

CallaghanInnovation

New Zealand's Innovation Agency

NZ CleanTech - Description of the innovation ecosystem

July 2021



Introduction

- This document describes New Zealand's CleanTech innovation ecosystem. This will guide NZ CleanTech innovators to many of the organizations that will help them achieve their goals.
- By “CleanTech innovator”, we mean early stage and growth high-tech businesses that create products to solve climate change and other environmental problems.

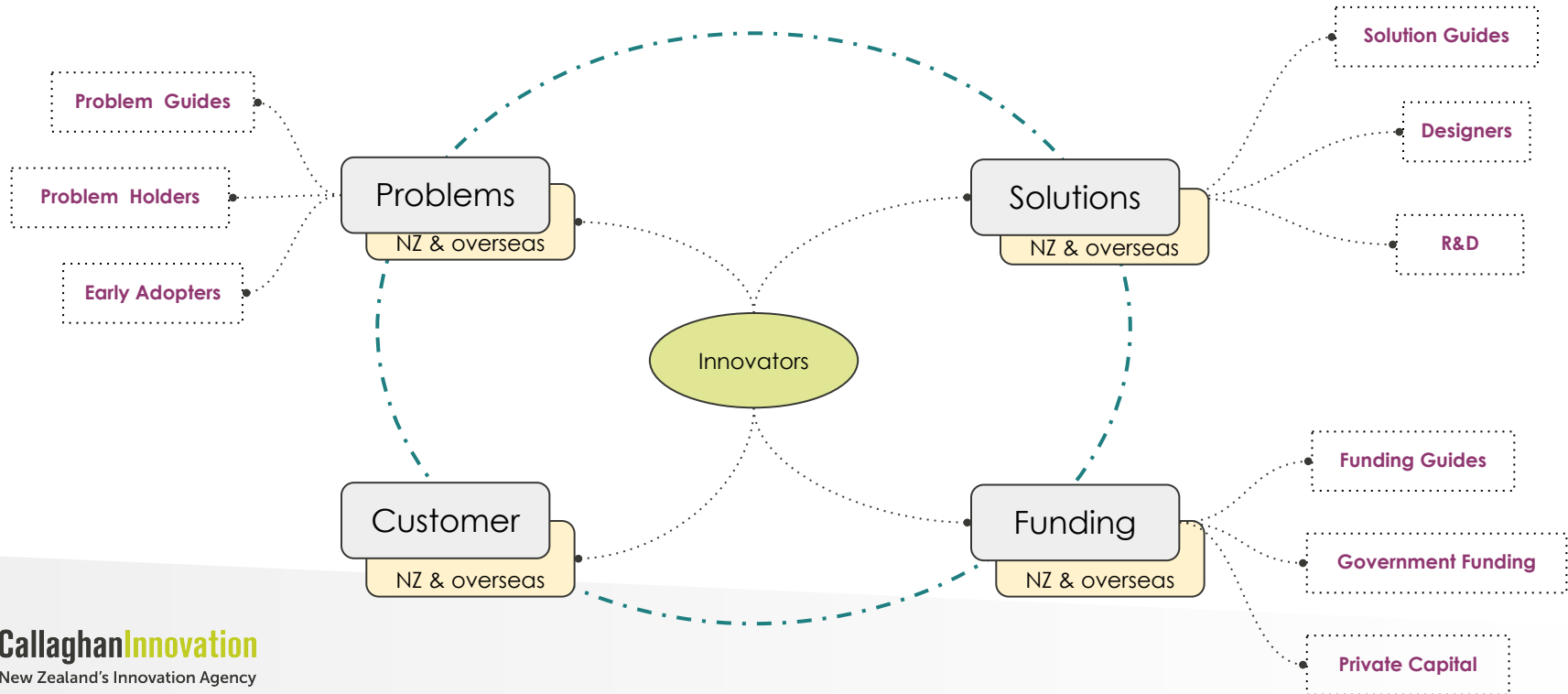
Key points

- The description of the ecosystem comprises a spreadsheet (available as a separate download on the [NZ CleanTech Mission webpage](#)) that includes 200+ organizations (e.g. accelerators, corporates, government, incubators, industry bodies, investors, Research & Development) that have assisted NZ CleanTech innovators across five industry groups (Agriculture & Food, Energy & Power, Transport & Logistics, Materials & Chemicals, Resources & Environment).
- An example of how each organization has assisted CleanTech innovators is provided together with a link to publicly available information.
- The assistance identified is based on innovators' needs for example: to understand the problem; to develop solutions; and to raise funding.

Extract from NZ CleanTech innovation ecosystem

Organisation Name	Country	Maori	Problem			Solutions				Funding		
			Problem guides	Problem holders	Early adopters	Solution guides	Designers	Providers	R&D	Funding guides	Government funding	Private Capital
Food, Fibre & Agritech Supernode Challenge (<i>KiwiNet</i>)	NZ		•			•				•	•	
Toitu Envirocare (<i>Farm Carbon Certification Programme</i>)	NZ					•						
Aotearoa Fisheries (<i>Tiaki</i>)	NZ		•	•	•							•
Ballance Agri-Nutrients (<i>Hiringa</i>)	NZ		•		•							
CropX (<i>Regen</i>)	Israel		•	•								•
Fonterra (<i>DSM Bovaer®</i>)	NZ		•	•	•							
Fonterra (<i>Lactanol</i>)	NZ		•	•	•							•
Sanford (<i>Tiaki</i>)	NZ		•	•	•							•
Sealord (<i>Tiaki</i>)	NZ		•	•	•							•
Southern Pastures	NZ		•	•	•							•
Synlait	NZ		•	•	•							
T&G (<i>Ecogas</i>)	NZ		•	•	•							
AssureQuality (<i>Farm Carbon Certification Programme</i>)	NZ					•						
Callaghan Innovation (<i>evokeAG International Event</i>)	NZ		•									
Callaghan Innovation (<i>Grants</i>)	NZ									•	•	
Department of Conservation (DOC)	NZ		•	•							•	
Environmental Choice (ME)	NZ					•						
MBIE - <i>ITP Agriculture</i>	NZ		•								•	
MBIE - <i>New Zealand-Singapore Future Foods Research</i>	NZ										•	

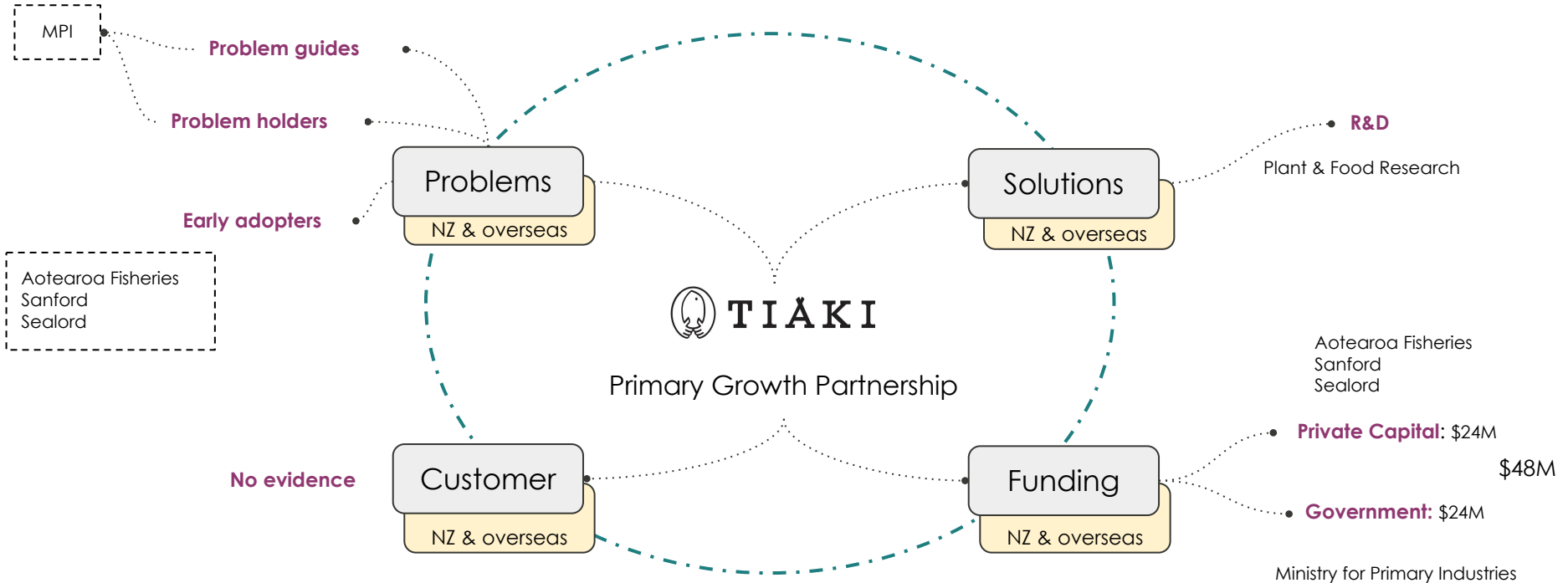
CleanTech innovators often need assistance on understanding the problem / opportunity, developing solutions and raising funds....



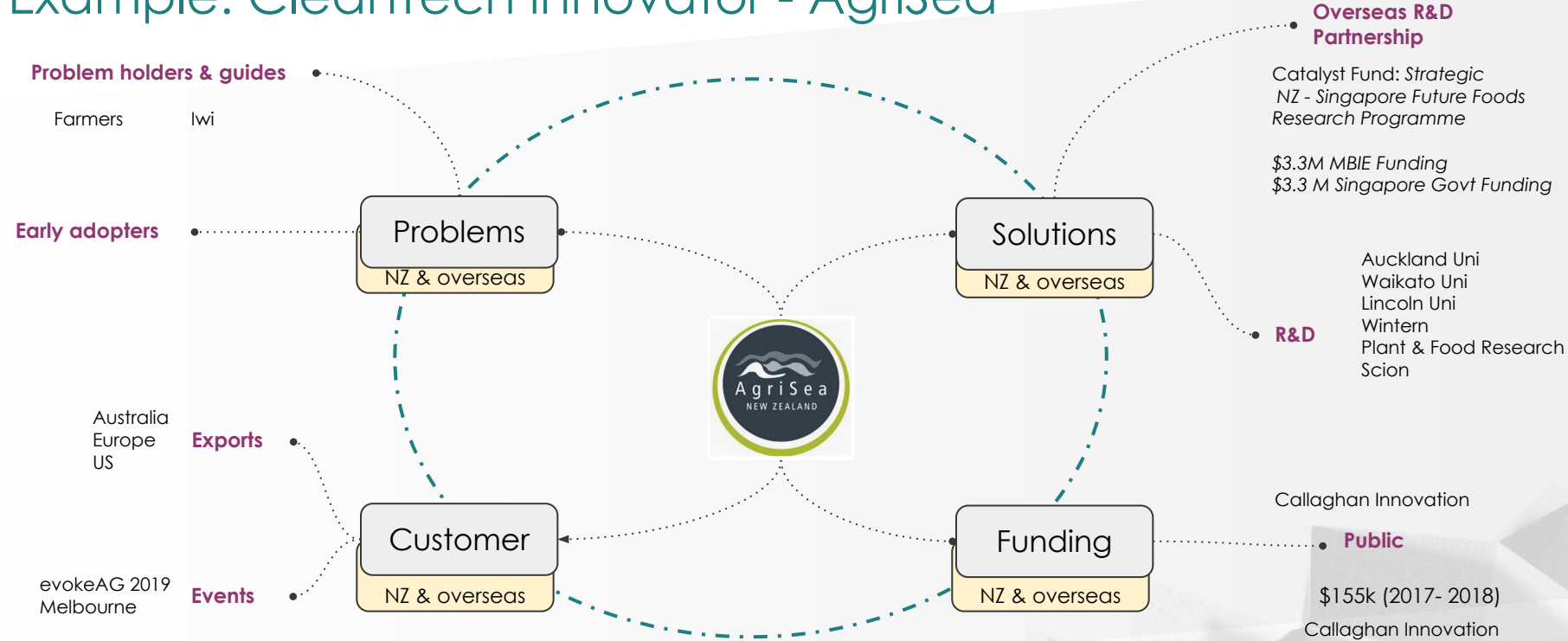
....different organizations provide different types of assistance.

Role	Help innovators to....
Problem guidesfind problems to solve
Problem holdersunderstand the problem to be solved
Early adopterstrial / pilot / test solutions in the real world
Solution guidesto find, develop and commercialise solutions
Designersto design solutions
Researchersto undertake research and development
Funding guidesto understand and find funding opportunities
Government fundingto obtain funding from Government
Private capitalto obtain private capital

Example: CleanTech innovator - Tiaki



Example: CleanTech innovator - AgriSea



Example: Agriculture & Food - Solutions

+40
Businesses*

Solutions

Solutions guides

R&D

*Note: Indicative data

Bridge Hub 2020 Water Challenge (e.g. EFF-GO)
C-Prize (by Callaghan Innovation)
Food, Fibre & Agritech Supernode Challenge (KiwiNet)
Toitu Envirocare (Farm Carbon Certification Programme)
AssureQuality (Farm Carbon Certification Programme)
Environmental Choice (MfE)
Bridgewest Ventures (Callaghan Innovation)
Kōkiri (Biome)
Level Two (e.g. Pastoral Robotics, BioConsortia)
Sprout (Callaghan Innovation)
WNT Ventures
Calm the Farm (Funded by Toha)
AgResearch (e.g. Seaweed, Hyperfarm tool)
Lincoln Agritech (e.g. CertusBio)
NZ Agri Greenhouse Gas Research Centre (MPI)

Science for Tech. Innovation Nat. Science Challenge (SFTI)
Sustainable Seas National Science Challenge (MBIE)
AgResearch (e.g. Seaweed, Hyperfarm tool)
Bioresource Processing Alliance
Cawthron Institute (Aquaculture)
Cawthron Institute (CH4 emissions using seaweed)
Landcare Research (Nitrogen losses from farms)
Lincoln Agritech (e.g. CertusBio)
Massey University (e.g. BioLumic)
NZ Agri Greenhouse Gas Research Centre (MPI)
Pacific Coast Technical Institute (PCTI) - e.g. AgriSea Bees
Pastoral Greenhouse Research Consortium (MBIE)
Plant & Food Research (e.g. Tiaki)
Riddet Institute (Sustainable Nutrition Initiative)
Scion (e.g. AgriSea 'Making nanocellulose hydrogels')
University of Auckland (e.g. Engender)
University of Otago (Department of Food Science)
Waikato University (Environmental Research Institute)
Wintec (e.g. Animal Health Research for AgriSea)

Example: Agriculture & Food - Funding

+40
Businesses*

*Note: Indicative data

Funding

Funding Guides

Private Capital

Government Funding

Bridge Hub 2020 Water Challenge (e.g. EFF-GO)

C-Prize (by Callaghan Innovation)

Food, Fibre & Agritech Supernode Challenge (KiwiNet)

Callaghan Innovation (Grants)

NZTE

NZTE - Agritech Powered by Place

Bridgewest Ventures (Callaghan Innovation)

Kōkiri (Biome)

Level Two (e.g. Pastoral Robotics, BioConsortia)

Sprout (Callaghan Innovation)

WNT Ventures

Calm the Farm (Funded by Toha)

Aotearoa Fisheries (Tiaki)

CropX (Regen)

Fonterra (Lactanof)

Sanford (Tiaki)

Sealord (Tiaki)

Southern Pastures

Blackbird Ventures (e.g. Sunfed)

Enterprise Angels (e.g. UBCO, Engender)

Icehouse Ventures (e.g. BioLumic, Engender, Sunfed)

Impact Enterprise Fund (e.g. Waikaitu)

K1W1 (e.g. Halter, Sunfed, BioLumic, Hot Lime Labs)

New Crop Capital (e.g. Sunfed)

NZ Growth Capital Partners (e.g. Hot Lime Labs, Regen)

Quadrant Private Equity (e.g. Sunfed)

Calm the Farm (Funded by Toha)

Overseas Private Capital

C-Prize (by Callaghan Innovation)

Food, Fibre & Agritech Supernode Challenge (KiwiNet)

Callaghan Innovation (Grants)

Department of Conservation (DOC)

MBIE - ITP Agriculture

MBIE - New Zealand-Singapore Future Foods Research

Ministry for the Environment (Jobs for Nature Fund)

Ministry for the Environment (Waste Minimisation Fund)

MPI - PGP (Precision Seafood Harvesting)

MPI - Sustainable Food and Fibre Futures

Science for Tech. Innovation Nat. Science Challenge (SfTI)

Sustainable Seas National Science Challenge (MBIE)

Sprout (Callaghan Innovation)

WNT Ventures

K1W1 (MBIE PreSeed Accelerator Fund)

Bioresource Processing Alliance

NZ Agri Greenhouse Gas Research Centre (MPI)