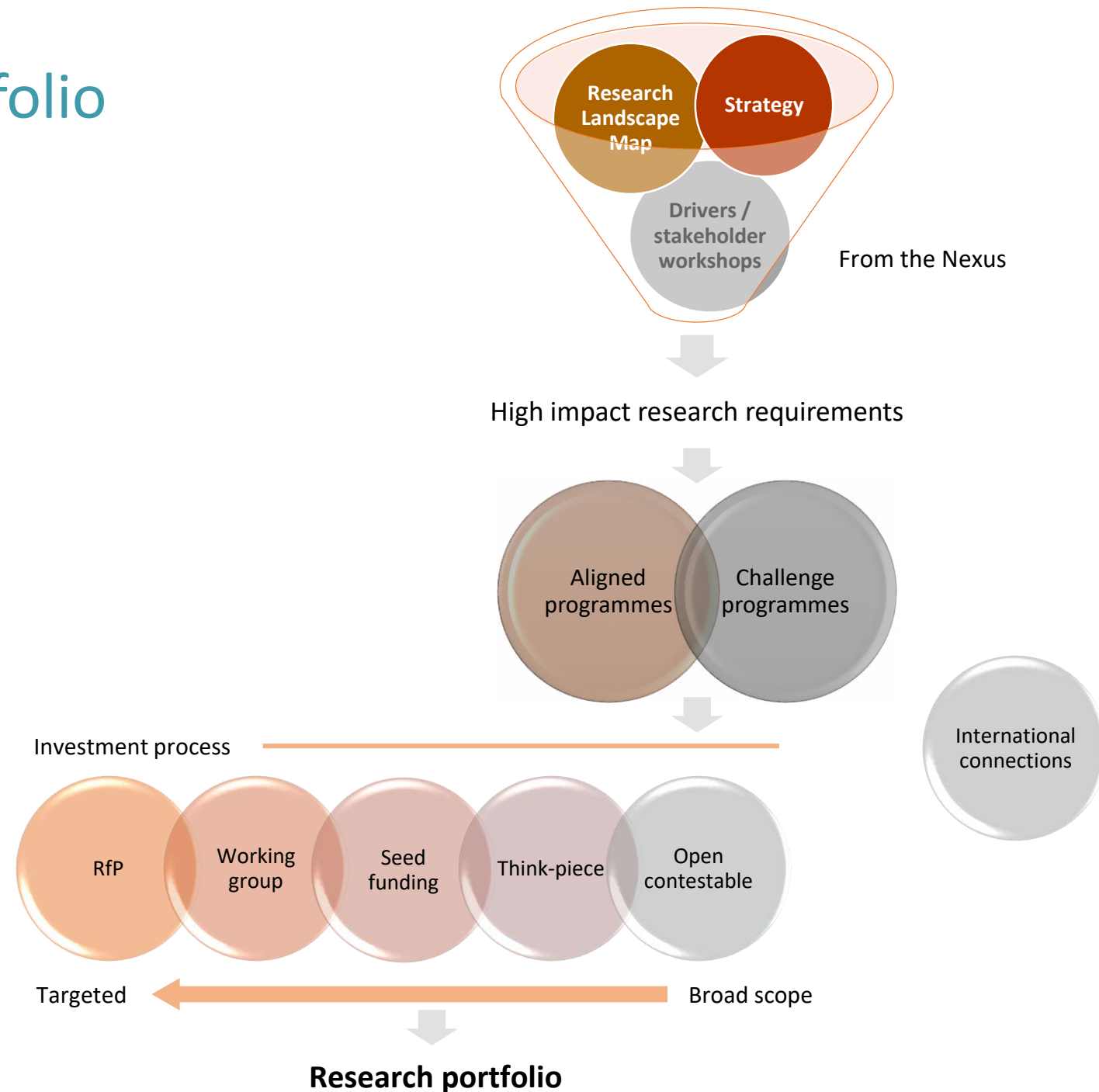
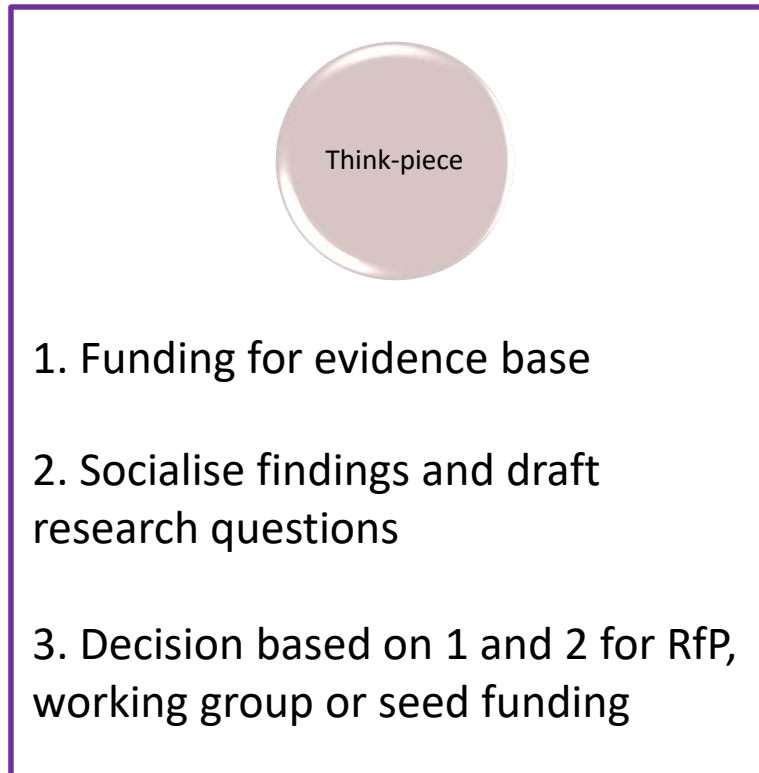
- Strategy

- Value chain as an incentive for practice change
- **Alignment and prioritisation** (reciprocity)



Processes and Research Portfolio

The research development process and scientific rigour



International connections



The Joint Programming Initiative on Agriculture Food Security and Climate Change (\$2M EU, \$2M OLW + aligned)

- Meeting the UN Sustainability development goals.
- Implications for NZ trade.



Farm management systems for precision farming (\$?M EU, \$0.9M MPI + ~1.8M OLW)

- Sensors and decision support.
- Applications and farm management systems.

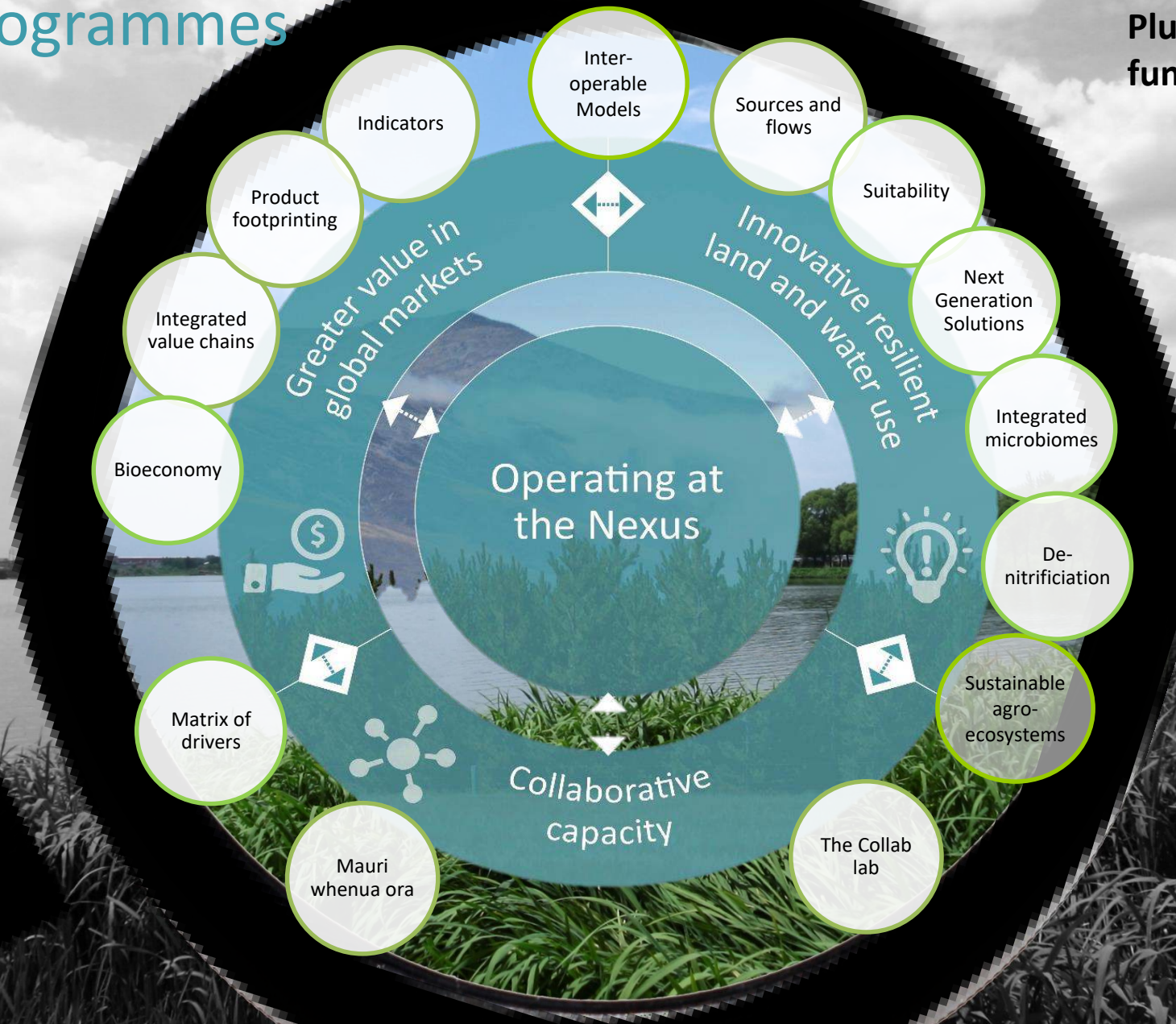


Sustainable and resilient food production systems (\$0.2M OECD, \$2M OLW + aligned)

Challenge programmes

Plus \$59M of 16/17 aligned funding in 61 programmes

- Contestable funding
- VM Contestable



**NO MOTORIZED
VEHICLES
NO BIKES
NO CAMPING**

**CAUTION
HEAVY
TRAFFIC**

