## THE ENERGY INNOVATION VALUE CHAIN

Research & Development

Initial Idea Technology formulation, Small scale

Proof of concept

Basic principles defined

**Demonstration & Commercialisation** 

Pre-commercial full-scale demonstration in operational environment

Deployment in Market

Commercially available in operational environment

Mass adoption
Competively mature in market

(TRL)

The organisations below contribute to the energy innovation ecosystem in services and funding activites. There are three stages in the innovation value chain: Research & Development, Demonstration & Commercialisation, Deployment in Market, representing TRL 1-11. The position of the organisation categories indicates their breadth of activity across the value chain. (F = Funding or finances, S = Services)

Ara Ake (S)

NZ Green Investment Finance<sup>(F,S)</sup>

Public & Private Capital (Angel Investors, Private Equity, Venture Capital) (F,S)

Ministry of Business, Innovation & Employment (F)

prototype

**Energy Efficiency Conservation Authority** (F,S)

Callaghan Innovation (F,S)

NZ Trade & Enterprise (F,S)

Innovative Partnerships (F,S)

Large scale prototype

Accelerators and Incubators (F,S)

NZ Universities (F,S)

Kanoa REDIU (F,S)

NZ Growth Capital Partners co-investment (F,S)

Crown Research Institutes (F,S)

Ministry Business, Innovation & Employment (MBIE) Partnerships Fund, Catalyst Fund, Endeavour Fund, Māori and Public Housing Renewable Energy Fund, National Science Challenge, Strategic Science Investment Fund, Advanced Energy Technology Platform, Commercialisation Partner Network, Innovative Partnerships, Regional Strategic Partnerships Fund, PreSeed Accelerator Fund.

Callaghan Innovation R&D Project Grant, Research & Development Tax Incentive (RDTI), R&D Experience Grants, R&D Fellowship Grants, Industry 4.0 Starter Service, Innovation IP.

Accelerators and Incubators Flux Accelerator, Bridgewest Ventures, WNT Ventures, Climate Response Accelerator, Lightning Lab.

NZ Universities Auckland Uniservices, Wellington Univentures, Massey Ventures, Otago Innovation, Canterbury Research & Innovation, Lincoln Research & Innovation, WaikatoLink, Ventures AUT.

**NZ Growth Capital Partners** New Zealand Growth Capital Partners (NZGCP) was established by the New Zealand Government in 2002 to build a vibrant early-stage technology investment market in New Zealand. Alongside operating their Aspire and Elevate funds, they are also involved in a range of market development initiatives that include sponsorship and support of programmes, events and other initiatives alongside ecosystem partners like New Zealand Private Capital and the Angel Association of New Zealand. Access NZGCP here.

**Crown Research Institutes** AgResearch, Institute of Environmental Science Research (ESR), <u>Institute of Geological and Nuclear Science (GNS Science)</u>, Landcare Research, National Institute of Water and Atmospheric Research (NIWA), Plant and Food Research, <u>Scion.</u>

Public/Private Capital Aspire NZ Seed Fund, Elevate NZ Venture Fund, Blackbird Ventures NZ, Pacific Channel, TPC Fund II, IVX Fund, First Cut III Fund, Movac Funds, k1w1 funds, GD1 NZ Technology Growth Fund, Punakaiki, Hillfarrance, Airtree, Pioneer Capital, Direct Capital, Pencarrow, NZ Private Capital, Angel Association NZ, Afterwork, Astrolab, Enterprise Angels, Equitise, FKA, Green Light Ventures, Impact Ventures, Matu Fund, Nuance Ventures, Snowball Effect, Soul Capital, The Instillery, Tomorrow, Zino Ventures, Ventures

**Ara Ake** Funding Access Assistance, Project or Initiative Support, Access to demonstration pilot infrastructure (Testbeds), Connect and foster trusting and enduring relationships with energy innovation stakeholders, Trusted advisor / Subject Matter Expert services, Matching industry needs with energy innovation solutions, Energy innovation Policy, Research and Insights. <u>Access Ara Ake here.</u>

Energy Efficiency Conservation Authority (EECA) Technology Demonstration Fund, Government Investment in Decarbonising Industry (GIDI) Fund, State Sector Decarbonisation Fund, Fuel Switch Enabler Fund, Crown Loans, Energy System Optimisation, Energy Management Planning, Warmer Kiwi Homes Programme, Low Emission Transport Fund, Public Charging Infrastructure, Energy graduate support, Energy Audits, Industrial systems design advice, Monitoring and targeting, Energy transition accelerator.

NZ Green Investment Finance New Zealand Green Investment Finance (NZGIF) is New Zealand's first green investment bank, established by the Crown with a clear mandate to accelerate and facilitate investment to enable New Zealand's low carbon future. It is a limited liability company that invests on a commercial basis, independent of government. <a href="Access NZ Green Investment">Access NZ Green Investment</a> Finance here.

NZ Trade & Enterprise NZ Trade and Enterprise InvestEd, International Growth Fund, Export Capability and Growth Services, Beachhead Advisors, Investment Advisors.

**Innovative Partnerships** The Innovative Partnerships programme is run by a team of experts dedicated to helping research and development intensive businesses connect, collaborate and invest in New Zealand. They engage with innovative companies that are pushing the boundaries of technology and solving the world's big problems, and assist them in finding their New Zealand opportunity. You can access Innovative Partnerships here.

Kanoa - Regional Economic Development & Investment Unit The Regional Strategic Partnership Fund, The Provincial Growth Fund, The COVID-19 Response and Recovery Fund, Infrastructure Reference Group, The Strategic Tourism Assets Protection Programme, NZ Upgrade Programme, Regional Investment Opportunities COVID-19 Worker Redeployment Initiative, He Poutama Rangatahi; The Māori Trades and Training Fund, The Sector Workforce Engagement Programme.