

The Deloitte logo is positioned in the top left corner. It features the word "Deloitte" in a bold, white, sans-serif font, followed by a small green dot. The background of the entire slide is a dark teal color with a pattern of concentric, semi-transparent circles. In the center, there is a bright, circular area containing a blue sky with white clouds and several birds in flight. At the bottom, the dark, rocky peaks of a mountain range are visible.

Deloitte.

Into the wind

Capabilities to navigate uncertainty

Deloitte New Zealand
State of the State 2023

Tuia tuia.

Tuia te rangi e tū nei.

Tuia te papa e takoto nei.

Herea ngā whakaaro ki ngā mate huhua kua
riro ki te pō.

He here tē motukia.

Mihia ngā maunga whakahī, ngā awa tupuna.

Mihia ngā manu kuaka, ngā manu taupua,
i hāpai i tēnei kohinga whakaaro ki te
taumata taumatua.

He mihi e kore e oti.

Nau mai rā e ngā iwi.

E kai ō mata ki ngā kupu nei,
hei whakakitenga anamata,
hei whakahiko i te hiringa o te whakaaro.

Haumi e.

Hui e.

Taiki e.



Executive summary

01



The challenges that
lie ahead for Aotearoa
are significant



We are at an inflection point in our history – climate change and sustainability, chronic inequities, and global economic and geopolitical change pose existential threats we have not previously encountered.

The confluence of social, technological, political, and economic megatrends creates new opportunities that we may miss if we cannot perceive them and act. When we consider the critical systems of our country: health, education, housing, infrastructure, and the sustainable economy, each has significant gaps – both through underinvestment and a changing set of future requirements.

For a generation, we enjoyed broadly stable assumptions about our place in the world, about economic and social trajectories, about international cooperation on global issues, and about technological solutions to problems. We are now in a shifting epoch, characterised by complexity, uncertainty, and disruption as we transition from one normal to another. Our issues and opportunities are playing out now but require us to take a long-term view.

Our current approaches for managing change are not fit for purpose because they are mostly based on linear thinking and struggle to deal with uncertainty and complexity. Exponential changes will continue, and the COVID-19 pandemic has demonstrated how unprepared humanity was for a fast-fuse, rapidly evolving phenomenon. Global warming provides a grim example of a slow-fuse exponential problem and illustrates how tempting it can be to 'kick the can down the road' when it comes to acting.

While Aotearoa has seen success in some wellbeing domains over time, we are still facing inequities of the distribution of that wellbeing. There are ongoing challenges in delivering reform and fragility in the face of shocks. This high-stakes, high-uncertainty context further exposes gaps in our capability.

Last year's occupation at Parliament illustrates the existing disenfranchisement in our society and how readily the boundary between civil discord and harmonious society can be pierced when a coalition of disenfranchised communities is ignored whilst it grows.

Our landing point is less defined than the kuaka's;

the details of our visions vary across communities. We know that we want to navigate toward a positive future aligned with what we value. As a collective, our sights are set on a future for Aotearoa, where Papatūānuku thrives, where people and communities flourish, and a productive economy creates meaningful work and value. We can learn from the kuaka's journey to inform how we get there and how we weather the storms along the way.

In this report, we find that complexity, uncertainty, and disruption define the headwinds into which we must fly. Taken together, they mean many future states are possible, and the pathways to those future states are hard to predict. In the face of these conditions, we cannot chart a linear course to achieve the vision for our future – our choices are subject to uncertainty, and our actions will be subject to shocks. Yet the consequences of action, or inaction, are greater than ever before. We must keep moving forward; be agile, and balance analysis with action, accepting that unintended consequences might arise.

This report does not suggest which pathways we should choose. Rather, we outline a set of strategic capabilities that Aotearoa will require to chart our course: how we will choose during times of uncertainty and how we will act through disruption to mitigate risk and orient to opportunity.

To make good choices in conditions of uncertainty, we must:



Build aligned choices with diverse voices

Bolder approaches to engaging diverse voices in choice-making, better informing and empowering citizens, and building consensus with speed and without dilution. This is important for more equitable choices, and a mandate for bolder solutions.



Make agile and future-fit investment decisions

With decision-making frameworks for investments that account for risk, uncertainty, and opportunity, prioritise a full range of non-financial costs and benefits, and shorten decision and implementation cycles. This strategic investment will insulate us from shocks and has the potential to create leapfrog transformational moments.



Bring choices to life with new technologies

Using data, evidence, digital tools, and storytelling so people can experience a range of possible futures to inform decision-making. This is important to make the implications of choices real to people, ground them in evidence and objective analysis, support better choices and avoid decision paralysis in a world with more data than ever.

To act successfully through disruption, we must demonstrate:



Sophisticated partnership and collective action

Partnership models that share delivery accountability, risk and reward across sectors and communities. Bringing diverse thinking and skills to our most pressing challenges will create more inclusive, responsive, and enduring solutions.



Networked responses to shocks

Response models that are networked and resilient to deal with a variety of localised and broad-based shocks. Greater connection, capacity and effective use of our collective strengths and resources will increase our resilience and effectiveness in mitigating and responding to shocks.



Catalysing private and public investment streams

Building the consensus and clarity of what is important to focus public and private funding on our critical investments. This is important for dealing with our biggest challenges and having the vision and courage to invest strategically and intergenerationally beyond short-term demands.

And we must bring choice and action closer together by:



Learning through choice and action

A more agile, iterative, and exploratory approach to how we make sense of and make choices in complex systems. Finding ways to hold flexibility while still making progress requires being brave enough to act without knowing everything; to fail, and to learn. This is important to act strategically and make progress in uncomfortable contexts.

This is our sixth Deloitte New Zealand State of the State report – and in writing it, we experienced **groundhog day** moments. There are common threads to the findings of our series. Strategic, courageous leadership is necessary, as is overcoming short-termism, to deliver on long term opportunities and challenges. We must forge a new relationship with risk. Understanding and delivering on our Te Tiriti obligations and supporting meaningful and sophisticated partnerships across government, communities and business will be paramount. Working effectively and collaboratively across government to provide New Zealanders with the best possible services while addressing the big issues and opportunities cannot be addressed in a single electoral term. Nor does this mahi sit within the preserve of one Ministry – or even the public service – alone.



In this report, we bring the threads of our recommendations together through the lens of the unique and important stewardship role of the public sector for many of our most critical systems: economic management, housing, welfare, education, health, and infrastructure. The role of the steward may historically have been regarded as ‘holding a steady course’ against risk or threat, but in an environment of complexity, uncertainty and disruption, the role of the steward becomes far more active, future-facing and bold.

Working along with iwi, communities and businesses, the public sector collectively needs to build four faces of the stewardship role and use these fully to support the journey ahead:



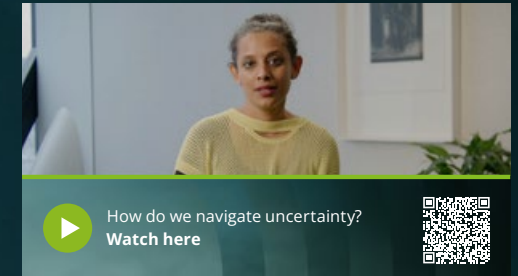
Create a bold understanding of the future as a Strategist with foresight and insight. Facilitate a coherent long-term view of the opportunities and disruptions coming our way on behalf of Aotearoa.

Shape the future as an Integrator building consensus for bold choices. Creating consensus, shared evidence, and collaboration for transformative changes across systems, diverse perspectives, and generations.

Adapt to the future as a Sentinel monitoring risk and vulnerabilities. Understanding risk and resilience in the aggregate and for groups to enable us to address vulnerabilities, build buffers and make risk-intelligent choices.

Build resilience for the future as an Investor across the four capitals. Delivering on the public services core and playing an essential role in investing in (and supporting the conditions for investment into) the human, social, natural, and financial resources for our journey.

These four faces of the public sector steward come together in the people of the public sector – current and future talent who must exhibit leadership, long-term and intergenerational action, diversity, engagement and risk-taking.



As the kuaka demonstrate courage and determination on their journey, so Aotearoa has an opportunity to make choices, act and adapt our pathways to secure positive futures for the generations to come.



Navigating
challenging
times

Navigating challenging times

02

Change is a constant – and it is positive. Change causes us to innovate and evolve as we adapt to risk and opportunity. But change can also bring discomfort as we are forced to grapple with uncertainty and complexity, and, by definition, brings disruption.

The period ahead brings significant, multi-faceted and accelerating change, making our current assumptions and frameworks for decision-making less and less valid. New opportunities will open up too, and we need to have the right capabilities to notice and take advantage of these.

Complexity arises from the reality that we are always seeking to balance many goals and objectives in a system with many interacting parts. Sometimes, our objectives are simple, but the solutions are complex – a goal of reduced emissions is simple but getting there is not. Other times, the solutions are simple, but the objectives are complex – we don't have a consensus on social agenda objectives, for example. Uncertainty means many future states are possible, and the pathways to those future states are hard to predict or quantify. A complex system with many unknowns results in unforeseen consequences – disruption.

The actions we expected would deliver one result may deliver something quite different, our trajectory does not play out as expected, and new challenges are thrown at us that we must find the capacity to respond to. This environment creates a specific set of challenges: around the choices we make and our ability to follow through on those choices with execution.

Challenges with choosing relate to our ability to make the right choices – what we choose to deliver, what risks to manage, what realities we need to accept, what opportunities to leverage, the issues to be prioritised and what responses will be most appropriate. Do we scale solar or wind energy? Do we build on greenfield or brownfield sites? Do we cultivate aerospace or agriculture? Can we find a way to do both?

Challenges with execution relate to our ability to execute our choices in the face of shocks and changing contexts – how we respond to risks and issues, how we deliver on our commitments, and how we stay motivated and effective in the face of consistent change and rolling crises.

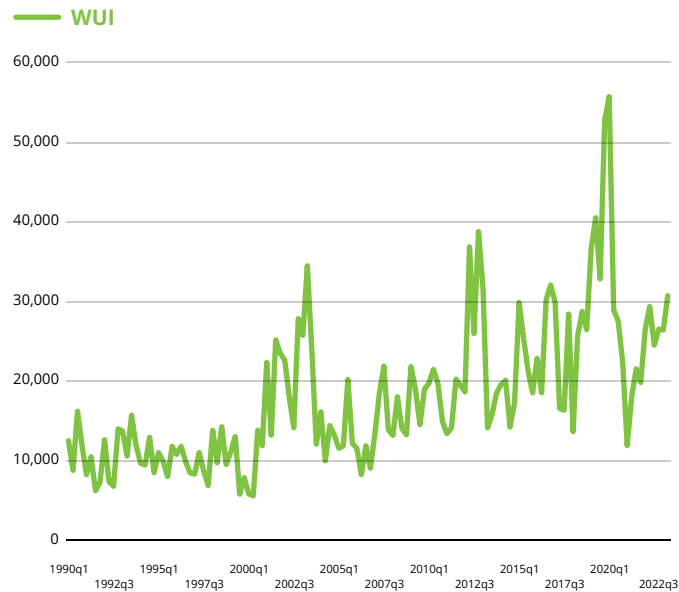
As uncertainty increases, there is an interplay between choice and execution – we need to respond to changing contexts and be able to quickly test and update our choices, as well as make our execution approaches more agile to change. This doesn't come easily. We know shocks will keep coming; to be successful, we must strengthen our ability to navigate complexity, uncertainty, and disruption.

Why is this context so challenging?

It might be hyperbolic to talk of 'unparalleled uncertainty' – uncertainty is always with us. The World Uncertainty Index paints a picture of peaks and troughs – not surprisingly peaking in 2020.¹ But the overall trend is upwards and uncertainty is an increasingly pervasive backdrop. The challenges facing us are multi-dimensional and, in some cases, existential. It is useful to reflect on why we find uncertainty so challenging.

Humans seem to be hard-wired to find complexity and uncertainty uncomfortable. It threatens our need for control and stability and can feel frustrating and disempowering.

World Uncertainty Index (WUI): Global Index. GDP weighted average. 1990Q1 to 2023Q2



Instead, we prefer certainty over probability (Prospect Theory)² and known courses of action over new ones (habits).³ Because of our preferences, we often struggle to make decisions in the face of complexity and uncertainty. We don't feel we have enough data and clarity, and we don't have sufficient confidence that we are making the right choice.

We have a serious loss aversion (the pain of losing is twice as powerful as the pleasure of gaining), and in these circumstances, we succumb to decision paralysis.⁴ Even though deferring a decision carries consequences and risk, we are more likely to wait or to prolong our considerations – the organisational snare of analysis paralysis, and the individual challenge of choice overload.

Foundationally, we struggle to understand and accept complexity and uncertainty. We have built tools to interrogate and quantify risk, but conveying uncertainty as a '1 in 70 chance', a percentage likelihood or a range, is still too abstract for most of us.⁵ And sometimes, we struggle to know what the right question is.

When we do act, we see challenges that constrain our success. Disruptions will continually challenge our ability to stay on course. When our assumptions don't hold and our context changes, whether through disruptions or unforeseen consequences, we struggle to pivot to our new reality. This means actions may be abandoned completely, or we may deliver the solution as planned despite it no longer being able to achieve the desired outcomes. This is particularly relevant in infrastructure, which is so long-lived that mistakes are often baked in early. We often apply the wrong approaches to the context – linear programmes of work in complex systems, paint-by-numbers programmes when we are, in fact, walking in the fog. Either way, the benefits of our investments are not realised.

The context also creates the possibility of desirable outcomes (opportunities) as well as undesirable ones (risks). Pursuing these opportunities – through disciplined innovation, calculated risk-taking or good fortune – can leapfrog us into more desirable futures.

But people also find it hard, even uncomfortable, to visualise a significantly different future from their today. Whether from a lack of reference points, or an absence of objectivity or imagination, we tend to start from where we are. For most people – even those with deep experience in their fields – visualising a possible future without first-hand experiencing precedent is the realm of science fiction.

Nikola Tesla provides us with a rare example, predicting what we would recognise today as a smartphone a hundred years ago.

“When wireless is perfectly applied the whole earth will be converted into a huge brain, which in fact it is, all things being particles of a real and rhythmic whole. We shall be able to communicate with one another instantly, irrespective of distance. Not only this, but through television and telephony we shall see and hear one another as perfectly as though we were face to face, despite intervening distances of thousands of miles; and the instruments through which we shall be able to do this will be amazingly simple compared with our present telephone. A man will be able to carry one in his vest pocket.”⁶

When we look ahead, we see that those who are best prepared to identify emerging trends, see the opportunities within them, and take advantage, can come out on top. This can play out positively – when societies and communities work together to benefit from opportunities – or can exacerbate inequities when privileged groups are better placed to take advantage of change. We will need to be deliberate in the strategic capabilities we develop to respond to risk and opportunity if we are to create equitable outcomes for all.



The global trends shaping our future

The global trends shaping our future

03

The challenges that lie ahead for Aotearoa – climate change and sustainability, chronic inequities, global economic and geopolitical change – and the confluence of social, technological, political, and economic megatrends generate a level of complexity, uncertainty and disruption that are significant in our lifetimes.

In the face of these conditions, we cannot chart a linear course up front and then act on it – our choices are subject to uncertainty, and our actions will be subject to shocks. Yet the consequences of action, or inaction, are greater than ever before.

We find there is a high degree of consistency in what we are seeking in Aotearoa: future states that are more positive and more aligned with what we value – although the details of those future states do vary by community. Our history of colonisation, and significant events of war and disaster, have far-reaching consequences for our ability to navigate to a better future. Equally, our natural assets of environmental and human capability, as well as our strong institutions, give us the foundations that could be used to propel us into these better states.

Many of the trends that shape our possible futures are global in nature, and we can and should look at how others are positioning themselves. But they will create tensions and trade-offs that are particular to Aotearoa.



Geopolitical tensions

This megatrend highlights the reality of geopolitical tension and conflict and the role this plays in the security and stability of Aotearoa as a small trading nation. The megatrend amplifies uncertainty and has significant potential for disruption.

Within and between the megatrends lie many big decisions and challenges that we will need to confront as we look to the future. Many of our big decisions are growing increasingly urgent, and in the process of navigating the future, we will have to make difficult trade-offs.

In this chapter, we analyse six megatrends shaping our future and lay out the challenge for our strategic capabilities to navigate through their consequences.

Geopolitical tensions

Geopolitical tensions and conflicts continue to have far-reaching impacts on international relations, economies, markets, and our daily lives. Russia's invasion of Ukraine has been a vivid reminder of how interconnected our economies and supply chains are. Supply chain shocks in commodities from flour to fuel, the resulting inflationary pressures and its impact on global economic growth are among the persistent trends resulting from these conflicts.⁷

At the same time, cyber risks have increased, and further escalation cannot be ruled out.

Increasing tensions between the United States and China also present risks and opportunities for trade – our imports, exports, and supply chains. Tariffs imposed by both countries have reshaped trade dynamics, creating some short-term niche opportunities for countries like Aotearoa to replace some of the previously imported American products in China.⁸ Deloitte's global insights feature on 'Supply chain resilience in the face of geopolitical risks' suggests the evolving US-China relationship could lead to two scenarios: strategic competition and decoupling. Each scenario carries complex and evolving implications for supply chains and trade relations, necessitating adaptability and strategic planning.⁹

Moreover, both the US and China are vying for influence in the Asia Pacific region, forging alliances and investing in various economies. China's pursuit of security agreements with Pacific Island countries has raised concerns about shifting geopolitical and security dynamics in our near region. Aotearoa faces the challenge of determining an appropriate diplomatic response and balancing the sovereignty of fellow Pacific nations as these dynamics evolve.

Climate change & nature

Aotearoa is no stranger to existential risks from our environment. Our Alpine and Hikurangi fault lines pose a significant threat to people, infrastructure, and our economy. The probability of a magnitude eight or greater earthquake occurring before 2068 is about 75% (due to the Alpine fault rupturing),¹⁰ and 26% (as a result of a Hikurangi Subduction Zone earthquake).¹¹



Climate change & nature

This megatrend highlights the impacts of climate change, nature and biodiversity loss on the stability of our economies, our critical infrastructure and supply chains, and indeed a threat to our existence. The megatrend amplifies complexity, uncertainty and disruption as we grapple with complex and cascading consequences, and mitigation or adaptation actions that must be sustained over a long time.

Regions of Aotearoa are experiencing higher temperatures in the summer months, rising sea levels, and retreating glaciers. The resulting retreat of our ecosystems isn't the sort of climate event we notice every day – it's a silent and potentially deadly threat to our environment, global food security, agricultural sectors and economies that is unfolding right under our noses. The direct impacts of climate change and human activity on nature and biodiversity bring a new set of threats to our way of life and even our survival.

Rising temperatures are causing a decline in the health and numbers of insects that pollinate an estimated 90% of the Earth's flora and an estimated 35% of global crop volume.¹²

Three-quarters of all crops around the world depend on pollinators. It is estimated the annual contribution of these insects to the world economy could be as great as US\$577 billion.¹³ Our survival requires a coordinated, long-term response. If climate inaction persists, it is projected that, by 2050, the cost to the Aotearoa economy could reach a staggering NZ\$4.4 billion. On the other hand, the Deloitte New Zealand Turning Point report finds that decisive climate action could deliver NZ\$64 billion to Aotearoa's economy by 2050.¹⁴

The frequency and severity of severe weather events globally and locally are on the rise. The number of events increased by a factor of five over the past 50 years (more than 11,000 reported disasters attributed to these hazards globally, with just over 2 million deaths and US\$3.64 trillion in losses).¹⁵ While there are dissenting views on whether the severe weather events experienced in Gisborne, Hawke's Bay, Auckland, and Northland are linked to climate change, our first-hand experience of how devastating weather events are is a wake-up call. Critical infrastructure has suffered unprecedented damage, particularly in the East Coast, Northland, and the Coromandel. The impact of the recent weather events is still being calculated (with estimates upward of \$8 billion), and it is acknowledged by all that supporting affected communities and rebuilding for resilience is critical.

Recovery and preparing for future shocks will take significant investment. In the 2023 Budget, the Government announced \$6 billion to fund a National Resilience Plan in response to Cyclone Gabrielle and other extreme weather events. The initial focus of the fund will likely be on road, rail, local resilience, and telecommunications and electricity transmission investment.¹⁶

The increasing frequency of extreme weather events and rising temperatures will further undermine our infrastructure, with asset maintenance becoming increasingly unaffordable for local councils.

Around the world, governments are being challenged on how they adapt, mitigate, and build preparedness and resilience. As we grapple with these challenges, decision-makers in centrally and locally led agencies must find ways to balance the diverse needs of communities and cities while assessing options for infrastructure protection and absorbing the escalating costs of infrastructure maintenance.

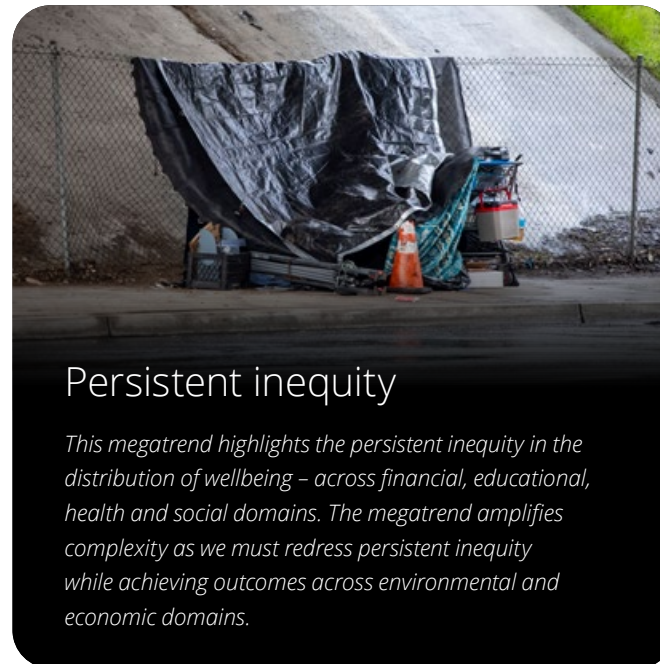
Persistent inequity

Equity is the fairness in the distribution of wellbeing – whether everyone is able to share in advances in wellbeing and have access to the building blocks of a good life. The topic of equity was canvassed extensively in our Deloitte State of the State 2019 from a variety of perspectives, including democratic voice, intergenerational equity, digital equity and equitable growth. Reflecting on this from our current perspective, it is clear that inequity remains persistent in New Zealand.

Despite the median net worth of Aotearoa households increasing between 2015 and 2021, there has been no significant change in the distribution of wealth over the same period. The top 10% of Aotearoa households continue to hold approximately 50% of the nation's total household net worth.¹⁷ Net worth varies significantly between different demographic groups. In 2021, the median individual net worth of Pākehā was \$151,000. Māori had a median individual net worth of \$42,000, even after adjusting for their younger age profile.¹⁸

The Pacific Pay Inquiry by the Human Rights Commission revealed that in 2021 for every dollar earned by a Pākehā man, Pacific men were paid just 81 cents and Pacific women only 75 cents. Over the course of a lifetime, this accumulates to a \$488,310 difference in lifetime earnings for Pacific women.¹⁹

These disparities in financial wellbeing translate into systemic inequities in the social, educational and health domains. Overall, indigenous populations are experiencing lower income and life expectancy, poorer education and health outcomes, and stigmatisation within health care, among other consequences.²⁰ The cost of living in Aotearoa has risen 7.7% in the past year²¹ and has widened the gap between richer and poorer households.²²



Persistent inequity

This megatrend highlights the persistent inequity in the distribution of wellbeing – across financial, educational, health and social domains. The megatrend amplifies complexity as we must redress persistent inequity while achieving outcomes across environmental and economic domains.

The same groups most impacted by the cost of living are also more at risk of climate change impacts, so the actions we take to mitigate or adapt to climate change must take an equity lens. The impacts of supply chain shocks and scarcity of resources will be felt most harshly by those communities who have historically been marginalised or are vulnerable due to lower economic and social capital.

In te ao Māori, the wellbeing of Papatūānuku, of te taiao, and the wellbeing of whānau are connected. Western thinking – from doughnut economics to ESG – is catching up. But not all our choices can be win-win.²³ Families in poverty do not have the luxury of choosing free range or ethical produce, of investing in insulation, or of taking public transport to a shift-work job. At a household level, meeting their needs will mean choices that are not good for the environment.

We see these tensions writ large in our cities. The public housing system – focused on safe, warm, and affordable homes for citizens and families – is incentivised to build where land is cheaper. Today, that usually means further away – from work, from leisure, from services. This places greater pressure on the transport system, which is already struggling to meet the emissions reduction and sustainability targets it is charged with. The concept of liveable or 15-minute cities seeks to address both objectives but is a paradigm shift for residents, businesses, and policy-makers. So, in the meantime, we are choosing: affordable housing or emissions reduction, or finding innovative solutions to achieve both?

Polarised perspectives

Persistent inequity is one factor that fuels growing social division. Inequities globally have come to flashpoints – a breakdown of social cohesion as the social contract between marginalised communities and the state is no longer trusted.

Studies in Europe show significantly increased disagreement on economic and social issues in the last 20 years²⁴; global surveys have shown we are feeling more polarised.²⁵ In Aotearoa, we are also experiencing the highest levels of disinformation and conspiratorialism seen yet.²⁶ The 2022 occupation of Parliament grounds and the growing political divide ahead of the 2023 election are visible indicators of diverging perspectives in Aotearoa.

Our country, like others, is increasingly concerned about extremism on the internet – with concerns peaking in the wake of the Christchurch terror attacks.²⁷ The subsequent Royal Commission of Inquiry and body of research has shown that extremists are noisier, more visible and angrier online than the average Aotearoa user, and our profile of extremist users fits with an international pattern in terms of extremism per capita.²⁸

The media has a role to play, too. Engagement motivates the media, and controversy drives engagement. Stuff's 2020 investigation into the portrayal and representation of Māori in its own reporting and its subsequent Te Tiriti o Waitangi charter is an example of the sort of media self-regulation necessary to ensure the nature of reporting doesn't fuel polarisation.²⁹

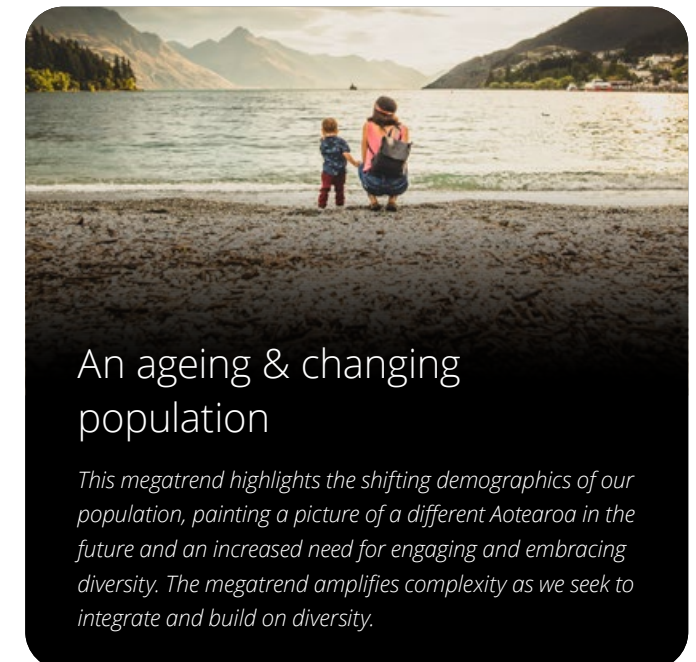
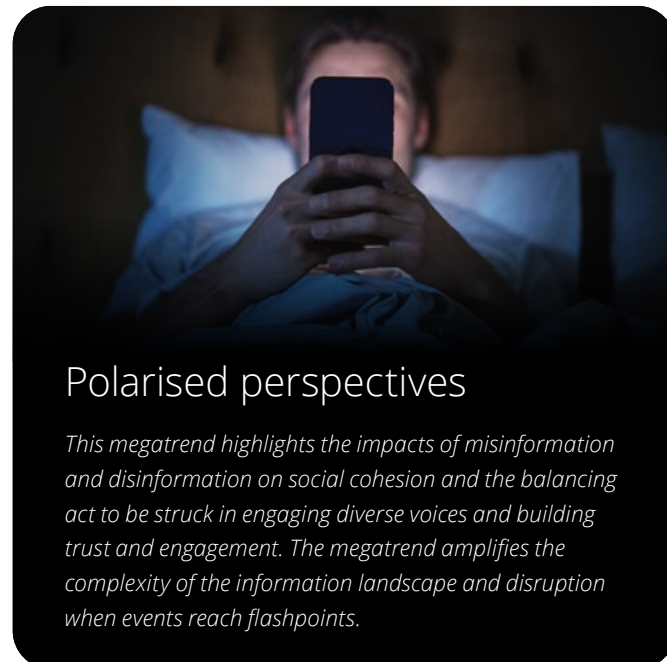
The Government is already facing the challenge of navigating complex, conflicting and sometimes dangerous perspectives and expectations. There is tension for the government on whether to engage with polarised groups. There are risks either way. It's difficult to know how to achieve resolution and how to best enable the success of a decision when the audience is polarised. When a minority set of loud voices are thwarting the conversation, should we listen and engage or push forward? If we don't listen, we risk major derailments and we potentially fuel greater polarisation. If we do listen, we risk over-privileging minority voices and getting lost in an endless debate.

When this tension plays out, we land in the unhappy middle ground of policy gridlock. Decisions are stalled or totally ignored because we are too afraid to make choices that might upset people, or we don't have the relationships or richness of information necessary to find new pathways.

Should we listen to polarising perspectives, even when it potentially amplifies harmful narratives and risks a shrinking window of opportunity? What can we do to enable meaningful engagement, consensus, and resolution? And how do we prevent disagreements in one area from spilling over into others and eroding trust in governments and institutions more broadly?

An ageing & changing population

By 2030, approximately one in six people worldwide will be over 60. In Aotearoa, the 65+ population is expected to reach one million by 2028³⁰, potentially comprising a quarter of our population by 2050.³¹



Ageing well – and equitably – will be a significant challenge; New Zealand enjoys an average life expectancy of 82 (one year above the Organisation for Economic Co-operation and Development (OECD) average)³² but that masks notable disparities in life expectancy and health outcomes, particularly for Māori and Pacific communities. Governments are also grappling with broader economic implications, including the rising costs of retirement while an extended ‘middle age’ potentially stimulates economic growth and has a greater capacity to lean into public life.³³

Our ethnic makeup is also shifting. In Aotearoa, the Māori population is projected to grow, comprising nearly 20% of the total population by 2038 (up from 15% today) – and will be younger than the non-Māori population.³⁴

The Pacific population is also expected to increase, making up 11% of our population by 2043 (up from 8% in 2018).³⁵

As our society diversifies, so will the worldviews and ideologies that sit within it, challenging us to create inclusive and equitable results from our schools, universities, workplaces, and institutions. Aotearoa is grappling with both bi-cultural and multi-cultural paradigms, which means embracing the opportunities that diversity brings and acknowledging and addressing where we are today and how we got here. The ongoing impacts of colonisation and the inequities and harms it has created need to be recognised and addressed, with our Tiriti foundation adding a cultural primacy lens to diversity discourse.

Accelerating technology landscape

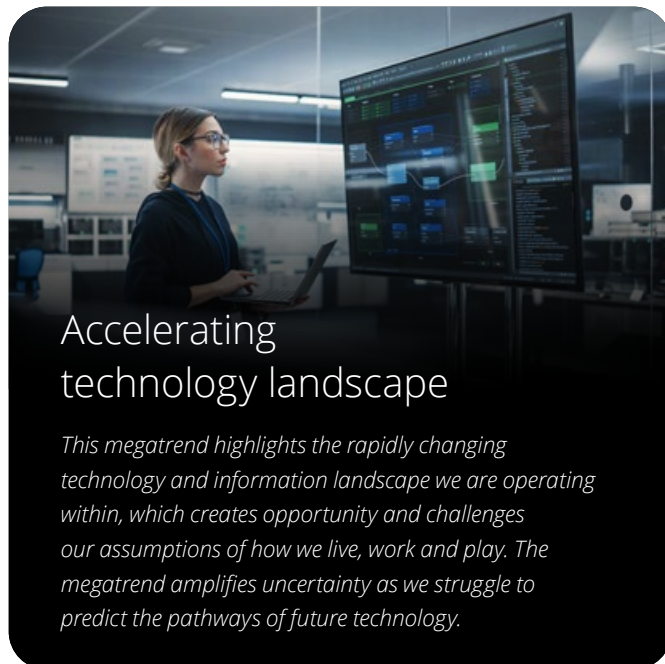
Rapid technological advancement continues to sculpt our lives; changing how we live, work and play. The ways we connect to and use the internet are becoming increasingly diverse and immersive. Whether through gaming or other means, 25% of consumers could be spending at least one hour in the metaverse (which uses augmented reality to place users in a digital world) each day by 2026, while 30% of businesses are estimated to have products and services ready for the metaverse in the same timeframe.³⁶

The ways in which we can use technology to modernise infrastructure will continue to change how we get around and how we interact with the physical world. The Internet of Things (IoT) automation presents opportunities to improve our cities and experiences. Think adaptive traffic lights, smart parking, optimised maintenance of our public assets and seamless experiences across different public services

2023 is the year the world first began to really understand how increasingly capable, applicable, and disruptive artificial intelligence (AI) can be. Its real limitations will be human: our risk appetite, our trust as users, our algorithms, and our ethical judgements on its application – all of which will inform the governance and controls we put around the use of AI. The opportunity is undeniable, and we face fundamental questions: how will we allow it to advance? How will we choose to use it? Will we simply wait for other nations to regulate AI, or will we take matters into our own hands?

We have more data than ever before and the ability to draw on more information more rapidly. At the same time, our ability to know what the future holds and make assumptions about the future that stick is degrading. There are more unknowns, so our assumptions are less valid. We can identify predictable and unpredictable high-impact risks and events, but knowing how to respond, and quickly, is not something we can get technology to do for us (yet).

Our human capacity to synthesise information and make decisions lags behind the rate of data collection and technology-aided analysis. This makes it hard to get the best value out of data and risks us ending up in an endless cycle of synthesis and decision paralysis. What happens when a new set of data points is ready to be tipped into our thinking by the time we feel we have enough information to act? When knowing all the facts is impossible because of uncertainty, how to build the confidence to make decisions and keep moving forward? Are we willing to let AI participate in wayfinding given its capacity to synthesise information is much faster than ours? These are the tensions we will have to navigate as we learn to make tough decisions in an ever-changing technology and data landscape.



Accelerating technology landscape

This megatrend highlights the rapidly changing technology and information landscape we are operating within, which creates opportunity and challenges our assumptions of how we live, work and play. The megatrend amplifies uncertainty as we struggle to predict the pathways of future technology.



Strategic
capabilities

Strategic capabilities

04

The kuaka has an underlying ability to navigate to its destination, but it must be adaptable and flexible in the face of unpredictable weather conditions and changing landscapes along its migratory route. It does not fly in a straight line.

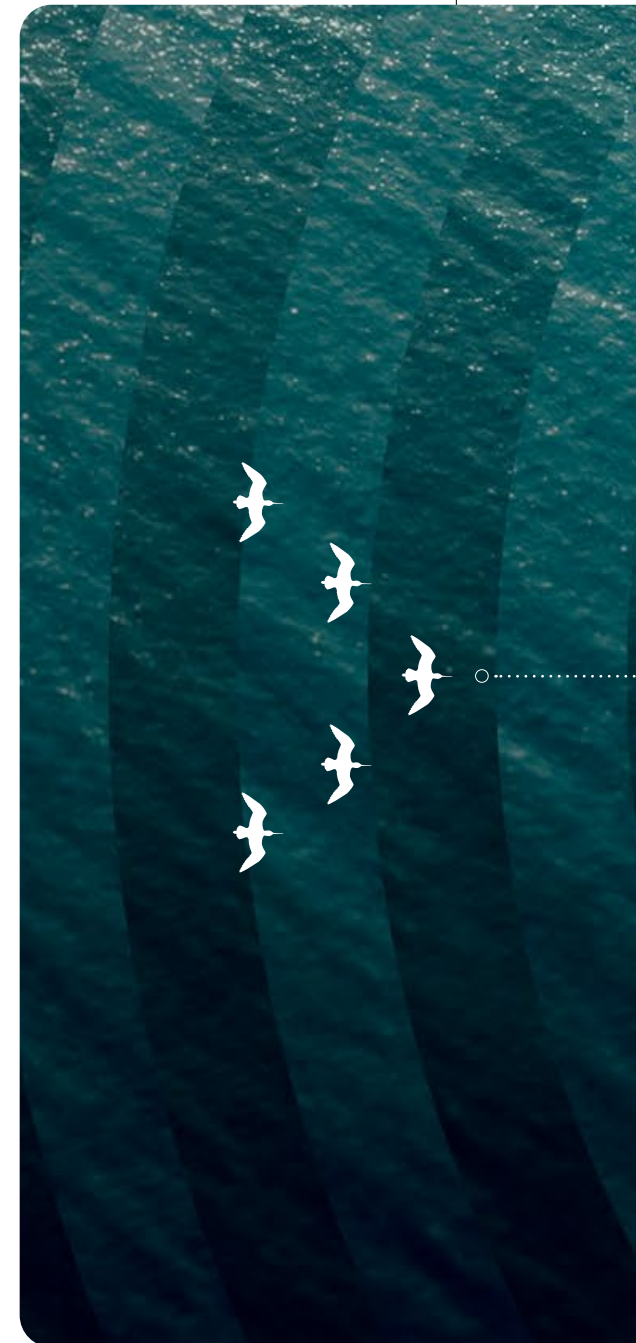
The same is true for how Aotearoa faces changing circumstances and unexpected challenges. Even if – like the kuaka – we had the advantage of knowing exactly where we are going, against a backdrop of uncertainty and disruption, it would be naïve to think we can map out our future and chart a linear course to how we will get there. We must be willing to pivot and adjust as needed.

We will need evidence-based and innovative solutions and those will come from experts, scientists, mātauranga Māori and beyond. The focus of this State of the State report is on *how* we will get there: the strategic capabilities we collectively need to navigate our future.

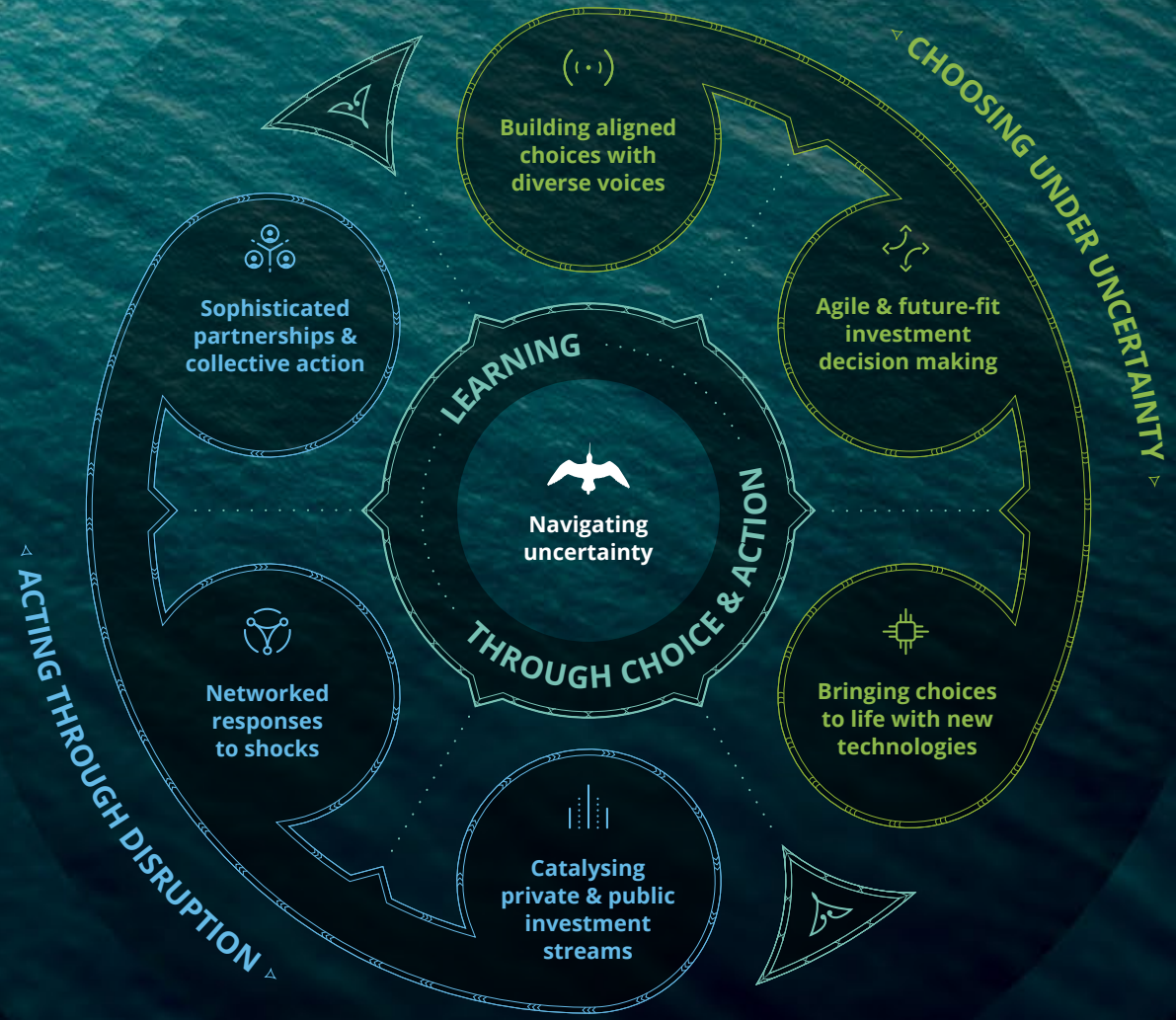
The leading strategy author and practitioner, Roger Martin, argues passionately that it is “impossible to have a good strategy poorly executed. That’s because execution actually is strategy – trying to separate the two only leads to confusion.”³⁷

Our research shows we need the capabilities to choose well in uncertainty, to think and act strategically about what we can and must do to achieve the outcomes that we desire, and to act well in an environment of disruption. In a high-change, unpredictable context, choosing and acting must be brought closer together as we find ourselves continuing to choose, to experiment and learn and to choose again. What we cannot do in the face of existential threats to our way of life is wait.

In this chapter, we set out seven strategic capabilities that we will need – across communities, public sector, and business – to navigate uncertainty and complexity, and bring about a future that delivers what we collectively value. Some of these capabilities exist but are not fully connected and harnessed across all levels of decision-making. Others are long-standing gaps and must be invested in. Much like the courageous kuaka, we must prepare ourselves, be decisive and agile, and work together to navigate this journey.



Strategic capabilities to navigate our future



Choosing in uncertainty

Choosing in uncertainty

05

Making decisions is hard in uncertain times. Despite having more hard and soft data than ever before, we will never have perfect insight or complete confidence in our assumptions. The possible futures are hard to quantify and compare.



Complexity means there will be valid disagreements about courses of action – genuine trade-offs and compromises that must be understood, justified, and engineered for us to move forward together.

Capability 1 Building aligned choices with diverse voices

Broadly speaking, Aotearoa does well in measures of public and democratic engagement. We are third in the OECD Better Life Index for Civic Engagement – voter turnout is higher than average, as is our engagement with stakeholders on developing regulations.³⁸ We are doing well in diversity of representation. This year we celebrated 61% of our Members of Parliament being women,⁴⁰ and the largest Māori³⁹ and Pacific caucuses we have ever seen.⁴⁰

But there is also less positive news. In 2022 we experienced a record low of 40.44% of eligible New Zealanders casting their vote in local elections.⁴¹ Māori, women and other diverse candidates have experienced abuse.

Our system is intended to provide all New Zealanders with the opportunity to participate and have their say. We know in practice this is not happening. We are already missing voices and perspectives when we make decisions about complex issues for Aotearoa. We should not be making decisions about communities without them. This is especially true of future generations who will wear the success or failure of our choices. Young people are marching to shed light on our biggest issues, but many who march are not legally permitted to participate in our civic and democratic processes. A Government commitment in November 2022 to introduce a bill to lower the voting age was reversed in March 2023 due to the lack of required numbers (75%) required for the bill to pass in parliament.⁴² The Government announced its focus had turned to lowering the voting age for local body elections only.⁴³ Just a few months later an independent electoral system review potentially re-ignited the issue, recommending the voting age be lowered to 16.⁴⁴

The issues we need public engagement on are complex and increasingly require technical and scientific understanding. There are genuine options in the paths we could take, the potential consequences of which can be difficult to imagine and the trade-offs neither simple nor binary.

Proliferating technology has fragmented where and how we get our information and engage on the issues that matter to us. On the one hand, this has created connection and communities where they were once hard to find. On the other, it has made it difficult to find a single source of truth and has created the breeding ground for misinformation and disinformation. All of this is further compromising our ability to connect on issues and hold the space for a fuller set of opinions and for nuanced decisions.

Our public engagement capability needs to enable us to connect with a fuller set of voices that are truly representative of our communities and population. This must include enabling participation and access for the people most impacted by the big decisions – both systemically marginalised groups and future generations. Deeper changes may also be needed to modernise how we engage: broadening voting channels, extending voting rights, using behavioural nudges, facilitating and supporting broader representation in local and central Government.

This asks for new capabilities from us all. We need to equip and empower citizens and communities to participate. Building education and trust are the best inoculations against misinformation and disinformation. Our aim should be to better inform communities. Communicating complicated ideas has never been more important, and in some ways, easier.

There is a voting generation who rightly expects information to be made easily available and digestible – plain, compelling messages that connect with people. Communities expect and deserve informed and insightful content, leveraging participative technology along the way. We need to deliver information that is evidence-based and de-politicised in the context of a core set of agenda items that should underpin our engagement in the long term. This would enable us to build a strong, consistent narrative and avoid overwhelming communities.

We need new ways to connect with people on their terms. Typically, we expect people to leave their contexts and safe spaces to participate in civics and democracy. This approach risks our ability to engage with a full set of people and communities. We are increasingly hearing about digital enablers for participatory democracy, community-level and delegated decision-making models that could enable us to move past periodic elections and enable micro-engagement of diverse communities for decision-making.

“We don’t need a TikTok or an Instagram for Aotearoa’s democratic engagement, but we do need to use community and peer-based digital spaces for fact sharing in a way that makes people feel informed. We should be asking ourselves: how do we keep it snackable?”

Izzy Fenwick

*Founder of FENWICK and Find Me,
and Emerging Director for Aotearoa Circle*

We must explore democratic processes that engage representative populations in a deep and informed way. This doesn’t mean engaging many and all to make decisions; it means using channels that enable narrow-and-deep engagement to help inform policy and options. Citizens’ assemblies (forums of randomly selected citizens who deliberate on important public questions) create space for citizens to think deeply, with access to technical and specialist expertise where needed, and deliberate on complex issues. They may have decision-making rights, or the outcomes can be used to frame broader policies and agendas. These sorts of channels give us engagement depth on big issues and complement the use of technology to connect with and inform communities – which broadens the diversity of people engaged in civics and democracy.

The public sector also needs new skills to engage with communities in a different paradigm; in their recent report ‘Make the Move’, Inspiring Communities sets out a series of necessary shifts for the public sector, including repositioning policy workers as conduits and facilitators.⁴⁵

Building our public engagement capability will shape better solutions. Better public engagement methods catalyse a broader set of ideas and, through that diversity, bring innovation. Evidence from citizens’ assemblies suggests that they are successful in finding consensus even on divisive issues.⁴⁶ It will also build a mandate for bolder solutions. Embracing complexity rather than simplifying to binary choices provides the opportunity to have more nuanced discussions. If we can do that in safe places for communities, we can hope for more courageous and insightful direction.

Critically we increase trust, creating a virtuous loop. Successful public engagement could go a long way in combating degrading public trust and confidence. Communities are increasingly likely to engage if the government can convert perspectives collected through better public engagement into solutions and real-life outcomes for people.



SPOTLIGHT

Engaging communities on the future of Auckland’s water supply

Auckland faces a major challenge in the coming years as its population continues to grow rapidly and its existing water supply reaches capacity. In an uncertain and resource-constrained environment, how can it safely and sustainably provide water to meet the needs of Aucklanders in the decades to come?

Questions like these are all too often answered in closed decision-making environments, with engagement used only to inform decisions, rather than make them. Koi Tū, the University of Auckland’s Centre for Informed Futures, flipped this approach on its head in late 2022 by convening a citizens’ assembly to determine, openly and collectively, the future of Auckland’s water supply.

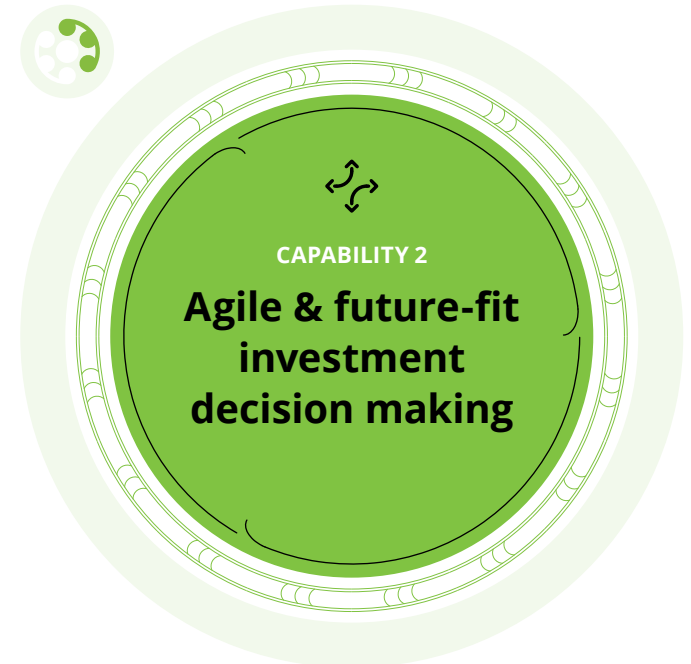
After sending invites to 12,000 randomly selected Watercare customers, 37 volunteers were chosen who represented Auckland’s wide range of ethnicities, ages, genders, educational backgrounds, and other demographics. Over a two-month period, the group talked with independent experts from across the water industry and considered six options. Koi Tū facilitated collaborative workshops to ensure that everyone was able to express their views and consider the key issues at play.

Through this inclusive workshop process, the group identified the environment and affordability as their most important considerations. This perspective shaped the group’s decision that purified recycled wastewater was the best option for future-proofing the Auckland water supply – the option tipped to be most controversial at the start of the project.

The feedback on the process from both participants and Watercare leadership was highly positive. The participants felt empowered by the consideration of real options in a major community decision, rather than feeling like contributors to an already-determined outcome. Several commented on the value brought by having so many different perspectives at the table.

Koi Tū Associate Director Dr Tatjana Buklijas says the assembly highlights the potential of this approach to improve decision-making on key issues. While politicians often lack courage on climate change for example, she says, “in the hands of everyday people, given opportunity to learn and deliberate, we might see progress.”

With more and more people having the opportunity to participate over time, we may see a ‘snowball effect’ as the movement gains momentum. The citizens’ assembly on Auckland’s water supply is a homegrown example of deliberative democracy. It demonstrates how consensus can be reached on difficult topics when we engage diverse communities deeply.



Capability 2

Agile and future-fit investment decision making

Our current physical infrastructure crisis – and investment debt – is the result of decades of short-termism and under-investment.

What we are experiencing now is the outcome of those choices, exacerbated by recent severe weather events. Our digital infrastructure – and digital equality – has also lagged. Technology innovations and the quickening pace of obsolescence are shining a light on those gaps.

Despite our rapidly changing context, how we make investment decisions hasn't evolved much. Too frequently, we focus on the issues of today when our reality requires long-term situational awareness, investment, and planning. Business case cost-benefit analysis has become smarter, but in an era of increasing shocks and instability, our assumptions are becoming unstable and less reliable. Our assumptions do not consider a broad enough mix of possible futures, risking the longevity of our investment decisions. Despite a growing ESG agenda in the private sector and wellbeing budgets in the public sector, our investment decisions still struggle to articulate and weigh up non-financial value. In the public sector, investment decisions that span departments and sectors in pursuit of collective outcomes are still challenging to develop and approve. Investment decision-making can be a painfully slow process.

“To make decisions we look at the relative costs and benefits of policy options. We take an ‘all else being equal’ approach – but all else is not equal, and it’s changing fast. We need to look beyond costs and benefits and also put a greater emphasis on the risks and opportunities. This takes us from a space of

looking at predictable cost/benefit returns, an orthodox accounting view, to looking at risks and opportunities over the long term and seeking out low probability high return options – taking a more entrepreneurial approach.”

David Hall

Climate Policy Director at Toha and Adjunct Lecturer at AUT University's School of Social Sciences & Public Policy

Investing in what we value must consider a broader set of investment impacts: climate, economic and social wellbeing, equity, and resilience. The benefits and outcomes we ground our investment decisions in do not go far enough in prioritising a range of considerations. Non-financial outcomes are often too lightly weighted or insufficiently articulated to influence the decision outcome.

A longer-term lens on outcomes is also critical to see beyond an investment pipeline focused on maintaining degrading infrastructure and servicing near-term demand. For example, in light of changing demographics, different solutions are needed. There are several Pacific-led social housing initiatives underway – including the Ministry for Pacific Peoples' Pacific Housing Initiative – that look to design homes that are fit for purpose and meet the aspirations and needs of Pacific families – focussing on building communities (not just houses) that reflect the way Pacific families live, move and play.

How we frame those outcomes is critical to avoid short-termism in what we invest in. Investing in a charging network for EVs

makes car use more sustainable; precinct planning that facilitates walkable cities would reduce the need for all kinds of private vehicles.

To be successful in uncertainty, we need investment frameworks and models that look forward. Green technology investment provides inspiration. Using a traditional cost-benefit approach, projecting out historic and current numbers, significant investments in green technology have not stacked up. Greater consideration of the risk (what will happen if we do not invest) and the opportunities (what future the investment could create, including spillover benefits) at the system level can help to shift that equation.

When reviewing clean energy technologies offering the cheapest ways of producing electricity and light across much of the world, EEIST (Economics of Energy Innovation System Transition) asserted “the most widely used economic framework for public policy appraisal, cost-benefit analysis, did not recommend the use of any of these critically important policies. In general, these policies were implemented despite, not because of, the predominant economic analysis and advice.”⁴⁷

For the government, this can also support choices to move beyond today's pull factors and make bold choices – that is, help shape society and more deliberately choose our direction – if this is a role we want the government to play.

Greater agility is needed to shorten decision and implementation cycles. Better use of data and technology will be a key enabler (see Capability Three). We must take a product management approach in our investment decision-making.

This means learning and improving as we go rather than undertaking a linear decision-making process that risks locking in a long-term, big investment commitment that might not remain fit for purpose. This will continue to be challenging in infrastructure where lifespans and delivery times are long. A decision to place a road, cycleway, or town centre has repercussions for generations when the context of the way people live is shifting in the space of years. However, more can be done to create more modular and agile solutions that create greater flexibility in our infrastructure, for example, building homes designed for changing family sizes and needs.

Critical for government investment decisions is the capability to invest strategically as an integrated public sector. The nature of the outcomes we are seeking to achieve, and the contextual trends that will impact them, do not land neatly within a public sector department – or even between opex and capex. Investment decision-making at the outcome level requires strategic forecasting and analysis, investment models, budgets, and approvals to be held across delivery accountabilities.

Decision rights and investment resources need to be held in the correct place in the system. Many issues we face reflect the locus of decision-making being held in the wrong place. We get the wrong solution – or fail to get traction – without the involvement of communities, organisations and individuals who have the most to gain.

Strategic investment creates the resilience that will insulate us from shocks and determines the wellbeing of our future generations. A future-focused investment capability will broaden our definitions of value and better align what we spend with what matters.

Reducing the time it takes to release the value of our investments – coupled with ‘big bet’ investments aligned to our shared vision – has the potential to create leapfrog transformational moments.



SPOTLIGHT

A broader definition of value applied to Kāinga Ora’s housing development investment pipeline

As of January 2023, the average house price in Auckland was 1.6x higher than the national average, 1.5x higher than Wellington, and two times higher than Christchurch. The lack of affordability is putting pressure on the social housing waitlist and is contributing to significant emergency housing costs, both for the Government and the whānau living in motels.

To support the rapidly growing Auckland city, Kāinga Ora has been developing several business cases to refresh, renew and intensify large existing land holdings in Mount Roskill, Oranga, and Tāmaki. In its entirety, Kāinga Ora plans to deliver over 40,000 new, warm, and dry homes throughout the country via its large-scale urban development projects over the next 20 years.

To enable the urban development programme, Kāinga Ora built a Cost Benefit Analysis (CBA) Model and Framework to enable it to evaluate the merits of the urban development projects consistently and robustly.

A joint Treasury and Ministry for Housing and Urban Development Steering Group was established to ensure transparency of model specifications, assumptions, and sensitivity testing.

To illustrate the broader set of investment impacts the projects are expected to deliver, the model estimated not only the traditional economic benefits associated with new housing but also the monetised social, health and environmental benefits too. To ensure the model and framework were both forward- and backward-looking, it included associated capital costs incurred to date and projected capital and operational costs for land development, new infrastructure, and housing and maintenance costs over 60 years.

The model demonstrates effective expansion of how we might assess value and over what time horizons when making investment decisions. Over the next several months, the urban development model and framework will be used to evaluate three more developments across Auckland and Tauranga and further support Kāinga Ora with its investment strategy. It has potential application beyond the housing developments and demonstrates an ability to make investment decisions for the future based on a broader set of investment impacts.



Capability 3

Bringing choices to life with new technologies

Advances in technology continue to accelerate. Collectively, technology and data are revolutionising how we live and will play a powerful role in helping us make decisions in uncertain times. But it also brings new challenges, including addressing the tensions of leveraging the capability and risks that AI brings.

Things that were once unimaginable are increasingly possible. We have more data than ever before, we are hyperconnected and we are increasingly enabled by Artificial Intelligence (AI). Technological breakthroughs in the energy and food production sectors, 3D printing, AI, quantum computing, drone and robot

capability, augmented reality, virtual reality, digital twins, and the Internet of Things are recent megatrends influencing how governments, businesses and communities operate. The edge will keep shifting.

We focus here on how new technologies – and data – can bring choices to life. Technology can already enable us to simulate, explore and learn about possible futures. Predictive analysis can forecast potential outcomes and data-driven scenario planning can simulate and test action pathways. Real-time monitoring can detect early warning signs and identify vulnerabilities in operations and supply chains. Not only can we use data to diagnose, test and support decisions, but we can conceptualise and communicate more effectively than ever.

One of the biggest challenges to quality decision-making in times of volatility is the lack of timely, accurate data – both in terms of diagnosis and in terms of monitoring, learning, and changing. Yet we live in a more data-rich environment than ever. Our reality is that we need to find ways to work with imperfect data. The Te Waihanga (the New Zealand Infrastructure Commission) mission to regularly release a complete view of planned public infrastructure activity in Aotearoa shows just how challenging it presently is to have all the information and bring it together. The Pipeline was first published in 2020 with a subset of planned infrastructure projects. Te Waihanga is still working to build a full set of planned projects. Its list of contributing public sector partners continues to grow, but the data is disparate, and gathering it reveals the multiple systems, people and approaches that must be navigated to build a view of [the pipeline](#). To harness data and digital to build insight-driven organisations and insight-driven governments, we must optimise how we collect and use data.

The focus needs to be on collecting the right data (including considering how we will bridge information gaps), so we have the evidence we need to make informed, timely decisions with confidence. This prevents us from drowning in data and being unable to make a decision.

Technologies such as AI, virtual reality and digital twins can help us visualise information and perform simulations.⁴⁸ This offers powerful – and rapid – means of modelling our choices and creating compelling and accessible visual models to engage a wider range of partners and participants. Platforms like UrbanistAI are already using generative AI for participatory planning and co-design, bringing to life what spaces could look like in the future.⁴⁹ Pockets of vision and innovation exist in Aotearoa, but work is required to moderate the perception of risks when it comes to using these solutions and better integrating them into our systems. Affordability is a challenge for many, but we should soon be able to prioritise using these types of technology as it becomes more affordable through advancement, increasing competition and growth of onshore capability.

To use data to create insight and inform decisions in the ways we have proposed, interoperability is a key enabler. The reality is we don't have standardised data, and we haven't integrated our data (because it is difficult and costly). We will learn as we go, and we can use our learning and leverage technology as it develops to improve our ability to collect, share, and use data. This requires long-term commitment and investment.

“Data is the engine that makes everything happen, but it sometimes feels like we are missing 60% of the data we need to make a decision. This is a huge gap, and filling it is expensive. We need to set up a long-term plan and it needs to be funded. We know what we are going to be spending on Superannuation for the next 30 years, but we don’t know what we will be spending on data a year from now.”

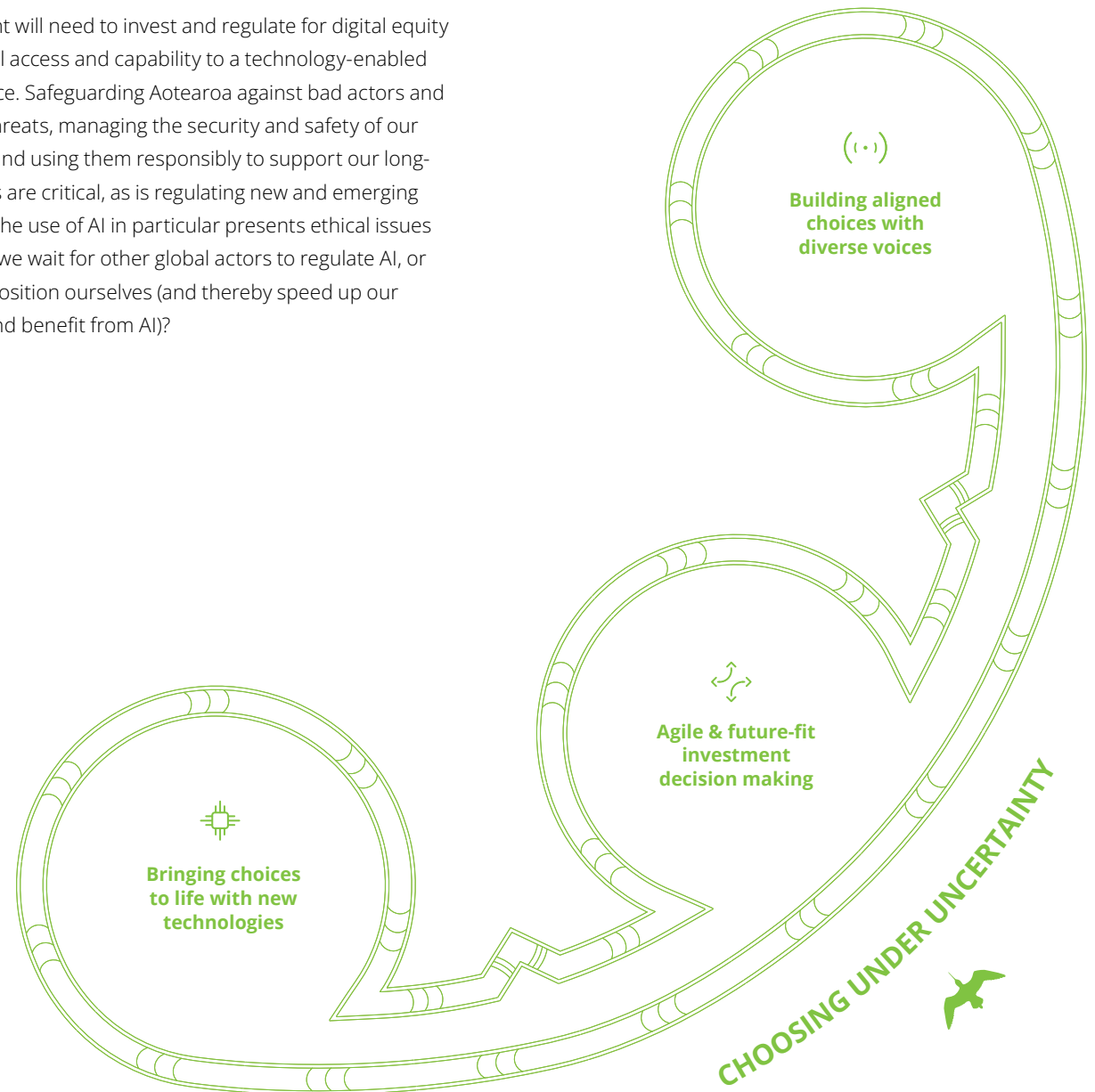
Hon. James Shaw

Co-leader, Green Party

None of this will come easy – especially for the public sector. Globally, the public sector is rarely viewed as a leader in the technology landscape, and in recent years it would appear Aotearoa has lagged behind its global peers. Ideas and concepts that were being discussed a decade ago (such as integrated services experience centred on major life events and RealMe identity) have not achieved traction across the sector, and other jurisdictions have gone ahead and implemented concepts that we have not. But citizen expectations of how technology and data are applied have increased, and the capabilities it provides us in a high-change environment are valuable.

Technology itself also contributes to a context of uncertainty, and the government will also need to play a unique role in governing how technology impacts us as citizens.

The government will need to invest and regulate for digital equity to ensure equal access and capability to a technology-enabled future workforce. Safeguarding Aotearoa against bad actors and international threats, managing the security and safety of our data streams, and using them responsibly to support our long-term outcomes are critical, as is regulating new and emerging technologies. The use of AI in particular presents ethical issues and risks – will we wait for other global actors to regulate AI, or will we take a position ourselves (and thereby speed up our ability to use and benefit from AI)?



An aerial photograph of a lush green forest. A dirt path winds through the trees, leading to a waterfall. The water is a vibrant turquoise color as it falls. The surrounding forest is dense and green, with some areas appearing slightly more yellowish-green, possibly due to sunlight or a specific type of vegetation. The overall scene is serene and natural.

Acting through disruption

Acting through disruption

06

As disruption creates unexpected challenges or presents unforeseen opportunities, holding to a chosen path becomes difficult – or no longer valid. We will need to be flexible and resilient in the face of a changing context to hold true to the outcomes we are seeking to achieve rather than the path we have taken.



The scale and nature of the challenges we are facing will take transformational investment and change. We will not be able to apply business-as-usual approaches to delivering.

Capability 4

Sophisticated partnerships and collective action

Kuaka travel in flocks. To ensure their collective survival on their non-stop journey of up to 13,000 kilometres, they take turns to lead and to support. Navigating through an uncertain future is something none of us can do alone. The challenges we are facing cut across whānau, communities, businesses, and government. We will need the strengths and capabilities that each of them brings. This calls for deeper and more sophisticated partnering.

Partnership is a key principle of Te Tiriti o Waitangi (Te Tiriti) and any discussion of partnership in Aotearoa starts with the partnership between Māori and the Crown. There is continued and growing focus and effort, but the criticism remains that approaches often default to being grounded in te ao Pākehā.

While the government has made significant recent strides in collaborating, it has stumbled at truly sharing the decision rights – often reverting to more traditional ‘consultation’ modes of operating. Delivering collaboratively has been challenging. A common te reo Māori translation for partnership is mahitahi, which refers to working together, collaborating or working in partnership. Without that to and fro of working together, a partnership is merely hypothetical. Real partnership is driven by activity and doing things together.

Effective partnership in a Te Tiriti context is typified by many things, including that they are authentically developed; take time and a commitment to resource appropriately; require engagement on a case-by-case basis (because Māori are not homogenous); and are based on unity in purpose, rather than uniformity of approach. Despite being a nation founded in a form of co-governance, our collective inability to see past poorly informed rhetoric means that we are currently being denied the opportunity to realise the value it offers.

The Three Waters co-governance framework sparked national debate and it became clear we are still not speaking the same language. Co-delivery is critical to Māori in partnerships with agencies or entities, as it takes Māori participation from an advisory or guidance capacity to one that has a tangible impact.

When we broaden our lens, we see maturing cross-sector partnering arrangements and capabilities. More sophisticated, flexible, multi-partner arrangements are forging new ground such as the Te Ahu a Turanga Alliance, industry transformation plans and the Aotearoa Circle.⁵⁰ Outside of these, our partnering models tend to default to those we know well, founded in the roles of buyers and suppliers. This can be counterproductive. Traditional contracting methods have repeatedly created a false sense of security while failing to deliver outcomes. Price-focused procurement creates a race to the bottom that does not reflect the risk and the effort to deliver the outcomes. Ultimately, truly sharing decision rights, risk and resources is uncomfortable (and hard).

We need to make space for a new dynamic. When in flight, the kuaka are led by kahukura. It was once told that when kuaka fly into Aotearoa they arrive in a swirling mass. Within the mass there are small groups, each with a leader whose role it is to cleave the air and provide initial lift for those in their flock who are following. These are the kahukura, making the space for movement and change. This requires creating the space for collaboration – cleaving the air – and knowing when to get out of the way – to enable the swirling mass.

COVID-19 taught the government a lot about getting out of the way. In 2019 we saw community-based entities having a much greater impact on managing the vaccination rates of their people than the government could.

United by the very real and clear goal of protecting lives, the government learned to trust, resource and enable communities to make the decisions that were best for them.

“We ought not to be too romantic about our ability to maintain trust and confidence with all communities. We were romantic about the ability of public institutions to deliver the COVID-19 response when in fact there were marginalised groups and people in the community that were better placed to deliver the response. Quickly, we mandated and resourced others to engage with those communities and got out of the way. We need to increasingly do this and do it sooner.”

Peter Hughes

Public Service Commissioner,
Te Kawa Mataaho Public Service Commission

Collectively we need to get comfortable holding accountability without ownership to partner authentically, supporting partnerships with governance models rather than contracting mechanisms. This will also enable a broader range of community organisations to be part of our solutions without requiring them to formalise structures and invest in non-core capabilities, like contract management, to meet procurement requirements.

We can create spaces for a new partnership dynamic by leveraging improved and sophisticated commissioning models that enable risk and reward sharing over the life of the partnership.

Commissioning models need to encourage the government to retain ultimate accountability while delegating responsibility for delivery and put in place evaluation and monitoring mechanisms to ensure ongoing delivery value. A wider definition of the value and outcomes we seek through our spending is part of this. The government’s existing social procurement policy is a strong starting point, but further embedding social outcomes into the government’s annual procurement spend of over \$50 billion is required to deliver economic, social and environmental outcomes and actively shape the market.⁵¹ There is an opportunity for the government and businesses to increasingly pick up this powerful lever and apply it to their partnering and purchasing approaches, too.

We are a small country, and we cannot do it all on our own. We should expand our thinking when it comes to potential collaborators, attracting offshore partners and investment to enable access to the capabilities we need that don’t exist locally. Whilst our reliance on our distinct cultural uniqueness serves us well, the global megatrends that buffet us mean there is much more for us to learn – and capitalise on – by looking outwards. It will make sense to work with others who are successfully forging a path already, and who can provide access to promising tools and solutions while we build the local dimensions and capability. The InterRAI tool to assess older people’s home and community support needs used by District Health Boards is a good example. The tool itself was developed offshore and used in more than 30 countries. Manatū Hauora and the Central Region’s Technical Advisory Services (CTAS) worked with InterRAI to develop and test a culturally appropriate version of the assessment model – taking the global and making it local to better provide equitable access to health services and health outcomes in Aotearoa.⁵²



SPOTLIGHT

Partnering to manage risk and inequity in Aotearoa

Increasing risk across multiple domains is fundamentally changing the way the insurance industry operates, and the impacts are far-reaching. We have seen insurers increase premiums for earthquake-prone homes and signal a clear intent for home insurance premiums to rise over time to cover growing underlying risks such as climate change and extreme weather events.⁵³ Government agencies are struggling to sufficiently insure their assets, while the continued growth of certain communities is being hindered by shrinking insurance policies. The full retreat of insurers from some communities is not a far-fetched conclusion, it is only a matter of time.⁵⁴ Intervention and regulation will only succeed with meaningful industry and community involvement.

Globally, insurers have started to explore more affordable insurance products for their customers – on-demand insurance (car insurance per kilometre) and micro-insurance for specific cover are two examples. In Kenya and Rwanda, Kilimo Salama offers a low-cost policy covering the cost of a farmer's crop only in the event of a loss due to extreme drought or excessive rain.⁵⁵

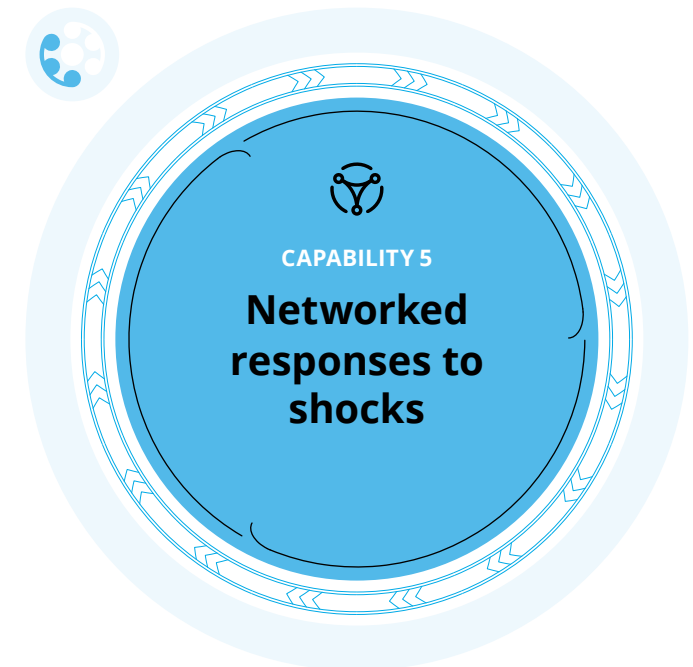
Given recent weather events, flood-prone areas in Aotearoa could be the next area of insurance contention. Only modest sea level rise is needed for significant flooding to occur, and current infrastructure is not well suited to withstand or mitigate the impact of flood events like those in early 2023. Modelling shows approximately 10,230 properties within Auckland, Wellington, Christchurch, and Dunedin will likely face insurance retreat by 2050.⁵⁶

Insurer retreat poses affordability and equity challenges and will severely restrict the growth of areas, particularly since insurance is a requirement for residential mortgages in Aotearoa. Besides economic and social consequences, there are cultural impacts and the unique connection to whenua for our Māori populations to consider. These consequences are inherently tied to the management and distribution of risk in our communities.

The reluctance of private providers to insure at-risk markets has prompted the government to consider implementing both flood and income insurance schemes. Currently under consideration are government insurance schemes that would further transfer risk to the state (the government Flood Insurance Scheme and Income Insurance Scheme), over and above the risk transfer currently enabled through our social support system.⁵⁷ The public sector already provides broad, basic natural disaster coverage through Toka Tu Ake EQC.

Even with the proposed schemes, there is a residual burden of risk that sits with individuals and whānau. The problem requires insurers to lean in, and we will only get there through innovation and true, long-term partnership between the public and private sectors.

Maturing our partnering and co-delivery capability will achieve more inclusive and sustained outcomes. We will bring the diversity of thinking and capabilities of all of Aotearoa – augmented by capability beyond our borders – to solve our most pressing challenges and create more enduring and responsive solutions as a result.



Capability 5

Networked responses to shocks

In recent years disruptive shocks and events have come from weather, natural disasters, geopolitical tensions, inter-state war, economic crises, terrorism, cyber risk, and a health pandemic.

They have become our new normal, and OECD research suggests we are likely to experience severe shocks more often, driven by global interdependence, climate change, global politics, and other rapidly changing drivers.⁵⁸

For some groups and communities, shocks are compounding. Our most disadvantaged groups are most exposed to the increasing risks we are facing and have the least access to the economic and social buffers that will help them to absorb or bounce back from those shocks. Deloitte's 2017 State of the State on household resilience revealed that low and middle-income New Zealanders are most likely to be more vulnerable to shocks and disruptions. The situation has not improved. 32% of respondents to the June 2022 Household Economic Survey said that their income was not enough, or only just enough, to meet their everyday needs.⁵⁹ Underinsurance (measured as the gap between the value of an asset and how much it is insured for) is a problem. Aotearoa ranks 26th out of 56 OECD countries for insurance spending, at 3% of GDP, compared to the OECD average of 9.4%.⁶⁰ 18% of respondents to the 2023 Growing Up in New Zealand survey could not afford home contents insurance.⁶¹ These households are not in a position to pay unexpected bills. We need to understand the risks to – and resilience of – our communities.

We have learned much about responding to shocks and the value of a multi-partner response in an emergency. COVID-19 demonstrated that while the departmental structure of government can be effective for business as usual, planning for and responding to shocks requires a collaborative and holistic approach. This means a response across multiple agencies, but also businesses and communities.

During COVID-19, and again during Cyclone Gabrielle, Māori were one of the most disproportionately impacted groups. This is because the most vulnerable are more likely to have poor access to critical resources to manage the impact of adverse events. During these two events, Māori communities have rallied together to aid each other where they could with a true sense of community and togetherness. Our response to shocks – from resilience to recovery – must be a networked one.

“The default mechanism for Government is to centralise a response and provide a universal response, but a significant event doesn’t impact people equitably. Cyclone Gabrielle is a great example – Māori were disproportionately affected. The tried-and-true mechanisms of resolution don’t work in a crisis if you are taking one size fits all approach. Instead, good decision making comes down to who holds the most knowledge and the greatest connection to the people who will benefit from the decisions being made. In the Cyclone Gabrielle instance, iwi and hapū were best equipped to make choices for their whānau and communities.”

Research interview

We need to reframe how we conceptualise our operating model for managing through shocks. We bring together capabilities across organisations, sectors, and systems to respond to major disruptions. While we have been successful in ramping up rapidly, thinking about these capabilities as a networked operating model – beyond organisational bounds – better allows us to optimise and evolve our preparedness, response, recovery, and beyond into flourishing.

When shocks happen, there is often a flood of information from multiple sources and an initial lack of clarity around who the decision-makers are, and what the chain of command looks like. Standing up cross-agency or cross-sector collaborations at short notice remains extremely difficult and challenging. Speed of decision-making is sometimes more important than making the right decision, as long as you can pivot quickly and course correct.

We can learn from COVID-19 and the constantly evolving landscape of decision-makers and leadership structures in place. We need to get clarity on the domains of decision-making and who holds decision-making rights, supporting that with rapidly flowing resources to the group – public sector or community – best placed to make choices and act. We need to lift beyond organisational boundaries to manage resource pools flexibly, moving generalist and specialist resources to where they need to be.

Information is key. Investing in the data and a ‘clearing house’ for information and insight that can operate as a central nerve centre, source of truth and control room for the network will enable fast decisions.

We need to create the feedback loops and the culture to learn – as the context changes, as new information comes to light, and as mistakes are made. This includes training and rehearsing the capabilities required to respond to shocks. Central to all of this is capacity planning. Business-as-usual efficiency is in tension with the capacity to be ready for and respond to the unexpected. But business-as-usual efficiency is a fallacy when shocks are our normal operating environment.

We will also need to manage risk holistically and in a people-centred way. Understanding the risk to different groups of people – not just the aggregate – will help us to strengthen resilience and support in a targeted way. Otherwise, we will have blind spots, and this increases the possibility that compounding risk for small communities will spill over into systemic risk through social polarisation and unrest. This also means managing the compounding impacts of mitigating shocks on our frontline responders so that we can sustain our critical frontline workforce in the long run.

Finally, managing through shocks requires us to build resilience at a broad level. Building our stocks and buffers to best withstand, absorb and bounce back from shocks is our greatest protection against uncertain disruptions. Building resources across many dimensions: from education, health and financial wellbeing to secure employment and improving accessibility and sufficiency of insurance, will help to manage shocks.



SPOTLIGHT

Queensland Reconstruction Authority

Following a series of unprecedented natural disasters, the Queensland State Government in 2011 established the Queensland Reconstruction Authority (QRA). While its headline focus was initially coordinating the biggest rebuilding effort in the state’s history, from the very beginning it had a mandate to improve community resilience and mitigate the impacts of future disasters.

The initiative was a success, and in 2015, the QRA was made a permanent part of the Queensland Government, now acting as the focal agency responsible for disaster recovery and resilience policy. It leads the development of the Queensland Strategy for Disaster Resilience, coordinates resilience outreach and investment, and has strengthened its role as a community builder – one of its key strategic objectives is building capacity in recovery and resilience through partnerships with community leaders.

While we have the National Emergency Management Agency (NEMA), there isn’t sufficient capacity in the emergency response system to sustain long-term recovery efforts associated with any one disaster.

The recurring nature of significant events, and the likelihood there will be more, necessitates that we prioritise and resource our long-term response capability, as well as build greater connection across the system and capacity within the system to enable long term response management.



Capability 6

Catalysing private and public investment streams

Given the quantum of investment required to navigate the challenges we are facing, we need to ask ourselves how we might afford the cost of the future.

Taxation is one part of this. Our tax take – within our broad-based, low-rate tax framework – is broadly aligned with OECD countries globally and will be difficult to meaningfully increase without changes in taxation policy and settings. Solutions we could choose include re-prioritising existing spending within that tax take, seeking to increase the tax take within the current system, and materially altering our tax framework. In the context of a spectrum of public and political views, this is itself a case study in our capability to choose a shared pathway in the face of diverse viewpoints. A shared evidence base, understanding of implications and the ability to surface and evaluate trade-offs are necessary to hold an informed conversation with the public on choices that will have an impact on us and future generations.

“Most of our tax revenue comes from those that earn between 50-100K per year. That group makes up about 57% of our total tax revenue. There are only about 100,000 people that earn over \$180K in New Zealand – there is only so much we can get from that group. You could take all of their income and you still wouldn’t do much fiscally. If we increase tax rates in the current system, it’s likely all we would get is the feeling of surprise and disappointment when it failed to deliver.”

Robin Oliver

Director, Olivershaw Tax Consultancy

Taxation can also play a secondary role as one government lever to incentivise (and disincentivise) behaviour. The public sector already does this in a number of ways, including social procurement (purchasing power), targeted tax relief and market regulation. Continued, clear and long-term signalling by the government can both attract investment and discourage behaviours that are detrimental long-term.

Public funding will never be unlimited, nor should it be the sole source of investment in our future. A greater focus however should be to catalyse private investment. Attracting wider sources of funding to the investments that we will need will be critical and is a growing focus globally. Sustainable investment vehicles bring private sector capital – and attention – to our challenges and opportunities. Here government can play the role of enabler: signalling what outcomes are important and where the gaps are.

“It’s more complicated to make strategic sustainable investment decisions in the absence of clarity and direction from the Government on domestic investment priorities and what constitutes ‘green’ or ‘transition’ activities and projects. The agreed direction of travel for Aotearoa is toward a low emissions economy. Now we need to get specific about net zero investment plans for key sectors and industries. This will help flesh out the opportunities for private capital to enable the transition.”

Jo Kelly

Chief Executive, Centre for Sustainable Finance: Toitū Tahuā

Aotearoa has made some progress in developing sustainable finance channels, yet considerable work remains to meet our fair share of contribution to climate action.⁶² Recent developments include the climate disclosure regime, the review of the Emissions Trading Scheme, and the inaugural issuance of \$3 billion through the Sovereign Green Bond Programme.⁶³

This issuance was similar in value to other first-time programmes from economies such as Singapore, Switzerland and Denmark. Demand for the deal reached \$7.5 billion – indicating strong demand for further issuance.⁶⁴ With the Climate Commission estimating an additional \$34 billion of investment is required across key areas of the economy by 2035, there is still significant potential that we must unlock.⁶⁵



SPOTLIGHT

Climate regulation for sustainable business behaviour

In 2021, the Government passed legislation to make climate related disclosures mandatory for some large financial market institutions in Aotearoa. Prior to that the lack of regulation meant many institutions had little by way of clear climate commitments and inconsistently reported on climate impact and sustainability progress.

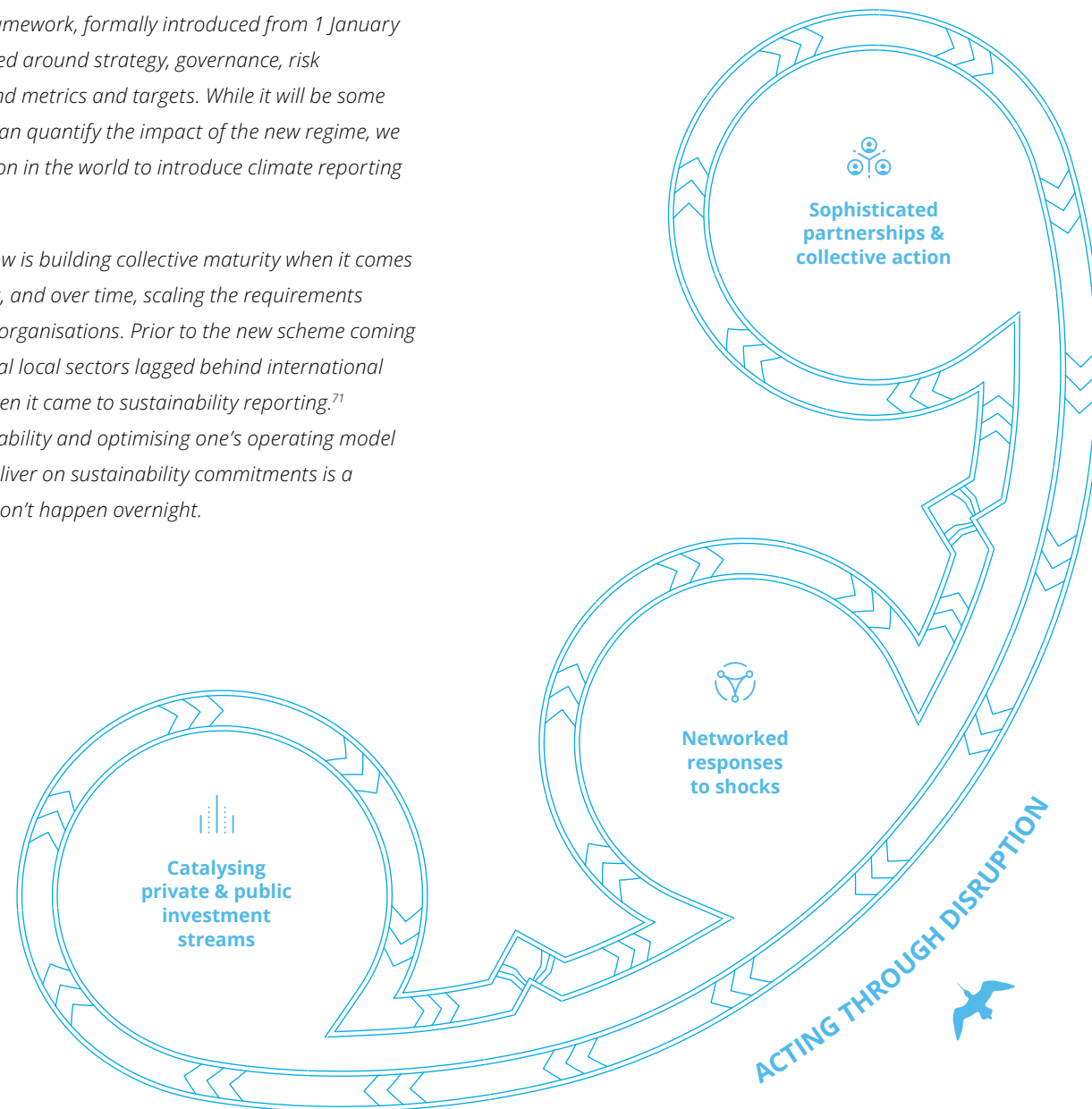
The Productivity Commission's report on New Zealand's Low Emissions Economy found the lack of regulation was causing "an ongoing and systemic overvaluation of emissions-intensive activities."⁶⁶

Aotearoa has a formalised commitment under the Paris Agreement to reduce its emissions by 50% (below 2005 levels) by 2030.⁶⁷ This was increased from 30% in 2021, given the urgent progress we need to make as a globe to limit global warming to 1.5 degrees (in the context of lagging performance). Aotearoa has among the highest per person greenhouse gas (GHG) emissions in the world.⁶⁸ Although in global terms it's a relatively small share of global emissions, we cannot afford to over-value and under-deliver emissions reductions activities if we want to meet our Paris Agreement commitments and help to stem global warming.

Approximately 200 organisations are mandated by the new climate-related disclosures legislation. This includes large publicly listed companies, insurers, banks, non-bank deposit takers, investment managers, large Crown Financial institutions and overseas corporations where their NZ-based business is over the relevant threshold (there are several thresholds, generally: \$1bn in total assets, income greater than \$250m and/or securities with a combined value over \$60m).⁶⁹ Given the number, size and value of mandated organisations, the potential for catalysing positive sustainability behaviours to bring about measurable, positive climate impact via the disclosures scheme is significant.

The reporting framework, formally introduced from 1 January 2023, is structured around strategy, governance, risk management, and metrics and targets. While it will be some time before we can quantify the impact of the new regime, we are the first nation in the world to introduce climate reporting of this nature.⁷⁰

The challenge now is building collective maturity when it comes to ESG reporting, and over time, scaling the requirements beyond the 200 organisations. Prior to the new scheme coming into effect, several local sectors lagged behind international counterparts when it came to sustainability reporting.⁷¹ Building the capability and optimising one's operating model to report and deliver on sustainability commitments is a journey, and it won't happen overnight.



Bringing choice
& action closer
together

Bringing choice & action closer together 07

Choice and action sound sequential: we consider our options, pick a path, and then walk it. But in a context of uncertainty and complexity we must continue to choose anew as we acquire information about results, revalidate and re-evaluate what we thought to be true.



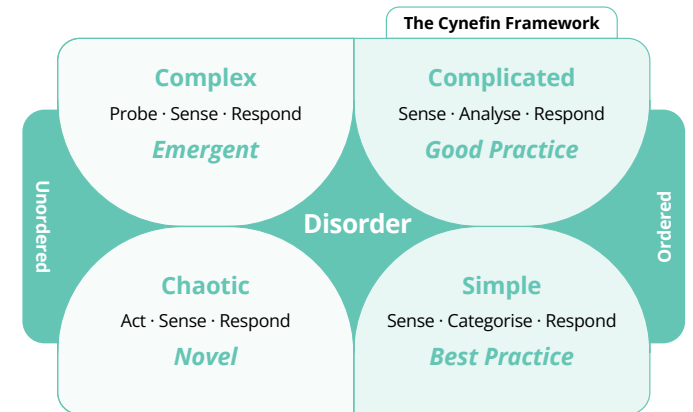
Navigating uncertainty requires us to create structure and direction where it doesn't currently exist so that we can make ongoing choices, take action and course-correct. Our kuaka, adapting to unpredictable weather conditions and changing landscapes along their migratory route, constantly amend their flight path – testing the efficacy and safety of their new route and charting a new course as they go, while staying true to their destination.

Capability 7
Learning through choice and action

The ability to respond strategically in complexity will close the gap between choice and action, creating momentum for change and more fit-for-purpose interventions long term.

The Cynefin Framework describes five conceptual domains which require different approaches to decision-making.⁷² In the ordered domains there is a clear relationship between cause and effect, and one or more 'right' solutions exist.

We tend to be more comfortable in this territory; we analyse the problem and respond with best practice (the answer) or good practice (an answer). The unordered domains are characterised by unpredictability and incomplete data. Here the relationship between cause and effect may only be understood with hindsight (if at all).



The complexity, uncertainty, and disruption we face most closely resemble the complex domain, in which cause and effect do exist but are hard to spot, and it may be impossible to identify a 'right' solution. When we are used to operating in ordered domains, this can be paralysing – taking no action feels safer than taking actions we are not confident in, and we stay in 'define and analyse' for too long.

In this domain, the strategic response in the Cynefin framework is to probe, sense and respond – test or search our coherent ideas for action and run parallel safe-to-fail experiments to reveal what is possible. In combination, the experiments change the system (rather than simply succeeding or failing) so that things are easier to manage.

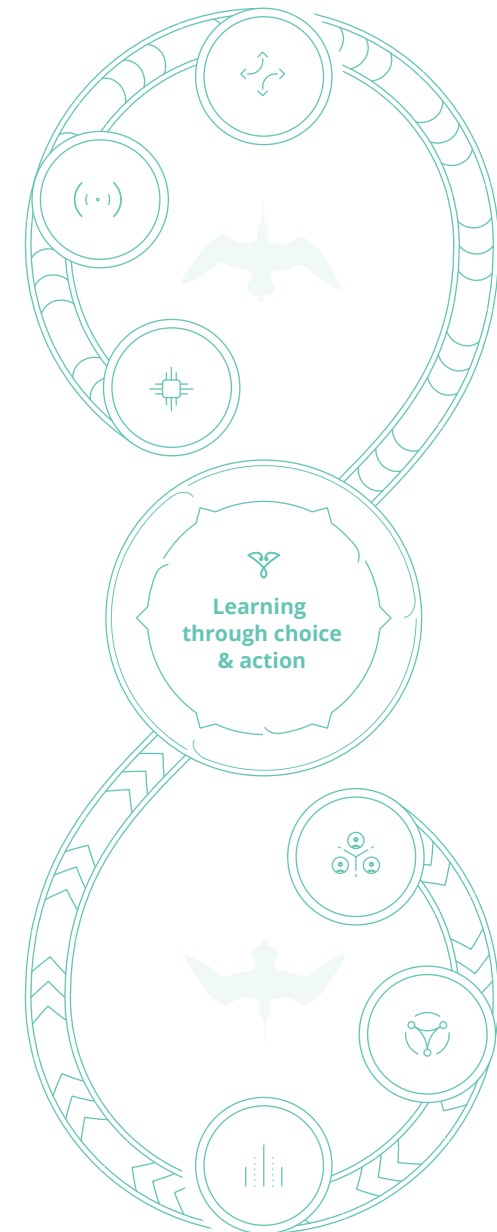
Realistically these kinds of experiments are rare. Where we cannot know what will work strategic flexibility is a more pragmatic approach. Strategic flexibility is not 'wait and see', but intentionally understanding what scenarios may play out, what actions we can take that best support multiple pathways, and how to shift to an alternative pathway where that is more likely to achieve our objectives. This way we take the best actions we can while intentionally keeping our options open as things change or become clearer. Originating from the field of climate change, Dynamic Adaptive Policy Pathways are one approach for doing this that is gaining some traction in Aotearoa.

Core to strategic flexibility is the ability to think at a system level, and a learning culture. Developing our capability to operate in complexity starts with the ability to think about and make sense of systems, the forces that shape them and the interconnections that hold them together.

Learning and making sense of complex systems brings together broad sources of insights to understand the health of the system. By recognising patterns, behaviours, and motivations, we can better assess how our interventions may have intended and unintended consequences. We also recognise the partnerships and collaboration that are required to create alignment across many parties.

Culture and practices of learning underpin complexity responses. Without the ability and willingness to course correct – and the readiness to fail – actions will be pursued because we have committed to them, not because they are likely to deliver the outcomes that we set out to achieve. Delivery agility must be supported by governance agility to be able to pivot without sacrificing long-term accountability to achieve our goals.

All of this is challenging in the public sector where decisions are subject to public scrutiny. It asks for organisational and political bravery to act without knowing everything and to consciously accept that we will make choices that we will need to change. An informed public that understands complex responses are critical to creating an environment where this is possible.



A photograph of a tall, white lighthouse with a dark top, situated on a dark, rocky cliff. The sky is a warm, golden yellow, suggesting a sunset or sunrise. Several birds are silhouetted against the sky, flying in a loose formation. The overall mood is serene and contemplative.

Future roles of the public service

Future roles of the public service

08

As citizens in a democratic society, we empower the government to invest collectively on our behalf, to represent the needs of a broad and diverse population, and to play a critical role in safeguarding our wellbeing. The public sector is a steward of our future; it has an inter-generational responsibility to build a positive future for Aotearoa.

Narrow definitions of stewardship are founded on caretaking, stability, management, and control. Against the backdrop of complexity, uncertainty, and disruption, these notions will not be enough and may even limit us. There is a need for the public sector to take a bolder stance on stewardship – leaning into the challenges and opportunities we face – and working alongside communities, businesses and iwi to bring to life the seven strategic capabilities we have outlined.

Our recommendation is for the public sector to strengthen the four faces of stewardship: Strategist, Integrator, Sentinel, and Investor.

The Strategist – Exploring the future

The kuaka have an advantage we don't have – a known and consistent goal. Getting there, though, is arduous and unpredictable.

Until recently, it was believed that kuaka follow coastal routes to make their migration from Alaska to Aotearoa. We have come to learn kuaka take the most direct route across the Pacific Ocean.⁷³ Intriguingly, scientists are still baffled by how kuaka navigate. Common theories include solar and celestial navigation or the use of magnetic fields, but there are reasons the theories don't necessarily stick when it comes to kuaka. Some have come to believe in an intrinsic sense of direction.⁷⁴

The public sector will need to be strategic in its own choices and actions. But we also need a shared, long-term view of the opportunities and disruptions that creates a common frame of understanding and thereby the conditions for more integrated positioning and responses between communities, business, and the public sector. The public sector is uniquely placed to do this, operating at the intersection of communities, organisations, and systems and with access to the skills, data, and insight that other participants don't have.



The Strategist
Exploring the future

The steward as a Strategist uses strategic foresight to create a coherent, long-term view of the possible futures ahead. It uses analysis to reduce uncertainty where possible. Crucially, the strategist doesn't lose sight of our existing learning and knowledge systems, it also draws from the past to help inform the future. By exploring what is possible for Aotearoa, the Strategist enables system participants and organisations to be better equipped to develop short and medium-term responses.

The Strategist role undertakes aspects of trend analysis, strategic foresight, and back-casting (working backwards from possible or desired future scenarios) in partnership with others. Partnering with iwi, communities, sectors, and regions will bring specialist knowledge and interests to bear strategic analysis and to share findings in consumable and actionable ways.

To be effective as the Strategist, the public sector needs to take an integrated and holistic approach to strategic foresight. The introduction of Long-Term Insight Briefings signals a move to strategic foresight; evolving these beyond the organisational bounds of individual Ministries would establish a more integrated approach to our possible futures. Joined-up strategic foresight will enable the public sector to shape and adapt responses and investments. We have a tough journey ahead. Siloed forecasting and ways of working will not get us far enough. Creating foresight as a public sector rather than individual agency assets is a shared endeavour for the benefit of many, and it will strengthen government-as-one ways of working.

The successful Strategist brings to life the capabilities of aligned and future-fit decision-making and bringing choices to life using new technologies.

The Integrator – Shaping the future

We won't be able to inch our way towards a vision for the future; we are going to need to make some big choices and be bold to hold to our outcomes. It will take agreement, compromise, and cooperation.

Kuaka succeed at their long-distance migration through collective, choreographed effort. By flying in formation, the birds can reduce expended energy by up to 20%.



The Integrator Shaping the future

Other techniques include changing the altitude of flight to benefit from less dense air and using wind and wave pressure to their advantage.⁷⁵ Just as kuaka would not succeed at their migration alone, we aren't likely to either.

Shaping our future requires a broad set of players and actions, and multi-levered changes, trade-offs and impacts that are economic and social, and government must play an Integrator role. The Integrator works to create consensus on outcomes and our pathways to get there – working with diverse perspectives to shape actions and help to guide focus and investments towards them.

Government – through regulation, policy, public institutions, revenue, and funding – holds many levers and conditions for change that can shape and shift systems. But it does not hold all the levers. Working with the system requires the government to have robust system models to understand who is impacted and who can have influence by how the system behaves.

An Integrator works with the system to bring diverse views and experiences together to build an evidence base and consensus for choices and action. The objective is sustainable progress: by bringing people on the journey and working through many perspectives, our choices and actions are better informed and the resource and sponsorship for the outcomes is less vulnerable to disruption.

Through working with the private sector, iwi, Māori, and communities across Aotearoa can identify and make bold bets. Climate adaptation, tackling inequity to deliver a just transition, and realising the opportunity of the future of work are all ripe for making bold bets based on value.

The Integrator also plays a role in converging and 'farming' many smaller bets – working with the system to bring together multi-point interventions, creating a 'portfolio' of action to deliver change and to learn from.

Government will play a role in these solutions. Directly investing and delivering, partnering, regulating, and incentivising. Through its actions, it delivers change directly and through the system, scaling promising behaviours within systems, shrinking legacy ones, and investing in the platforms and infrastructure that will enable others in the system to thrive and transform.

The public sector also holds a unique ability to hold and disseminate the knowledge and evidence gathered through working with the system – as well as from outside. The Integrator should actively collate data and knowledge on what is important to us – from what a good education system looks like to what works to address our biggest challenges – and make this available to decision-makers in the government and beyond.

The Integrator holds the key to making significant leaps in transformations. Developing bold and sustained actions through consensus clearly signals our direction of travel, paving the way for others to act. The orchestration across players increases our chances of successful co-delivery. We are behind on the eight ball, but a good Integrator can help us get ahead.

The successful Integrator brings to life the capabilities of aligned choices from diverse voices and sophisticated partnership and collective action.



The Sentinel Adapting to the future

| The Sentinel – Adapting to the future

Whatever their nature, the disruptions are likely to keep coming. Each shock uncovers and amplifies existing risks and introduces new ones. It tests the resilience of whānau, communities and organisations and exposes both our vulnerabilities and our buffers.

The survival rate of Kuaka is more than 90% on its migration to Aotearoa. Surprisingly, kuaka are known to make the journey from an early age, with some landing in Aotearoa as young as four months old.⁷⁶

Kuaka understand the aerosphere they live in; they know when to leave for their flight and how high to fly on their journey to seek out advantageous weather patterns and avoid disastrous ones. Notably, kuaka aren't born with the latter abilities – they make mistakes in their juvenile years.⁷⁷ What enables their survival from such an early stage is their ability to learn and adapt.

In an environment of multiple and cumulative disruptions, and inequitably distributed risk and resilience, the public sector plays the role of a Sentinel. The Sentinel is vigilant, keeping watch for risk and harm, providing warning, and signalling where we need to focus our attention. The Sentinel intentionally builds our resilience and our capability to prepare, respond, recover, and thrive.

Communities who will be most affected by looming disruptions may also be least able to respond. This creates further inequity. While risks may land within certain groups, they can rapidly spill over into broader economic, social, health and environmental risks across the system. As the Sentinel, the government must analyse, test and learn to build an understanding of how risks are interconnected across risk domains and how they manifest across groups rather than viewing risk in the aggregate.

Through understanding our vulnerabilities to risk as a nation, the Sentinel gives us the ability to assess our resilience buffers – their sufficiency and their distribution. We can then move to invest in gaps across systems, particularly for communities with the least resilience and the most need. Actively investing in resilience is in tension with a traditional focus on efficiency – particularly in times of economic downturn.

However, over time, we improve our ability to bounce back after shocks by addressing our underlying vulnerabilities as we go.

Of course, risk isn't always purely a negative concept; risk and opportunity are intertwined. Enabling citizens and organisations to assess and balance risk creates the potential for change. The Sentinel finds ways to incentivise parts of the system to take risks at the same time as buffering and reducing risk elsewhere. In a public sector still roundly characterised as 'risk averse', this requires our public sector leaders to take an active, deliberate risk (and opportunity) stance and think about risks beyond current events and future issues.

The Sentinel role means embedding and systematising some of the behaviours we practised during our COVID-19 response, such as risk intelligence and planning. Through clarifying risks at a national and community level across systems and our key vulnerabilities, the Sentinel creates a line of sight from interconnected risks through to the possible future scenarios. This understanding supports active investment in resilience buffers and an integrated (and enduring) response to preparedness, response, recovery and thriving. Addressing our underlying vulnerabilities will prevent and reduce real harm and improve our ability to bounce back when the shocks hit.

The successful Sentinel brings to life the capabilities of networked responses to shocks and learning through choice and action.

■ **The Investor** – Building reserves for the future

There is no question we need the resources and capacity to navigate the challenges ahead. In the context of the unexpected, money in the bank (literal and metaphorical) can be used to weather all storms. We need to act now to manage in the near term and to enable future generations.

Kaitiakitanga, in this context, is about what we can invest in today that will benefit our descendants in the future – part of the role we must play in being a good ancestor.

The Investor

Building reserves for the future



Kuaka build energy stores that can be sustained over an incredible distance. The average kuaka weighs 300 grams, but before they take flight for their migration, their average weight jumps to 600 grams.⁷⁸ They have developed the ability to sustain their energy once they take flight, too. It is believed the kuaka rest for approximately 42 minutes a day by putting half their brain to sleep for bursts of up to 12 seconds at intervals while in flight.⁷⁹ Without these sorts of mechanisms, the kuaka would lack the capacity and resources to migrate altogether.

To be successful on our journey, we need the public sector to invest in human, social, natural, and financial resources across citizens, communities, businesses, and the public sector itself. This is the role of the Investor.

“We need to decide as a community what are the minimum things that every human being needs to get out of bed and function – we’re talking about a relatively small list: health, education, housing, and clothing. It’s not entirely unrealistic either – in Singapore, everyone has a house to live in since the Government owns 70% of housing stock. It’s not out of this world. If you decide there are some basic services, you can jointly fund it and make it happen.”

Girol Karacaoglu

*Adjunct Professor Wellington School of Business and Government,
Te Herenga Waka – Victoria University Wellington*

In our research, we heard common themes of concern for our education, health, housing, and social cohesion. These are core to the public sector and domains that we cannot afford to do poorly in any context.

In the environment we are in today they are imperative to our success; from seizing the opportunity of green-collar jobs to informed democratic participation, we must continue to invest in our human and social capital.

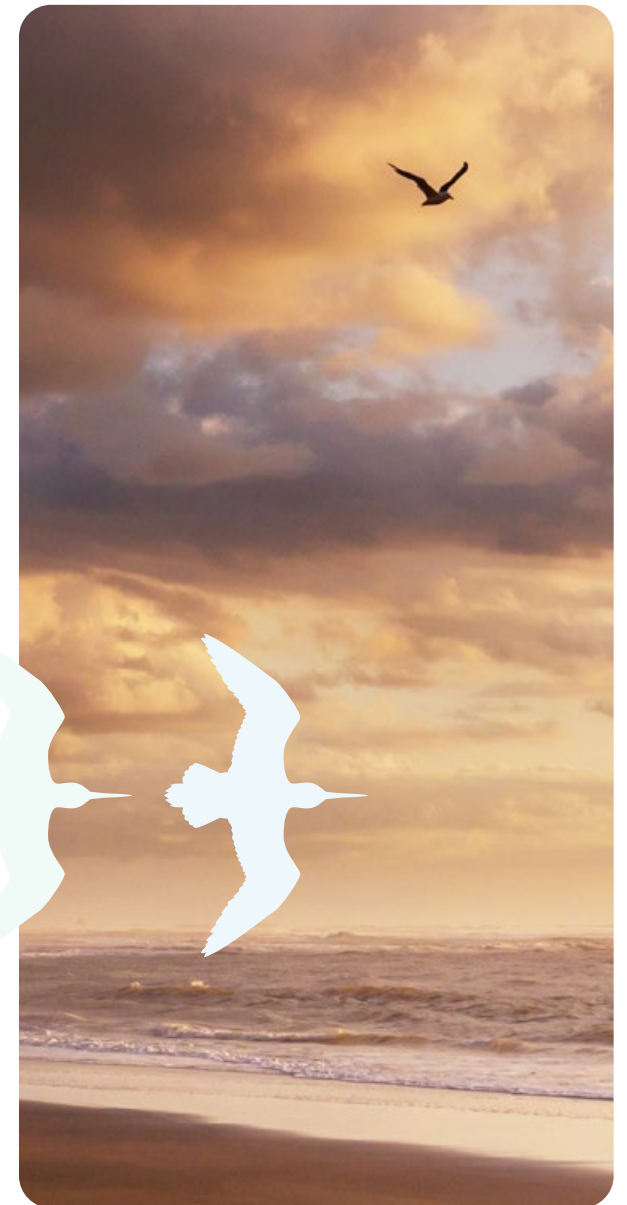
The private sector will play a vital role in our future. Investment in the right places to unlock greater productivity could be the key to bolstering our four capitals. Productivity in the private sector lags on average up to 45% behind that of high-performing small, advanced economies. While productivity in the public sector is not regularly measured, we know we have more productivity potential to unlock.⁸⁰ To do this, we must set clearer expectations for productivity gains, build our capability to measure productivity, and report on core public service efficiency as the best ways to start.⁸¹ This requires focused innovation policy in areas of emerging economic strength and competitive advance, fostering of innovation ecosystems in high-potential industries, and collaboration with industry.⁸²

The Investor actively brokers opportunities to attract sustainable finance and offshore investment to where it is needed. It also plays a role in encouraging investment in skills and competencies and attracting specialist knowledge to the sectors where it is needed.

Our public sector investment decision-making frameworks, such as the Treasury's Living Standards Framework, enable us to make balanced investments across the four capitals. In that respect, we have been at the front of the pack.

But we trail in the tables on educational outcomes, productivity, and several key economic indicators – particularly in relation to equity. These are symptoms of under-investment. The Investor has a role in building our resource and resilience across our four capitals, thereby enabling us to better withstand and bounce back from shocks. With the right discipline, the Investor has the potential to take us a step further than resilience to a place of antifragility, where we capitalise and thrive in times of chaos – able to build back better in the wake of significant shocks.

The successful Investor brings to life the capabilities of sophisticated partnerships and collective action and catalysing private and public investment streams.



A photograph of a beach at sunset. The sun is low on the horizon, creating a warm, golden glow. The sky is filled with soft, orange and yellow clouds. The ocean is calm, with gentle waves lapping at the shore. In the foreground, there is a field of tall, golden grasses. Several people are silhouetted against the bright light of the sunset, walking along the beach. In the background, a range of mountains is visible under the hazy sky.

Investing
in our people

Investing in our people 09

When we look across the four capitals in Aotearoa (financial, social, natural, and human) and consider the context of complexity, uncertainty, and disruption, we heard consistently that there is only one reliable hedge against disaster: the depth and breadth of human capability that we can bring to bear on our national challenges.

Talent, insight, empathy, and lived experience – these are the attributes that were resoundingly referenced as the most valuable things we can bring. They allow us to innovate and be agile, create strong bonds and resilience as communities, engage meaningfully, and work with data, evidence, and knowledge. They allow us to draw on rich wells of historical and cultural understanding to forge new pathways.

Considering the four faces of the public sector steward also sets a new challenge for public service talent and leadership: to manifest these roles and capabilities within the workforce and to work with Aotearoa businesses and communities to create this human capital for our future.

The system of education and learning in its broadest definition, will be critical to nurturing our future talent. Attracting and retaining talent across the public service will ensure we can harness this capability in the roles that matter. We must build the strategic capabilities into our education and learning frameworks, organisational capabilities of business and government and our leadership groups.

We started this report with a daunting set of challenges facing Aotearoa, and a sense that despite progress, there remain fundamental gaps in the strategic capabilities we can bring to bear on navigating our way to a thriving future. We finish, however, with a sense of optimism. It is truly our people and communities, and our shared commitment to this country, which will see us through the winds of change. Across six megatrends, seven capabilities and four faces – the focal point is on our people investments.





As the kuaka take wing each year, relying on the strength of the flock to make a most courageous journey, so we have the opportunity to take flight **into the wind together.**

Endnotes

- 1 <https://worlduncertaintyindex.com/> Note: The WUI is computed by counting the percent of word "uncertain" (or its variant) in the Economist Intelligence Unit country reports. The WUI is then rescaled by multiplying by 1,000,000. A higher number means higher uncertainty and vice versa. For example, an index of 200 corresponds to the word uncertainty accounting for 0.02 percent of all words, which – given the EIU reports are on average about 10,000 words long – means about 2 words per report.
- 2 Daniel Kahneman and Amos Tversky. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47, no. 2 (1979), 263. doi:10.2307/1914185.
- 3 Daniella Laureiro-Martínez and Stefano Brusoni. "Cognitive flexibility and adaptive decision-making: Evidence from a laboratory study of expert decision makers." *Strategic Management Journal* 39, no. 4, 2018, 1031-1058. doi:10.1002/smj.2774.
- 4 Kahneman and Tversky. "Prospect Theory: An Analysis of Decision under Risk."
- 5 "Why It's So Hard for Us to Visualize Uncertainty." *Harvard Business Review*. Last modified November 11, 2016. <https://hbr.org/2016/11/why-its-so-hard-for-us-to-visualize-uncertainty>
- 6 Nikola Tesla interview conducted by John B. Kennedy and published in the 30 January 1926 issue of *Collier's* magazine.
- 7 "Russia-Ukraine War Business Scenarios." Deloitte United States. June 2022. <https://www2.deloitte.com/us/en/pages/consulting/articles/russia-and-ukraine-war-economy-business-scenarios.html>.
- 8 "US China Trade War Food for Thought for New Zealand." Deloitte New Zealand. September 2020. <https://www2.deloitte.com/nz/en/pages/chinese-services-group/articles/us-china-trade-war-food-for-thought-for-new-zealand.html>.
- 9 "Global Supply Chains and the US-China Trade War." Deloitte Insights. December 2021. <https://www.deloitte.com/global/en/our-thinking/insights/topics/economy/us-china-trade-war-supply-chain.html>.
- 10 "Research Finds Alpine Fault Quake More Likely in the Next 50 Years." *GNS Science | Te Pū Ao*. <https://www.gns.cri.nz/news/research-finds-alpine-fault-quake-more-likely-in-the-next-50-years/>.
- 11 "Paleotsunamis on the Southern Hikurangi Subduction Zone, New Zealand, Show Regular Recurrence of Large Subduction Earthquakes | The Seismic Record | GeoScienceWorld." <https://pubs.geoscienceworld.org/ssa/tsr/article/1/2/75/605992/Paleotsunamis-on-the-Southern-Hikurangi-Subduction>.
- 12 Jennifer Marshman, Alison Blay-Palmer and Karen Landman. "Anthropocene Crisis: Climate Change, Pollinators, and Food Security." *Environments* 6, no. 2 (2019), 22. doi:10.3390/environments6020022.
- 13 "Why Bees Matter." Food and Agriculture Organization. <https://www.fao.org/3/I9527EN/i9527en.PDF>.
- 14 "Aotearoa New Zealand's Turning Point." Deloitte New Zealand. 2023. <https://www2.deloitte.com/content/dam/Deloitte/nz/Documents/about-deloitte/nz-turning-point-report.pdf>.
- 15 "Weather-related Disasters Increase over Past 50 Years, Causing More Damage but Fewer Deaths." World Meteorological Organization. Last modified 9 September 2021. <https://public.wmo.int/en/media/press-release/weather-related-disasters-increase-over-past-50-years-causing-more-damage-fewer>.
- 16 "Tackling the Infrastructure Deficit." Deloitte New Zealand. May 2023. <https://www2.deloitte.com/nz/en/pages/2023-government-budget/articles/infrastructure.html>.
- 17 "Distribution of Wealth Across New Zealand Households Remains Unchanged Between 2015 and 2021." Stats NZ. <https://www.stats.govt.nz/news/distribution-of-wealth-across-new-zealand-households-remains-unchanged-between-2015-and-2021>.
- 18 "Household Net Worth Statistics: Year Ended June 2021." Stats NZ. <https://www.stats.govt.nz/information-releases/household-net-worth-statistics-year-ended-june-2021/>.
- 19 "Voices of Pacific peoples: Eliminating pay gap." New Zealand Human Rights Commission. 2022. <https://www.hrc.org.nz/document/voices-of-pacific-peoples-pacific-pay-gap-inquiry-report> (secureserver.net)
- 20 Matthew Hobbs, Annabel Ahuriri-Driscoll, Lukas Marek, Malcolm Campbell, Melanie Tomintz, and Simon Kingham. "Reducing health inequity for Māori people in New Zealand." *The Lancet* 394, no. 10209, 2019, 1613-1614. doi:10.1016/s0140-6736(19)30044-3.
- 21 "New Cost of Living Figures Show Who It's Hitting Hardest." RNZ. 1 May 2023. <https://www.rnz.co.nz/news/national/489044/new-cost-of-living-figures-show-who-it-s-hitting-hardest>.
- 22 "Building a Fair Future for All." Deloitte New Zealand. October 2022. <https://www2.deloitte.com/nz/en/pages/public-sector/articles/building-a-fair-future-for-all.html>.
- 23 Kate Raworth. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Hartford: Chelsea Green Publishing, 2017.
- 24 "Political Polarisation: the Phenomenon That Should Be on Everyone's Lips." CaixaBank Research. Last modified 25 November 2022. <https://www.caixabankresearch.com/en/economics-markets/public-sector/political-polarisation-phenomenon-should-be-everyones-lips>.
- 25 "BBC Global Survey: A world Divided?" IPSOS. Last modified 23 April 2018. <https://www.ipsos.com/en/bbc-global-survey-world-divided>.
- 26 Russell Palmer. "Rise in Disinformation, Conspiracy Theories Prompts Calls for Election Protections." RNZ. Last modified 8 April 2023. <https://www.rnz.co.nz/news/political/487555/rise-in-disinformation-conspiracy-theories-prompts-calls-for-election-protections>.
- 27 "New Zealand's Internet Insights 2022: Concerns and safety." InternetNZ. <https://internetnz.nz/new-zealands-internet-insights/new-zealands-internet-insights-2022/concerns-and-safety>.
- 28 Milo Comerford, Jakob Guhl and Carl Miller. "Understanding the New Zealand Online Extremist Ecosystem." Institute for Strategic Dialogue. <https://www.isdglobal.org/wp-content/uploads/2021/06/NZ-Online-Extremism-Findings-Report.pdf>.

- 29 Katarina Williams. "Our Truth, Tā Mātou Pono: Stuff Introduces New Treaty of Waitangi Based Charter Following Historic Apology." Stuff. Last modified 28 November 2020. <https://www.stuff.co.nz/pou-tiaki/our-truth/123533668/our-truth-t-mtou-pono-stuff-introduces-new-treaty-of-waitangi-based-charter-following-historic-apology>.
- 30 "One Million People Aged 65+ by 2028." Stats NZ. Last modified July 2022. <https://www.stats.govt.nz/news/one-million-people-aged-65-by-2028/>.
- 31 Ibid.
- 32 "New Zealand Better Life Index." OECD. <https://www.oecdbetterlifeindex.org/countries/new-zealand/>
- 33 "The Future of Aging." Deloitte Insights. Last modified June 2019. <https://www2.deloitte.com/us/en/insights/industry/health-care/future-of-aging-aging-population-and-healthcare-industry.html>.
- 34 "How is Our Māori Population Changing?" Stats NZ. Last modified November 2015. <https://www.stats.govt.nz/reports/how-is-our-maori-population-changing>. Note: By 2038, half the Māori population will be younger than 28 years, compared with 24 years in 2015. Over the same period, the median age of the non-Māori population is projected to increase from 40 years to 45 years.
- 35 "Subnational Ethnic Population Projections: 2018(base)–2043." Stats NZ. Last modified March 2022. <https://www.stats.govt.nz/information-releases/subnational-ethnic-population-projections-2018base2043>.
- 36 "Unbounding: Unlimited Reality's Metaverse for Business Series." Deloitte United States. Last modified December 2022. <https://www2.deloitte.com/us/en/pages/consulting/articles/unlimited-reality-metaverse-for-business-event-series.html>; "Gartner Predicts 25% of People Will Spend At Least One Hour Per Day in the Metaverse by 2026." Gartner. Last modified February 2022. <https://www.gartner.com/en/newsroom/press-releases/2022-02-07-gartner-predicts-25-percent-of-people-will-spend-at-least-one-hour-per-day-in-the-metaverse-by-2026>.
- 37 "Stop Distinguishing Between Execution and Strategy." Harvard Business Review. Last modified March 2015. <https://hbr.org/2015/03/stop-distinguishing-between-execution-and-strategy>.
- 38 "Better Life Index: Civic Engagement." OECD. <https://www.oecdbetterlifeindex.org/topics/civic-engagement/>.
- 40 "New Zealand Women and the Vote." Ministry for Culture and Heritage. Last modified April 2023. <https://nzhistory.govt.nz/politics/womens-suffrage>.
- 39 Joel Maxwell. "Labour's Largest Ever Māori Caucus Elects New Chairs Willow-Jean Prime and Rino Tirikatene." Stuff. Last modified November 2020. <https://www.stuff.co.nz/national/politics/300160474/labours-largest-ever-mori-caucus-elects-new-chairs-willowjean-prime-and-rino-tirikatene>.
- 40 Hopgood, Sela. "NZ Election Brings in Largest Pacific Caucus." RNZ. Last modified October 2020. <https://www.rnz.co.nz/international/pacific-news/428650/nz-election-brings-in-largest-pacific-caucus>.
- 41 "Final Voter Turnout Results." Taituarā — Local Government Professionals Aotearoa and LGNZ. Last modified February 2023. <https://www.votelocal.co.nz/final-voter-turnout-results/>.
- 42 "New Zealand Govt Reverses Move to Introduce Bill to Lower Voting Age." Reuters. Last modified March 2023. <https://www.reuters.com/world/asia-pacific/new-zealand-govt-reverses-move-introduce-bill-lower-voting-age-2023-03-13/>.
- 43 "Prime Minister Chris Hipkins Abandons Plan for Legislation to Lower Voting Age for General Elections." Newshub. Last modified March 2023. <https://www.newshub.co.nz/home/politics/2023/03/prime-minister-chris-hipkins-abandons-plan-for-legislation-to-lower-voting-age-for-general-elections.html>.
- 44 Anneke Smith. "Electoral System Review Recommends Voting Age Lowered to 16, Party Threshold to 3.5%." RNZ. Last modified June 2023. <https://www.rnz.co.nz/news/political/491390/electoral-system-review-recommends-voting-age-lowered-to-16-party-threshold-to-3-point-5-percent>.
- 45 "Make the Move – Shifting how the public sector works with communities", Inspiring Communities, New Zealand 2023. https://inspiringcommunities.org.nz/ic_resource/make-the-move-shifting-how-the-public-sector-works-with-communities/
- 46 "Bringing Citizens' Assemblies to the Mainstream." University College London. Last modified May 2022. <https://www.ucl.ac.uk/impact/case-studies/2022/apr/bringing-citizens-assemblies-mainstream>.
- 47 "The New Economics of Innovation and Transition: Evaluating Opportunities and Risks." The Economics of Energy Innovation and System Transition (EEIST), University of Exeter. 2021. <https://eeist.co.uk/eeist-reports/the-new-economics-of-innovation-and-transition-evaluating-opportunities-and-risks/>.
- 48 For example, Deloitte's Optimal Reality platform: <https://www.deloitte.com/an/en/services/consulting/services/optimal-reality.html>
- 49 UrbanistAI. <https://urbanistai.com/>.
- 50 "New Gorge Highway Project Alliance Wins Diversity Award." Stuff. 25 September 2021. <https://www.stuff.co.nz/manawatu-standard/news/300416149/new-gorge-highway-project-alliance-wins-diversity-award>.
- 51 "Growth in Government Procurement Spend." New Zealand Government Procurement. Last modified May 2021. <https://www.procurement.govt.nz/about-us/news/growth-in-government-procurement-spend/>.
- 52 "Developing a Culturally Appropriate Assessment Model." InterRAI and Deloitte New Zealand. January 2023. <https://www.interrai.co.nz/assets/CAAM/InterRAI-CAAM-Final-Report-Final.pdf>.
- 53 "Residential Flood Insurance Issues Information Release." The Treasury New Zealand. Last modified December 2022. <https://www.treasury.govt.nz/sites/default/files/2022-12/residential-flood-insurance-issues-4490225.pdf>.
- 54 "Sea level rise and the withdrawal of residential insurance in Aotearoa New Zealand." Climate Sigma for the Deep South National Science Challenge. Last modified December 2022. <https://deepsouthchallenge.co.nz/wp-content/uploads/2021/01/Insurance-Retreat-December-2020-Final-Report.pdf>.
- 55 "Underinsurance Poses a Threat to Inclusive Progress in Aotearoa." Deloitte New Zealand. Last modified February 2023. <https://www2.deloitte.com/nz/en/blog/financial-services/2023/underinsurance-poses-a-threat-to-inclusive-progress-in-aotearoa.html>.
- 56 "Sea level rise and the withdrawal of residential insurance in Aotearoa New Zealand." Climate Sigma.
- 57 "Underinsurance Poses a Threat to Inclusive Progress in Aotearoa." Deloitte New Zealand.
- 58 "Future Global Shocks: Improving Risk Governance." OECD. April 2010. <https://www.oecd.org/governance/48329024.pdf>.
- 59 "Household Income and Housing-cost Statistics: Year Ended June 2022." Stats NZ. March 2023. <https://www.stats.govt.nz/information-releases/household-income-and-housing-cost-statistics-year-ended-june-2022/>.
- 60 "Underinsurance Poses a Threat to Inclusive Progress in Aotearoa." Deloitte New Zealand.
- 61 "Material Hardship." Growing Up in New Zealand. April 2023. <https://www.growingup.co.nz/growing-up-report/material-hardship>.
- 62 "New Zealand: Climate Action Tracker." Climate Action Tracker. March 2023. <https://climateactiontracker.org/countries/new-zealand/>.
- 63 "Wellbeing Budget 2023: Support for today Building for tomorrow." Government of New Zealand. 18 May 2023. <https://budget.govt.nz/budget/pdfs/wellbeing-budget/b23-wellbeing-budget.pdf>.
- 64 "Sustainable Debt Global State of the Market." Climate Bonds Initiative. Last modified 2022. https://www.climatebonds.net/files/reports/cbi_sotm_2022_03e.pdf.
- 65 Caralee McLiesh. Speech: "Financing the transition to a low emissions, climate resilient economy." The Treasury New Zealand. 18 September 2022. https://www.treasury.govt.nz/sites/default/files/2022-09/sp-financing-transition-low-emissions-climate-resilient-economy-19sep22_1.pdf.

- 66 "Low-emissions economy." Productivity Commission. August 2018. https://www.productivity.govt.nz/assets/Documents/lowemissions/4e01d69a83/Productivity-Commission_Low-emissions-economy_Final-Report_FINAL_2.pdf.
- 67 "Govt Increases Contribution to Global Climate Target." New Zealand Government. 31 October 2021. <https://www.beehive.govt.nz/release/govt-increases-contribution-global-climate-target>.
- 68 "Low-emissions economy." Productivity Commission.
- 69 "Mandatory Climate-related Disclosures." Ministry for the Environment. 17 June 2022. <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/>.
- 70 "NZ Becomes First in World for Climate Reporting." New Zealand Government. Last modified 13 April 2021. <https://www.beehive.govt.nz/release/nz-becomes-first-world-climate-reporting>.
- 71 "New Zealand Insights: How can ESG reporting fuel positive change?" Ernst & Young New Zealand. October 2022. https://assets.ey.com/content/dam/ey-sites/ey-com/en_nz/topics/sustainability/ey-nz-fourth-esg-reporting-maturity-assessment.pdf.
- 72 "The Cynefin Framework." The Cynefin Co. 8 October 2021. <https://thecynefin.co/about-us/about-cynefin-framework/>.
- 73 Gerard Hutching. "Wading birds - Bar-tailed godwits' migration route." Te Ara – the Encyclopedia of New Zealand, June 2006. <http://www.TeAra.govt.nz/en/map/9184/bar-tailed-godwits-migration-route>
- 74 "Bar-tailed Godwit's Sense of Direction." Animal Navigation. 22 August 2011. <https://www.animalnav.org/bar-tailed-god-wits/>.
- 75 Christina Troup. "Bird migration - Preparation for the journey". Te Ara - the Encyclopedia of New Zealand, 12 June 2006. <http://www.TeAra.govt.nz/en/bird-migration/page-5>
- 76 K Woodley. "Bar-tailed godwit: Kuaka". In Miskelly, C.M. (ed.) New Zealand Birds Online. 2013. <https://nzbirdsonline.org.nz/species/bar-tailed-godwit>
- 77 "The Godwit's Long, Long Nonstop Journey." The New York Times. 20 September 2022. <https://www.nytimes.com/2022/09/20/science/migratory-birds-godwits.html>.
- 78 "Flight of the Godwit." Science Learning Hub - Pokapū Akoranga Pūtaiao. Last modified September 2011. <https://www.sciencelearn.org.nz/resources/296-flight-of-the-godwit>.
- 79 "Long-Haul Godwit." EarthDate Broadcast, Episode 239. 20 November 2021. <https://www.earthdate.org/episodes/long-haul-godwit>.
- 80 "Measuring state sector productivity." New Zealand Productivity Commission. Final report of the measuring and improving state sector productivity inquiry, vol. 2., 2018. <https://www.productivity.govt.nz/assets/Documents/3d3c1cd997/Final-Report-Measuring-State-Sector-Productivity.pdf>
- 81 "Improving state sector productivity." New Zealand Productivity Commission. Final report of the measuring and improving state sector productivity inquiry, vol. 1., 2018. <https://www.productivity.govt.nz/assets/Documents/a110722008/Final-Report-Improving-State-Sector-Productivity.pdf>
- 82 "Frontier Firms follow-on review." New Zealand Productivity Commission, 2023. https://www.productivity.govt.nz/assets/Inquiries/follow-on-review-frontier-firms/Frontier_Firms_follow-on_review_28April2023.pdf

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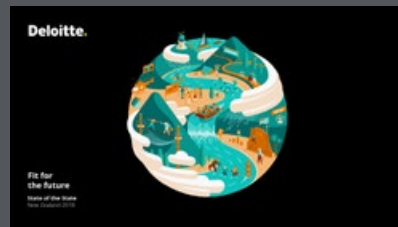
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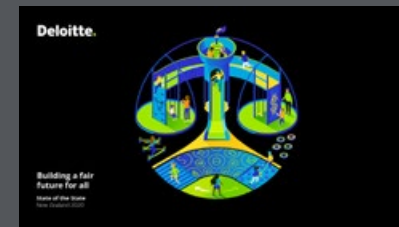
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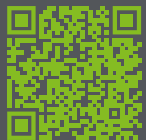
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