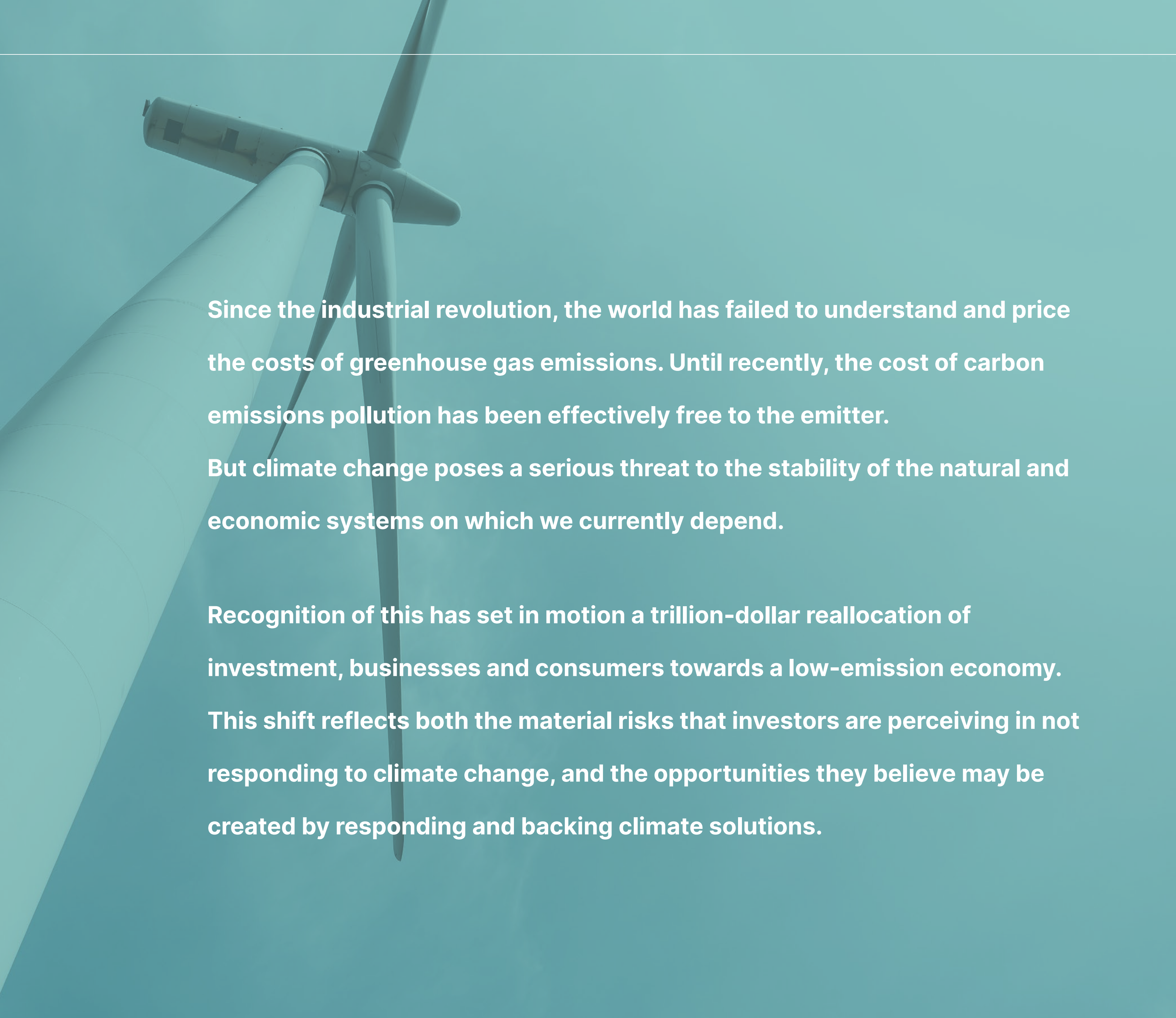


Investing in Climate Solutions

EVENT SUMMARY

AUCKLAND, APRIL 2023





Since the industrial revolution, the world has failed to understand and price the costs of greenhouse gas emissions. Until recently, the cost of carbon emissions pollution has been effectively free to the emitter.

But climate change poses a serious threat to the stability of the natural and economic systems on which we currently depend.

Recognition of this has set in motion a trillion-dollar reallocation of investment, businesses and consumers towards a low-emission economy.

This shift reflects both the material risks that investors are perceiving in not responding to climate change, and the opportunities they believe may be created by responding and backing climate solutions.

“Investments made now in climate change mitigation and resilience provide the greatest net benefit for investors, the wider economy, society and the climate”



Mitigation and adaptation

The impacts of recent climate-related events in Aotearoa New Zealand on already vulnerable whānau and communities have offered a galvanising force and timely reminder that the domestic transition to ‘Net Zero by 2050’ requires investment in both mitigation and adaptation. Climate solutions are needed in nearly every sector.

Investments in climate solutions can help investors mitigate the systemic risks of climate change, hedge against risks to their carbon intensive investments, and reap opportunities for diversification and strong returns as the world economy transitions.

All stewards of capital, including Māori, iwi and community assets, foundations and endowments, have an important role to play right now.

The role of philanthropy and community funders

To help funders navigate climate investment and better align their portfolios to net zero, Philanthropy New Zealand | Tōpūtanga Tuku Aroha o Aotearoa, Wellington Community Fund, Bay Trust, Foundation North, Trust Waikato, Climate Venture Capital Fund, and the Centre for Sustainable Finance: Toitū Tahua partnered to host ‘Investing for Climate Solutions’, a summit-style event for trusts, foundations, grant-makers, iwi and Māori asset owners.

The event, held at Novotel Auckland Airport Hotel on April 26, 2023, highlighted the actions, opportunities, and key enablers for ‘crowding-in’ capital to New Zealand based climate solutions. This document is a summary of insights from the event.



Sue McCabe, CEO | Philanthropy New Zealand | Tōpūtanga Tuku Aroha O Aotearoa

Sue McCabe

CEO | PHILANTHROPY NEW ZEALAND | TŌPŪTANGA TUKU AROHA O AOTEAROA

It is significant that this event is held on the whenua o Tāmaki Makaurau given the impact of the January floods and February cyclone on parts of the region. Because this is the reality of why we are here - the destruction of homes, livelihoods, and land and the long lasting psychological impacts on communities, and on our kids.

I'd like to acknowledge, as a Pākehā, the role of mātauranga Māori and indigenous world views in how we plan and respond to climate change. From a Philanthropy New Zealand perspective, our role is representing and supporting philanthropy and grantmaking; and this includes supporting our members to invest in and grant to climate action.

There's lots of great leadership and progress occurring in the sector - but here's a real head scratcher.

We have heard leaders from our membership say their organisation doesn't have a remit to fund issues relating to climate change (granting or investment). There's clearly a need to amplify the sector's commitment to climate action.

Climate change is every funder's issue.

The IPCC has said multiple climate hazards will occur simultaneously and multiple climatic and non climatic risks will interact. Causing chaos - we've had a glimpse at this prediction in reality - because we've had a cyclone hit a few weeks after a flood.

We know the disproportionate impact of those two events on the most vulnerable.

A tonne of funding - central and local government and philanthropic - is being diverted to responses - therefore is not available for other community need.

We can choose to be grim and defeated. Or we can choose to be action focussed and grateful that we're in a position to make a difference.

Philanthropic organisations have power to influence – in all sorts of ways.

Your capital, grantmaking resources and the knowledge of your advisors is significant. You're already making a huge difference to Aotearoa socially, economically and environmentally.

Today is about supporting the contribution you can make in the climate action area. Your investment in adaptation can strengthen the resilience of our infrastructure, production systems and supply chains. Meanwhile the great mitigation opportunity to reduce greenhouse gas emissions - the renewable energy market - is so well suited to our country's abundant natural power sources and is seeing increasingly competitive returns.

Yes we need to acknowledge a developing investment market for climate solutions. We can seize the economic opportunity to support some homegrown solutions as the world transitions, and actively manage the risk to investments that comes with not acting.

Funders, you can take a long-term perspective, take risks and have the ability to back innovative solutions.

You can also support indigenous innovation and support Māori-led climate ventures and enterprises to grow and multiply.

You care about equity, and you can progress this through considering how your investments enable a more just transition to a low carbon society. You can support more vulnerable and low-income communities to access the benefits of a cleaner greener economy, as well as prepare for environmental change.

Some days you may feel challenged in this – but the relative agility of philanthropy and grantmaking compared with some other sectors is striking and a major plus.

So let's keep going.





Lisa Tumahai, Deputy Chair | He Pou a Rangi Climate Change Commission,
Chair | Te Rūnanga O Ngāi Tahu

Lisa Tumahai

DEPUTY CHAIR | HE POU A RANGI CLIMATE CHANGE COMMISSION

CHAIR | TE RŪNANGA O NGĀI TAHU

There are many things happening globally that affect Aotearoa and the climate change transition. Because the way the world is interconnected, global trends may provide both headwinds and tailwinds for the transition at the same time.

The latest science also shows that we have the tools & the know-how that if we scale efforts up we can actually do this.

The philanthropic community can take prompt action, achieve faster results than government, and plan beyond short-term political cycles.

As iwi/Māori, we are inspired by the leadership our tūpuna demonstrated.

Their commitment to conscious innovation and development to support the wellbeing of our people and the taiao intergenerationally helps us stay focused on achieving our climate change goals, but we need to all get behind the kaupapa.

From their perspectives as tangata whenua, rangatira and kaitiaki, iwi/Māori organisations already know what is required in their rohe to reduce emissions and build climate resilience in their communities.



CLIMATE INVESTMENT OPPORTUNITIES:

- 01 Accessible innovation and technology that can unlock and support deeper and faster emissions reductions, while also building resilience to climate impacts.
- 02 New business models and new ways of working, as well as financial support for low-income households, marae, and papakainga to access the benefits of lower emission vehicles, homes and energy.
- 03 Exotic forests are faster growing and generate better economic returns. However, philanthropy can support native planting - prioritising broader intergenerational co-benefits, such as improved water quality, restored biodiversity, and carbon storage, rather than short-term economic returns.
- 04 Pest reduction to protect carbon stored in forests

CLIMATE FUNDING OPPORTUNITIES:

- Partnering with iwi/Māori organisations to fund an exploration into mātauranga Māori - to support enduring and equitable climate action for people and the taiao.
- Better integration of mātauranga Māori into research around public policy and social science to support an equitable low-emissions transition.
- Partnering with mandated iwi and hapū representatives to support their localised emissions reductions and climate adaptation strategies.





Mike Smith, Iwi Chairs Forum | Climate Change Spokesperson

Mike Smith

IWI CHAIRS FORUM | CLIMATE CHANGE SPOKESPERSON

Managed retreat from the coastline is a real threat that we're grappling with right now.

The unanswered question is "where are we going to go, where are we going to relocate these communities?"

We can't find any groups that fund or make grants available for land purchases... and yet that's one of the most fundamental aspects of climate resilience, it's the foundation of everything. Food security, habitation security - without that land base, nothing happens.

This is a major shortfall in philanthropic funding.

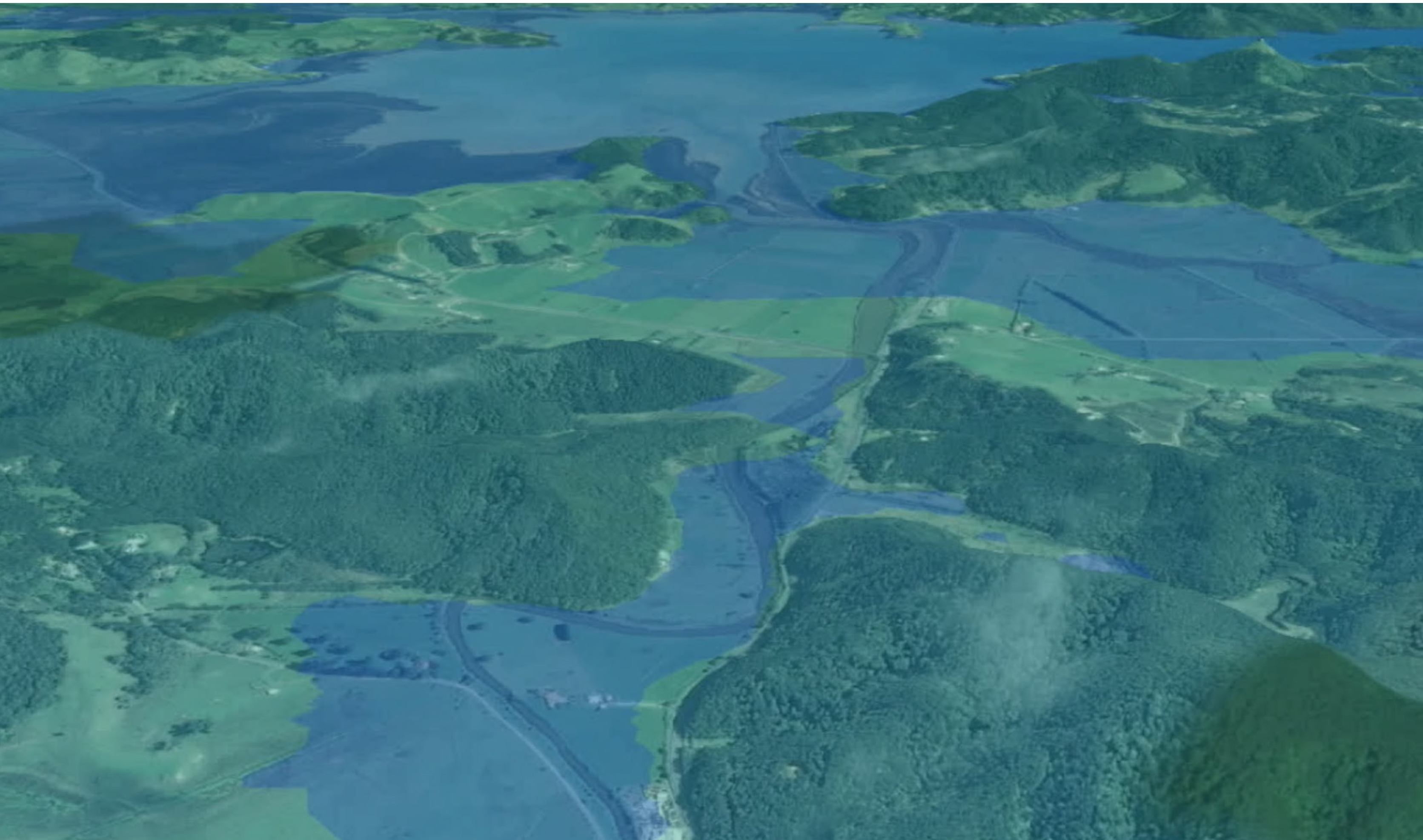
INVESTMENT OPPORTUNITIES:

- 01 Land acquisition to enable managed retreat
- 02 Dollar-for-dollar investment on projects

For more information, contact
Hinekaa Mako: hinekaa@gmail.com



Flooding / sea level rise projections around Whaingaroa in the Far North



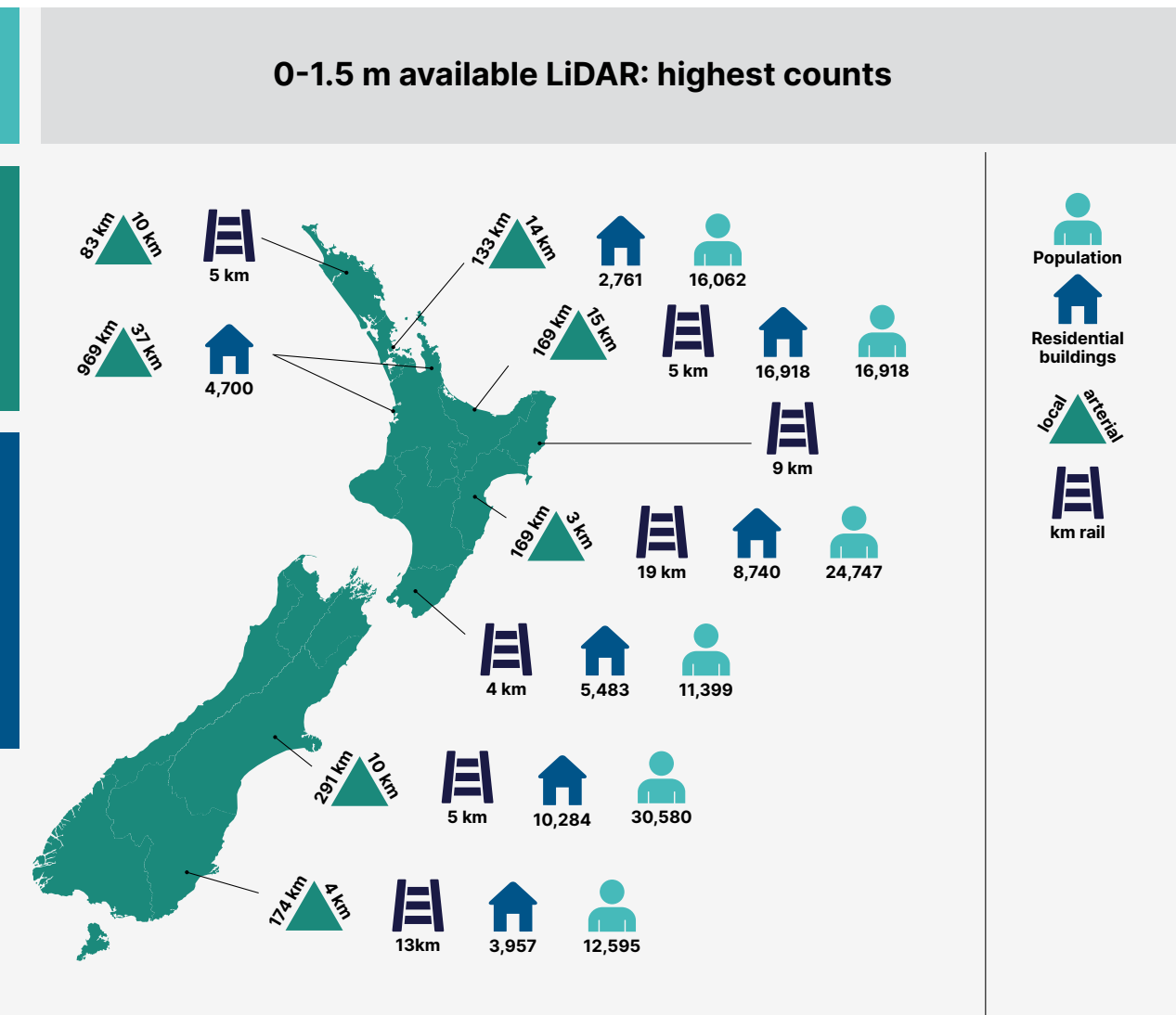
Flooding in early 2023 at Waikoura



Replacement cost of all buildings: \$19B (2011)

Total No. of residential buildings: 43,680
 Total No. all buildings: 68,170
 Total resident population: 133,265 (Census 2013)

National infrastructure
 - 382 critical-facility buildings
 - 5 airports
 - 1,547 jetties & wharves
 - 2,121 km of roads (1,930 km local roads)
 - 46 km railway





Lucas Kengmana, Senior Investment Strategist | NZ Super Fund

Lucas Kengmana

SENIOR INVESTMENT STRATEGIST | NZ SUPER FUND

Climate risk is not being priced appropriately by the market. “As a long-term investor, if we’re not getting rewarded for taking risk, we seek to reduce it.”

NZ Super Fund has shifted its passive, index-linked global equity benchmark to a Paris-aligned benchmark. It is working through a process of enhancing the ESG profile of its other assets, starting with its multifactor equities strategies.

It is creating a portfolio optimised to deliver a range of climate outcomes as well as maintaining investment risk exposures appropriate to a fund with a long-term horizon, such as a heavy weighting to growth assets. It has invested in climate solutions in infrastructure and VC funds, carbon credits and carbon forestry.



NZ Super Fund has four elements within its Climate Change Investment Strategy:

- 01 REDUCE** – set targets for reducing emissions across the portfolio (carbon intensity and exposure to fossil fuel reserves).
- 02 ANALYSE** – analysing the impact of climate change on investments and employing the discount cashflow model to adjust for expected returns for climate change. “This means that often, we would not invest in things if we thought they would not do well in a world where climate change was happening.”
- 03 ENGAGE** – with our investee companies, managers, policymakers, and governments to encourage action on climate change.
- 04 SEARCH** – for investments that would do particularly well in a zero carbon world; i.e. investing in climate solutions.



Linn Araboglos, CEO | Wellington Community Fund

Linn Araboglos

CEO | WELLINGTON COMMUNITY FUND

Most funders have a long-term horizon as in perpetuity trusts, and are relatively politically independent. That means they have the ability to weather the storms of political change, and to fund innovation.

Philanthropic organisations have the ability to take some of the risks that others may not be able to.

Philanthropic investors and grant-makers represent hundreds of millions of dollars of granting capacity and billions of dollars of assets under management. Yet only around 4% of philanthropic funding in Aotearoa goes to environmental outcomes.

Philanthropy can't only be about granting. A large part of the influence and power we have to actually affect change is through our investment portfolios, which are our biggest resources.

The values we bring to our work in philanthropy must extend to our biggest resources.

Checklist of climate investment questions – for philanthropic funders and investors:

- 01** Do our existing investments reflect the 'tika' or 'just transition' principle of kaitiakitanga?
- 02** Are our investment partners/suppliers committed to climate responsible investing and practices? Have you asked?
- 03** Do we know our targets / measures for climate responsible investments?
- 04** Have the rights and interests of future generations been considered in our decision making?
- 05** Do we have the right information that helps us assess climate risks along the value chain?

The Funders' Commitment on Climate Action

Developed by a group of community trusts.

A voluntary pledge outlining seven commitments.

Modelled on overseas commitments, with a uniquely Aotearoa lens.

The 14 signatories have a granting capacity of over \$100m per annum and collectively hold billions of dollars in assets.



THE PLEDGE HAS FOUR STRATEGIC PILLARS:

01 INVESTMENT PORTFOLIO - including impact investments

02 GRANTING STRATEGY - including increased funding to climate action

03 OPERATIONS - reduce GHG footprint of our own organisation/ carbon accounting

04 COLLECTIVE ACTION, ADVOCACY & LEARNING - with communities, other funders and strategic partners.

THE COMMITMENTS ARE:

- Reflect Te Tiriti o Waitangi and support Māori aspirations regarding climate action
- An equitable transition
- Enable leadership, especially tangata whenua, rangatahi and marginalised communities
- Commit and share resources
- Learn and grow
- Decarbonise investments and operations
- Report on progress.

COMMIT TODAY:

climateactionaotearoa.co.nz

Panel discussion: barriers and enablers for climate investment

BARRIERS:

- Business as usual is the easiest path of least resistance.
- The misperception that investing towards net zero means taking a haircut on returns or taking more risk. But, there are many exciting opportunities that will be higher-returning because they'll benefit from the transition to a greener economy.
- Sometimes getting all trustees on the same page can take time.

ENABLERS:

- It can be helpful to focus on likely commercial returns rather than defining opportunities as 'social' or 'impact' investments.
- Talk about decarbonisation (what corporates are doing right now) rather than 'climate change' (can seem overwhelming).
- Knowhow is important - reach out and ask for help. Climate change is complex: it's scary to tackle it because you have to admit you don't know everything about everything.
- Work with a carbon footprint provider who can engage with your advisors and fund managers.
- Supporting fund managers and holding them to account can have ripple effects into investee assets.



“Not getting too hung-up on the accounting in a net zero world but actually directing capital towards some of these solutions is really important.”

KATHERINE WARD, CAMBRIDGE ASSOCIATES

A woman with blonde hair, wearing a white patterned top, is speaking into a microphone. She is looking slightly to her right. The background is a blurred indoor setting. The text 'Practical steps to aligning your portfolio to net zero' is overlaid on the left side of the image in white, bold, sans-serif font.

Practical steps to aligning your portfolio to net zero

Insights from our panel:

- Joining a pledge, like the Funders' Commitment on Climate Action, can give you access to a community and resources that will help you on this journey.
- Just get started.
- Instead of defining values, imagine the world you want in 30 years' time, then work out what to invest in to bring about that world.
- Get the support of your board for an aspirational strategy, then invest in it.
- Seek advice and values aligned partners.
- Set targets and work backward from them.
- Look at reporting against the climate disclosure standards to identify climate risks.
- Join an international pledge such as the Net Zero Asset Owners Commitment, which has frameworks you can utilize.
- Measure your portfolio's carbon footprint today. This allows you to identify low-hanging fruit and is relatively easy to do for listed assets through data providers.
- Use listed sector exposures for initial estimates for private assets.
- Make a small impact allocation. Allow for a slightly lower return or higher risk, while avoiding a material impact across the whole portfolio.
- You have to make do with the best data available, despite gaps.
- Focus on retooling and driving down emissions rather than buying carbon credits – that's a last resort.

How should we be thinking about 'exclusions' and 'engagement'?

What's good and bad engagement?

- It can be quite easy for asset managers to use some of these terms to give an impression that they're doing a lot about climate when in reality they might not be.
- There is no right answer. It is valid to say we'll continue to hold a stock and engage with a company and force change, but we need to be clear about what the engagement will be and the desired outcome.
- You can step away from emissions-intensive industries, or step into them to help them become more sustainable in partnership with scientific and technological experts, as Ngāi Tahu is doing with its dairy farms.
- One approach is to restrict engagement to New Zealand companies, who may be influenced by New Zealand investors (whereas big multinationals won't be).
- Most clients opt for divestments from companies making the majority of their money from fossil fuel reserves.
- Ensure investors and fund managers are well-aligned.
- Don't be afraid to exclude.



A unique role for philanthropy?

- Philanthropy is well-placed to invest in the climate 'disrupters' needed to drive the transition: the two biggest are renewable infrastructure and venture capital.
- Philanthropic investors can deliver outsize returns by proving out things like regenerative agriculture where there is some evidence that there might be a solution there but robust financial data is still scarce.
- Engaging earlier with iwi/Māori. There's a case for iwi/Māori owning critical infrastructure: this would keep profits in NZ and redistribute via iwi entities – a form of impact investing. Iwi/Māori need partners to do this.



Climate solutions – illustrative investment opportunities

01. **Pathfinder**
02. **Mission Studio**
03. **Climate Venture Capital Fund**
04. **EnviroStrat GreenWave Aotearoa**
05. **Lodestone Energy**
06. **Tāmata Hauhā**

01

Pathfinder

At a glance

A managed fund investing in global Green Bonds, targeting above-average bond market returns over a 3+ year period. Currently open for investment.

Who's involved

Manager: Pathfinder

CEO: John Berry

CIO: Paul Brownsey

Directors: Sandy Maier (Chair), Mei Fong, Brett Gamble, Ben Gough, Anya Satyanand

Sub-investment manager: Affirmative Investment Management (UK based)

Custodian: Public Trust

Green Bonds

www.pathfinder.kiwi

john.berry@pathfinder.kiwi

01. Pathfinder

IMPACT OPPORTUNITY

The Pathfinder Green Bond Fund invests in global Green Bonds. Businesses (like banks, power generators, property companies and industrials), governments and supra-national organisations can issue Green Bonds. The 'green-ness' is not about who is borrowing the money, but rather the purpose and authenticity of the specific climate or environmental project the Green Bond is financing. Projects can range from solar energy in Cambodia to climate adaption in the Netherlands.

INVESTMENT OPPORTUNITY

About the Manager: Pathfinder Asset Management Limited is a subsidiary of Alvarium (NZ) Wealth Management Holdings and is 100% locally owned. Its ultimate owners include Pathfinder's co-founders John Berry and Paul Brownsey (together, 30%) and Ben Gough, Andrew Williams and Brett Gamble (together, 60%).

Investment focus: NZ's first dedicated Green Bond Fund, with investments selected by Affirmative Investment Management (the sub-investment manager). Affirmative is widely regarded as one of the global leaders in Green Bond investing. In the event insufficient Green Bonds are available, Affirmative can select approved environmental bonds for a limited part of the portfolio.

Fund detail: PIE fund structure. All-inclusive annual Management Fee of 0.60% p.a. + GST (negotiable on large investments). The Fund's benchmark (a comparable market index) is the Bloomberg Barclays Global Aggregate Bond Index hedged into NZ dollars.

Value proposition: The Fund offers ethical investing in global Green Bonds to achieve sustainable long-term risk-adjusted returns.

Asset allocation: The target allocation is 100% international fixed income, hedged to NZ dollars.

OUTLOOK

TARGET RETURNS AND INVESTMENT HORIZON

The Fund targets above-average bond market returns over a 3+ year period. It is suited to investors with a medium tolerance to risk and a minimum timeframe of 3+ years.

There is no guarantee of future performance or financial returns.

DEFINITIONS

Bonds, means fixed income or debt securities (not shares or equity securities).

Green Bonds, means bonds funding 'green purposes' such as clean transportation, clean water access, increasing resilience to extreme weather events and renewable energy supply networks.

Disclaimer: This document is for information purposes only, and is not investment, legal or tax advice. Nor is it a recommendation to take any course of action. Pathfinder Asset Management Limited is the issuer. A PDS is available at www.pathfinder.kiwi



At a glance

The Hillary Institute and Edmund Hillary Fellowship (EHF) are building a Mission Studio where our first grand challenge is climate innovation. The Mission Studio is about activating exceptional people and innovative projects to power up system solutions from Aotearoa.

Who's involved

Chief Executive: Rosalie Nelson

Chair: Anna Kominik

Directors/Trustees: Camia Young, Ian Short, Andrew Hoppin

Hillary Laureates & EHF Fellows: The Mission Studio brings together two global communities of over 500 Hillary Laureates & Edmund Hillary Fellows

Studio Team: Cheryl Reynolds, Alex Hannant, Dan Khan, and others.

System Change

www.ehf.org/news-blog/a-new-expedition-the-mission-studio

cheryl@ehf.org

02. Mission Studio

IMPACT OPPORTUNITY

The Mission Studio was announced in February 2023, along with the grand challenge of climate innovation and four mission focus areas:

- **Energy Transition:** Limit global temperature increase to 1.5C. NZ has net-zero long-term emissions by 2050;
- **Nature Restoration:** Protection and restoration of 50% of our lands and ocean;
- **Sustainable Food:** Help sustainably feed 10 million people: A shift to net-zero food and fibre systems;
- **Resilient Communities:** Adaptive infrastructure, cities and communities to address climate impacts.

The Mission Studio will be the 'connective tissue' to:

- **Convene** leaders, funders and innovators around a mission-led response, starting with climate change;
- **Activate** the connections, capital, and capabilities required to mobilise collective action;
- Hold stakeholders **accountable** to a quantifiable model of impact on specific climate outcomes;
- **Inspire** the world to accelerate action through storytelling, learning, and partnership.

INVESTMENT OPPORTUNITY

Investment areas: There is the ability to invest in the following areas: the platform, the programme, and projects. The Hillary Institute (a New Zealand charity) and its parent organisation EHF will own The Mission Studio platform and programme, including the protocols and systems impact. Projects will be participant-owned.

Business model: We are gathering funding and investment commitments to establish The Mission Studio from our Fellows, Board, Team, and others, and we are offering opportunities for philanthropists and investors to partner with us as The Mission Studio maps its pathway towards a self-sustaining business model.

Value proposition: Fellows and Laureates bring unique capability – global influence and voice, knowledge of markets, innovation, connections and resources. The Mission Studio is designed and developed to harness this value, and is powered by the Hillary Institute and EHF to provide the **innovation infrastructure** to enable radical collaboration for collective impact. This includes mobilising capital, capability, and connections, and acting as the 'connective tissue' needed for systems transformation.

Standing true to our roots, role and responsibility, The Mission Studio will be underpinned by the values of Sir Edmund Hillary, and Te Ao Māori principles, recognising Te Tiriti o Waitangi as our founding document.



At a glance

The Climate Venture Capital Fund invests in high-growth Australian and New Zealand companies that promise high climate impact and high returns. Eligible wholesale investors only. Not currently open for investment.

Who's involved

Partner: Rohan MacMahon

Partner: Lance Wiggs

Partner: Dr Jez Weston

2040 Ventures Team: Chris Humphreys, Nadine Hill

ONE MILLION TONNES

Emissions reduction target per \$50m invested

Funds invested to date not disclosed

Climate venture capital

www.climatevcfund.com

rohan@2040ventures.com

03. Climate Venture Capital Fund

IMPACT OPPORTUNITY

The Fund invests in early-stage companies with a high climate impact, including those commercialising technologies that can materially reduce greenhouse gas emissions. After launching in 2021, the Fund is already on track to exceed its goal of saving 1 million tonnes of greenhouse gas emissions per \$50 million committed.

INVESTMENT OPPORTUNITY

Ownership: Limited Partnership private fund

Manager: 2040 Ventures Limited (also managers of the Punakaiki Fund, ~\$100m funds under management)

Business model: The Fund invests to deliver commercial venture capital returns for investors. It has an external impact committee, and measures emissions impact using the IRIS+ Metrics developed by the Global Impact Investing Network to measure and report impact.

Investments to date:

- Cleanery: Auckland, low-waste cleaning and personal care
- MGA Thermal: Australia, thermal energy storage
- Liquium: Wellington, green ammonia for fuel and fertiliser
- Zincovery: Christchurch, low emissions zinc recycling

Value proposition: Invest in high-growth, early-stage Australian and New Zealand companies with high climate impact and potential for high returns.

OUTLOOK

GROWTH PLANS AND TARGETS

The Climate Venture Capital Fund closed for new investors in 2022, and will be placing new investments until 2025. We are considering offering a second Climate VC Fund due to the capital required to address climate change and the extensive pipeline of investable opportunities in this space. For further information please feel free to get in touch.

PROJECTED ROI AND INVESTMENT HORIZON

The Climate VC Fund seeks to make strong commercial returns for investors (>20% target IRR) as well as measurable climate impact. Like most venture capital, the investment horizon is medium-long term.

EnviroStrat

At a glance

EnviroStrat with its partners have developed and are piloting regenerative ocean farming projects in NZ. GreenWave Aotearoa is a commercial pilot aimed at the creation of a sustainable, end to end seaweed supply chain utilising a high impact, farmer centric model

Who's involved

Project Lead: EnviroStrat

Partners: Premium Seas, Ngāi Tai ki Tāmaki, University of Waikato, University of Auckland, AgriSea,

Initial Funding Partners: Auckland Council, Bay Trust, Foundation North, and The Tindall Foundation

Ongoing Investors: Ministry for Primary Industries - SFFF Fund, Philanthropy, Private Capital

CEO: Dr Nigel Bradley

Director of SI: Eddie Christian

Natural resource sector advisor and impact investment project developer

www.envirostrat.co.nz

eddie.christian@envirostrat.co.nz

04. EnviroStrat GreenWave Aotearoa

IMPACT OPPORTUNITY

1. Environmental

- Provision of ecosystem services including water quality and biodiversity improvement
- Increase in biodiversity by 4x in local habitats
- CO2 & nutrient sequestration from farmed seaweed

2. Cultural

- Use mātauranga Māori (traditional knowledge)
- Māori employment in aquaculture
- Enhance mauri (wellbeing) & vitality of coastal waters

3. Social

- Small business ownership and wealth creation
- Productive training and employment opportunities
- Enable rapid scaling post-pilot

4. Economic

- Direct employment growth potential in region (on farm & processing)
- Create a new commercially viable supply chain with further growth opportunities
- Bridging the financial gap for RO farmers

INVESTMENT OPPORTUNITY

In 2021, EnviroStrat, along with its partners, commenced an ambitious \$5.3M, 3-year pilot project to prove and enable commercial-scale seaweed farming in NZ by adapting GreenWave's farming model for the NZ context. At the heart of this regenerative ocean farming model are profitable independent marine farmers from local communities that build economic and social resilience for their communities.

The pilot focuses on the identification of the optimum growing environment, hatchery development, planting techniques and harvesting processes. In September 2022, GreenWave Aotearoa delivered its first out-planting at scale of hatchery-grown *Ecklonia radiata* seaweed.

As the pilot concludes, there is an opportunity to invest in supporting the expansion of supply through co-investment in farms and increasing value by new product development and ensuring a secure & sustainable supply of NZ seaweeds to manufacturers.

OUTLOOK

FUTURE PLANS AND TARGETS

by 2026 - 250 farms

Impact of:

3,248,180 linear metres of seaweed

45,360 kgs carbon* and 3,628 kgs nitrogen*

PROJECTED IRR AND INVESTMENT HORIZON

Target IRR of 8-11% on a 15-year investment horizon

05



LODESTONE ENERGY

At a glance

Lodestone Energy is leading the development of Aotearoa New Zealand's largest ever solar project: five solar farms from Northland to Bay of Plenty. Its mission: bringing solar to the mainstream energy market.

Who's involved

Chair: Jack Matthews

Managing Director: Gary Holden

Directors: Guy Haddleton, Joanna Perry, Sam Morgan, Susan Paterson, Will Thomson

Major shareholders: Gary Holden (32%), Guy Haddleton (21%)

Purpose Capital led a \$10M syndicated impact investment into Lodestone Energy. The syndicate consisted of Purpose Capital Impact Fund, Trust Horizon, Tauhara North No2 Trust, as well as investors from the Purpose Capital Impact Fund.

Clean energy

www.lodestoneenergy.co.nz

info@lodestoneenergy.co.nz

05. Lodestone Energy

IMPACT OPPORTUNITY

Transpower has estimated New Zealand will need to double electricity generation by 2050 as the vehicle fleet is electrified and fossil fuels are replaced with electricity in industrial heat processes. Lodestone's solar farms will increase New Zealand's solar production by eight times and act as one diversified power plant, reliably feeding electricity into local networks while allowing the land to continue to be productive, with over 85% of baseline farming yield expected when the solar farm is operational.

Lodestone's first five solar farm projects will generate enough energy to power 50,000 homes or a city the size of Hamilton.

Lodestone aims to deliver solar projects through collaboration and partnership with community and stakeholder groups. Solar is renewable, uses no water, creates no pollution, makes virtually no noise and releases zero emissions.

INVESTMENT OPPORTUNITY

While the first 5 sites are fully invested there are several international developers with portfolios of partially developed sites who are now looking to exit the market. The challenges of selling the power and finding contractors has become insurmountable for some. The Company expects that this second phase would dimensionally add eight farm sites and represent a capital expansion of \$400M to \$500M. The Company is currently developing its second phase equity raise strategy and expect to be coming to market mid-2023.

OUTLOOK

GROWTH PLANS AND TARGETS

Construction has commenced at the Kaitaia site. Finance has been arranged and a blessing of the 32MW Edgumbe site takes place this week. Expecting to complete financing arrangements for the Waiotahi site by the end of Quarter 2 2023. The Whitianga site is next and Dargaville the final site to be developed.

PROJECTED ROI AND INVESTMENT HORIZON

15% IRR | Trade sale or IPO listing in 5-7 years

At a glance

Tāmata Hauhā is a private company that partners with New Zealand farmers and Māori landowners to develop their non-productive marginal lands.

We utilise the New Zealand Emissions Trading Scheme as an economic and environmental enabler to create landowner economic prosperity and well-being.

Who's involved

Founder and Kaiwhakahaere Matua: Blair Jamieson

Directors: Dr Hans Albrecht, Andrea McKenzie, Richard Pinfold, Roland Toder

Utilising forestry and direct investment to unlock Māori development

www.tamata.co.nz

kiaora@tamata.co.nz

06. Tāmata Hauhā

IMPACT OPPORTUNITY

Our experienced team of 'whenua advisors' are Māori landowners themselves who understand the frustrations of applying for Government funding, or the challenges of raising capital for upfront investment required to bring Māori land into production – particularly as Māori landowners are unable to utilise their land as security to raise debt.

Māori are significant landowners and asset holders, innovators, and ecological leaders. Māori have always had strong cultural, spiritual and environmental values and sustainable land use practices. These values and practices continue today, placing the care of the environment and its people at the heart of Māori identity.

Today, approx. 1.26 million hectares is vested in some 8,463 Māori land entities or Trusts, which have an average size of 14.8 hectares and average of 45 owners. Less than 5% of the total New Zealand area remains in Māori ownership (including 2.6 million hectares comprising customary and Māori freehold land titles only).

Approximately 80% of Māori freehold land is yet to realise its development potential. 265,790 hectares are not currently vested in management structures or Trusts and remain ungoverned, with an average size of 108 hectares and average 204 owners.

Our approach is designed to restore indigenous habitat and increase biodiversity, as well as create soil stabilisation on marginal non-productive land, especially farmlands and regional catchments impacted by recent cyclone events.

To do this well, Tāmata Hauhā provides landowners with all the capital investment required to improve productivity of their land assets. We then apply mātauranga Māori knowledge systems, cutting-edge science and government support to help alleviate the economic and environmental management burdens currently placed on New Zealand landowners.

INVESTMENT OPPORTUNITY

Ownership: Pacific Channel (57%), Christian Albrecht (13%), Sturgess Holdings/Tom Sturgess (9%), plus 10 smaller holdings.

Business model: Landowners provide the land, and Tāmata Hauhā provides all the finances – and carries the financial risk – to develop forests: firstly exotics and then natives. Once entered into the Emissions Trading Scheme (ETS), the landowner receives 50% of the profits for 16-20 years and from then on 100%. The agreement often ends at that point with the management of the forest returning to the whānau, though Tāmata Hauhā also offers additional or ongoing support for landowners.

Value proposition: Landowners do not have to front up with any money and receive half the returns, which are far greater than many sheep and beef operations utilising marginal land.

OUTLOOK

GROWTH PLANS AND TARGETS

2022 (Completed): 1856 hectares

2023: 2204 hectares

2024 (Pipelined): 5500 hectares

PROJECTED IRR AND INVESTMENT HORIZON

Equity Raise (Presently Open):

11% IRR on 20-year investment horizon

Equity Raise, and \$50M Matike Taurikua (Fintech) Investment by another party: 22% IRR on 20-year investment horizon

Equity Raise, and \$100M Bond Investment by another party:

31% IRR on 20-year investment horizon

Investing in climate solutions

Progress on climate change will require a lot of capital from many different players, across various asset classes over a long period of time, to address the investment needed. This paper examines some of the many ways that investors are trying to address climate change and different climate impact investment options, whether aiming for investment returns or impact benefits, or a combination of both.

This paper was provided for attendees at the April 2023 “Investing in Climate Solutions” conference.

Note: Nothing in this document constitutes investment advice.

[READ THE PAPER](#)



Psychological & Land IMPACT



Sue McCabe

Importance of funding indigenous led trusts & projects



IMPACT

ADVOCATE

RESPONSIBILITY

Get behind the kaupapa

Planting trees



investing

Move papatūānuku into the room

6th Global EXTINCTION EVENT



Mike Smith

Recession affects all sectors



Tina Pora

Covid impact compo climate



CLIMATE SOLUTIONS



Restore the cloak of Papatūānuku & the mana of Tane mahuta

Warmer Wetter WILDER?! Windier

A world our mokopuna can live in

Our children after us and the children after them

26 April 2023



What will you do?

ACTION

LONG TERM perspective

Let's keep GOING

The World has warmed

0.5 degrees



Do the same with climate care



BRING BALANCE



FUTURE



Mokoouna care

I want to be a grandmother



Lisa Tumatai

Science

30 years since UN = Rio Conventions

ENING

DERFUL here

WITE & ARE

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We acknowledge the support of WEL Energy Trust to enable us to share the lessons from this event.

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