RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

Progressing Climate Action by Driving Transformational Change

A speech delivered to the 2020 Pacific Ocean, Pacific Climate Change Conference

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Introduction

Kia orana tatou katoatoa, talofa lava.

Thank you to the organisers – the Government of Samoa, Victoria University of Wellington, the National University of Samoa, and the Secretariat of the Pacific Regional Environment Programme – for the opportunity to contribute to the conversation on how to progress climate action for the people of the Pacific. Today I've been asked:

How do we make transformational change to manage climate risks in the Pacific?

This is an important, difficult, and urgent question. To promote transformational change, the issue that needs addressing must be convincingly important, imminent, and personal. Our recent history – and lack of collective action – has highlighted how difficult it is to ignite this sense of urgency for climate change transformation.

Climate change transformation will involve developing and implementing renewable energy strategies, 'greening' the financial system, and managing economic and social adaptation. A full suite of plans and activities is necessary for such a significant task. But they also need to be viewed as real and tangible – not abstract and intellectual.

Transformational change needs to be motivated through engaging both minds and hearts in individuals, institutions, and broad society. Each of these levels interweaves, and builds on and supports each other.

As Pacific Islanders we have lived with constant change. Throughout, however, we have continued to honour others and retained our deep integration with nature. Now, against a backdrop of environmental threats, the world needs our way of being, our 'mōmō', more than ever.

Individual transformation

My personal story of transformation begins here in the Pacific. Nooroa, my granddad, left the beautiful island of Atiu in the Southern Cook Islands and came to Aotearoa New Zealand in the 1930s. When he left Atiu the average temperature would have been around 24^{o}C. It must have been a shock to settle in Taupō, in the interior of the North Island of New Zealand, where the average temperature was just over 10^{o}C.

Yet Nooroa prospered. In the cold pumice soils of Taupō he grew everything – potatoes, broad beans, pip fruit, and even an avocado tree. He demonstrated how to plant, conserve, and preserve. He ingrained in me the type of change Māori know as te iho – a change that seeps into your bones.

I have remained inspired by the notion of kaitiakitanga – or guardianship – from Polynesian culture. I know, however, that this notion is common across cultures.

It is now critical that we use our guardian mind-set more than ever given that the world of the 1930s no longer exists. Compared to Nooroa's world, the average temperature has increased 1 degree, the sea is rising and extreme weather events such as storms are expected to increase in intensity and frequency.[1] Auckland experienced its longest dry spell of 47 days this year, well above the average length of 10 days.[2]

At our home in coastal Bay of Plenty, we continue gardening, but the crops have changed. Sustainability in 2020 also means adapting the garden to protect our home. We've been planting Pīngao, a grass to help bind the sand and build the dunes. This is to help protect our home – for now – from the 21cm of global sea level rise projected by 2040 if emissions remain high.[3]

As people of the Pacific know as well as anyone, climate change is lapping, and increasingly crashing, at our doors.

Institutional transformation

Shifting now to institutional change, I'm going to share where we're going at Te Pūtea Matua, the Reserve Bank of New Zealand.

As New Zealand's central bank, we are the kaitiaki of the financial system tasked to maintain and enhance financial stability. We act collectively to promote the prosperity and well-being of all New Zealanders. We do this in large part by promoting a sound and dynamic monetary and financial system – a necessary platform for a sustainable and productive economy.

One of our core activities is assessing material risks to banks and insurers, and the financial system as an ecosystem. Climate change is a key risk to global financial stability.[4]

New Zealand being a small, island nation with an agricultural-based economy means we will be impacted differently than others. And thus, we must keep our preparations in tune with our environment and resources for our economy to prosper.

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[1] MFE (2020) National Climate Change Risk Assessment New Zealand Snapshot
[2] Our Atmosphere and Climate 2020 summary *https://www.mfe.govt.nz/node/27249* *Against an average of 10 days for 1960–2019.*
[3] MFE (2020) National Climate Change Risk Assessment New Zealand Snapshot
[4] Reserve Bank and Climate Change

And here is the challenge: climate change and its associated risks provide a direct challenge to financial stability, however the risks are material but extremely difficult to identify, price, allocate, and manage with accuracy.

We will never have perfect information on the risks of climate change, but we do know that climate change holds far-reaching implications for New Zealand's financial system. The environment and the economy are interdependent.

The New Zealand Treasury estimated that the 2007/08 and 2012/13 droughts jointly reduced GDP in New Zealand by around $4.8 billion.[5] The National Institute of Water and Atmospheric Research (NIWA) estimates $12.5 billion of property is already exposed to extreme coastal flooding in New Zealand, and that each 10cm of sea level rise puts another $2.4 billion of assets at risk.[6] And the frequency and severity of floods and droughts – like Northland in New Zealand experienced this year – will increase with climate change.

As well as physical risks such as these, there are also adaptation risks associated with the shift to a climate resilient economy – such as the impacts of 'flight shame' or the accelerated pricing of greenhouse gas emissions. These risks can intensify and snowball. It is not hard to imagine agriculture facing a triple whammy: a pummelling by drought, a consumer shift towards plant-based protein, and regulations to ensure transition to a low carbon future.

We have moved to incorporate climate change as a key priority in our activities.[7] Our strategy has three components: incorporating climate change into our core functions; managing our direct impact on the climate; and leading through experience and collaboration.

We are getting our own house in order.[8] This month we reported our verified carbon footprint for the first time in our annual report. This covers our direct emissions.[9] We are now working on an emissions reduction plan, including reviewing our reserves portfolio.

We are also building our climate expertise and awareness through training and development for all staff, and building our technical expertise. In particular, we are stepping up our supervision of climate-related risks for banks and insurers. We have recently completed

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[5] D. Frame, S. Rosier, T. Carey-Smith, L. Harrington, S. Dean, I.Noy (2018), *Estimating financial costs of climate change in New Zealand*, New Zealand Climate Change Research Institute, and NIWA

[6] Niwa (2019) Coastal Flooding Exposure under Future Sea-level Rise for New Zealand. Accessed at https://www.deepsouthchallenge.co.nz/projects/national-flood-risks-climate-change. A second study, of modelling flooding from rainfall and rivers, estimated that around 411,000 were currently exposed along with 20 airports and 3400km of electricity transmission lines. Niwa (2019). New Zealand Fluvial and Pluvial Flood Exposure. Accessed at https://www.deepsouthchallenge.co.nz/projects/national-floodrisks-climate-change

[7] Reserve Bank Climate Change Strategy

[8] Working together to strengthen resilience, develop culture, and support economic recovery, a speech delivered by Assistant Governor Simone Robbers to the 16th Financial Markets Law Conference on 22 Oct 2020

[9] Reserve Bank Annual Report 2019 – 2020 (see page 28)

training our supervisors in climate-related risks and are integrating climate risks into our supervision frameworks.

Societal transformation

At a societal level, change can be incremental or driven by a shock. For example, right now, the COVID-19 pandemic is a shock causing global change. From a financial perspective, COVID-19 has again highlighted why we need to guard against systemic risk.[10] The inescapable nature of the current global health crisis has parallels for what climate change may have in store for us.

We need to think about the challenges and opportunities that lie ahead. We have opportunities for a more sustainable economic recovery form the ravages of COVID-19 by rebuilding our economies in a more environmentally sustainable manner.

To build a more sustainable economy globally we are going to need all hands on the pump. Public and private sector knowledge and capital must be mobilised together. No one party can afford to tackle the challenge alone. The UN Environment Programme estimates, for example, that global greenhouse gas emissions must be cut by 7.6% a year from now until 2030 to meet a 1.5°C temperature goal.[11] The International Energy Agency estimates that such action will require US$3.5 trillion per annum until 2050 for energy sector investments alone.[12] Collaboration and co-investment is necessary. After all, we live in a world with a global glut of savings and massive infrastructure deficits. We need to connect capital and opportunities.

Work is already underway in our Pacific region – but it will take ongoing collective effort from the public and private sector, and through appropriate incentive structures. For example, in 2017 Fiji issued a sovereign green bond.[13] In 2019 the Asian Development Bank launched in Fiji an Action Plan for Healthy Oceans. Their plan is to finance ocean health and marine projects up to $5 billion from 2019 to 2024 for Asia and the Pacific, including co-financing from partners.[14] And, the New Zealand Super Fund is one of 18 founding members of the Pacific

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[10] Banking the Economy in Post-COVID Aotearoa, a speech delivered by Deputy Governor Geoff Bascand to banking industry representatives in Wellington on 31 July 2020

[11] UN Environment Programme https://www.unenvironment.org/news-and-stories/press-release/cut-global-emissions-76-percent-every-year-next-decade-meet-15degc

[12] Grantham Research Institute on Climate Change and the Environment, Climate change and the just transition A guide for investor action https://www.unpri.org/download?ac=9452

[13] The Role of Ocean Finance in Transitioning to a Blue Economy in Asia and the Pacific https://development.asia/explainer/role-ocean-finance-transitioning-blue-economy-asia-and-pacific

[14] ADB Launches $5 Billion Healthy Oceans Action Plan https://www.adb.org/news/adb-launches-5-billion-healthy-oceans-action-plan

Islands Investment Forum (PIIF) actively sharing expertise on how to integrate climate change into investment strategies.

Regulatory policy is another tool to drive transformational change. At the Reserve Bank we are playing our part in contributing to New Zealand's climate response. For example, we are contributing to the Sustainable Finance Forum, submitted on the Zero Carbon Act[15] and are contributing to the development of New Zealand's first National Adaptation Plan.

We also support the proposal for mandatory disclosure of climate-related financial risks.[16] More good quality, comparable information being disclosed by the firms we regulate is critical to climate change management. And we are taking every opportunity to highlight the risks to financial stability from climate change and the need for an effective response. For example, our bi-annual *Financial Stability Reports*[17] have highlighted the systemic risks from climate change and this focus will continue. In the last month we highlighted climate risks amongst audiences such as the NZ Australia Chartered Accountants, the New Zealand Bankers' Association, and the G30.[18]

Our collaborative climate change work is also expanding with the New Zealand Council of Financial Regulators, as well as internationally as a member of the Sustainable Insurance Forum (SIF), and the Network for Greening the Financial System (NGFS).

And we are leveraging our contribution to these global fora to step up our understanding and supervision of climate-related risks. For example, last month we drew on resources from the NGFS and SIF in training our supervisors in climate risk. Last year we collaborated with the NGFS at the South Pacific Governors' Annual Meeting in Sydney.

Conclusion

You asked for my thoughts on transformational change. This means doing things differently as individuals, institutions, and society. Climate change is a risk that requires a collective response. Grounding a response in our collective knowledge, data and expertise will strengthen its effectiveness. The consideration of climate change needs to be a 'must do' not a 'nice to have', and we need to take every opportunity to succeed, such as in our current response to the COVID-19 virus-led economic challenge.

Kei te whanakē, tangata rite.

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[15] Reserve Bank: Submission on the Climate Change Response (Zero Carbon) Amendment Bill
[16] Reserve Bank: Submission on the Climate-Related Financial Disclosures Discussion Document
[17] Reserve Bank *Financial Stability Reports*
[18] A Near Horizon: Seizing the opportunities and managing the risks in the transition to net zero: The importance of climate-related financial disclosures, remarks delivered by Governor Adrian Orr to a virtual roundtable in May 2020

“We are all of one race, we must adapt”

Meitaki.