

Discussion Paper 2023/01

BIG Ideas: Brief to the Incoming Government (B.I.G.)

SHORT READ



MCGUINNESS INSTITUTE
TE HONONGA WAKA

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Note: This version of *BIG Ideas: Brief to the Incoming Government (B.I.G.)* is the short read and does not include references. For a more detailed report and a full list of references, please see the long read, *Discussion Paper 2023/01 – BIG Ideas: Brief to the Incoming Government (B.I.G.)*.

This paper forms part of the Institute's CivicsNZ project.

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Preface

'Expecting the unexpected' is part of my philosophy ... As we find ourselves confined today [due to the pandemic], all of us, from Nigeria to New Zealand, must realise that our destinies are intertwined whether we like it or not. This is the time for us to reconnect with our humanism. If we do not see humanity as a community with a shared destiny, we cannot exert pressure on our governments to take effective, innovative action.

– Edgar Morin (b. 1921), September 2020

In 2020, at the age of 99, French philosopher Edgar Morin hoped the COVID-19 pandemic might improve our understanding of science and teach us how to live with uncertainty and how to prepare for disasters, particularly those caused by biosphere degradation.

Morin coined the term 'polycrisis', which is now in popular use. The World Economic Forum's *Global Risks Report 2023* described a polycrisis as 'a cluster of related global risks with compounding effects, such that the overall impact exceeds the sum of each part'. When a challenge becomes a crisis it is defined by scale, but when a crisis becomes a polycrisis it is defined by complexity. The ability to solve any one of the crises in a polycrisis is difficult, as a polycrisis is a connected mass of crises all impacting and amplifying each other. For example, challenges such as housing supply, cost of living, poverty and health are amplified by changes in climate.

As we write this, our country is facing a crisis. The Auckland floods, followed shortly afterwards by Cyclone Gabrielle, have led to New Zealand's third ever national state of emergency under the Civil Defence Emergency Management Act 2002. The previous two were in March 2020 at the onset of the COVID-19 pandemic, and in February 2011 after the Christchurch earthquake.

We question whether New Zealand is in the midst of a polycrisis, and, if so, what we can do about it. We are seeing system stresses and policy lags at a level we have not seen before. For example, in December 2020, New Zealand declared a climate emergency, but the latest cyclone has created a new form of climate urgency. Minister of Climate Change James Shaw noted during the cyclone that the country is entering a 'period of consequences', and decades of under-delivery and policy failure by successive governments is the root cause of the issue. We agree. The lack of a national resilience strategy, climate strategy and coherent macro system thinking means that we are still discounting the future in our decision-making processes (see, for example, the Parliamentary Commissioner for the Environment's report on discount rates). We would argue that local authorities did not have the risk 'reduction' or 'readiness' capabilities to be ready for climate events (of scale) as central government had failed to get them ready, and the quality of the 'response' and 'recovery' process is still to be proven.

Our only way forward is to do something significant.

We suggest doing something in the form of a polysolution – a package of BIG policy actions that have scale and together are able to 'shock' the emerging polycrisis with a diverse range of actions designed to slow, control and ideally reverse the mass of crises we face. This policy shock should be designed to bring Aotearoa New Zealand in line with our preferred future (see Figure 1). In this context, 'BIG' is a play on both the phrase Brief to the Incoming Government (B.I.G.) and the term 'BIG', in that the policy changes are of sufficient scale and size to deliver a polysolution.

This discussion paper suggests that Government should urgently focus all public policy on the year 2040 – because climate change impacts are expected by the Intergovernmental Panel on Climate Change (IPCC) to significantly impact our way of life around that time, and Te Tiriti bicentennial commemorations provide a time to reflect and create an enduring way forward. We need to ensure our assets and resources are well maintained and fit for purpose, and our mokopuna have the necessary skills, wisdom and character to become the stewards of Aotearoa New Zealand in the year 2040.

Importantly, this paper focused on collecting ideas, megatrends, and wild cards from patrons, rather than testing them. Pages 5–20 discuss seven BIG policy actions that list a wide range of ideas. Appendix 1 contains a list of megatrends and wild cards and Appendix 2 suggests a tentative checklist for successfully implementing BIG ideas. To gain an understanding of the detail see the long read, *Discussion Paper 2023/01 – BIG Ideas: Brief to the Incoming Government (B.I.G.)*.

The aim was to design a package of BIG policy actions for analysis by government and others that put people and the planet at the centre. The ideas are for consideration and debate, in the hope of contributing to a wider conversation about Aotearoa New Zealand’s long-term future. We acknowledge others will have their own ideas and solutions, have different perspectives on the scale and pace of change and have different views on the extent to which the current public service systems are designed to cope. For example, the patrons do not necessarily endorse every idea, proposal or perspective listed in this paper – and that is the beauty of this process. The funnel process, illustrated in Figure 2, enables ideas to come to the surface for discussion. It encourages critical thinking, a systems approach, design solutions, strategy mapping and open-ended conversations. Importantly, ideas should be collected well before they are assessed, analysed and costed, and decisions over funding and institutions are made.

The McGuinness Institute is non-partisan. This means our protocol is not to publish material in the vicinity of an election. For this reason, although the next incoming government is likely to be in place in October 2023 (six months away), we are releasing this paper in April to invite feedback at some distance from the election process. We hope it contributes to the important discussion on what next for public policy.

This paper could not have been prepared without the Institute’s patrons, Roger Dennis, Sue Elliott, Bronwyn Hayward, Mark Henaghan, Carwyn Jones, Girol Karacaoglu, Nikki Kaye, Elaina Lauaki-Vea, Ella Lawton, Trevor Moeke, Bill Moran, Claudia Orange, Michelle Pawson, Neville Peat, Jessica Prendergast, Mike Reid, Lachlan Rule, Diane Robertson, Conal Smith, and Morgan Williams (see map on the back cover). A number of patrons were unable to provide feedback due to recent weather events or work-related situations. In a few cases we sought advice on some specific policy actions, including from David Ermen on ecological corridors.

We would like to thank all the contributors for sharing their ideas and insights; however, we take full responsibility for its contents and any errors within. Thank you for your interest in this paper and the work of the Institute.

Ngā mihi



Girol Karacaoglu
Patron



Wendy McGuinness
Chief Executive

Figure 1: The cone of plausibility

The cone of plausibility illustrates the relationship between hindsight, insight and foresight and distinguishes between possible, probable and preferred futures.

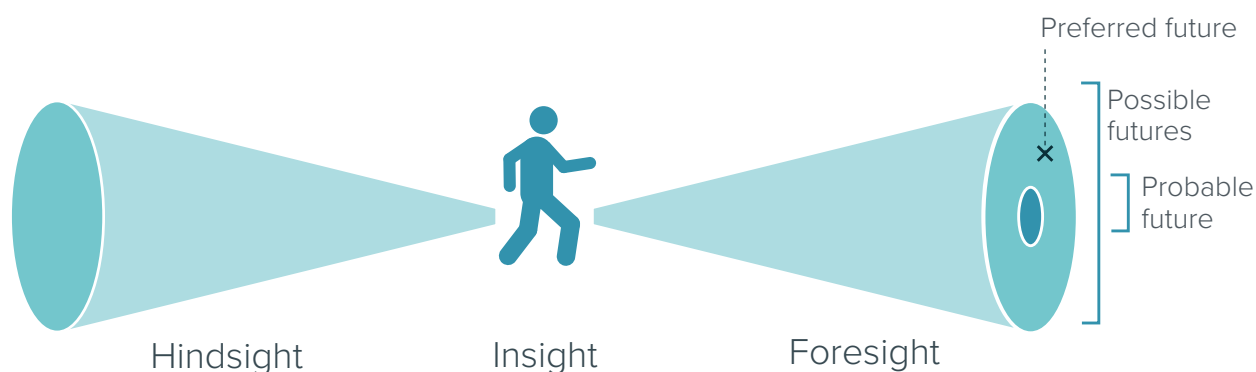
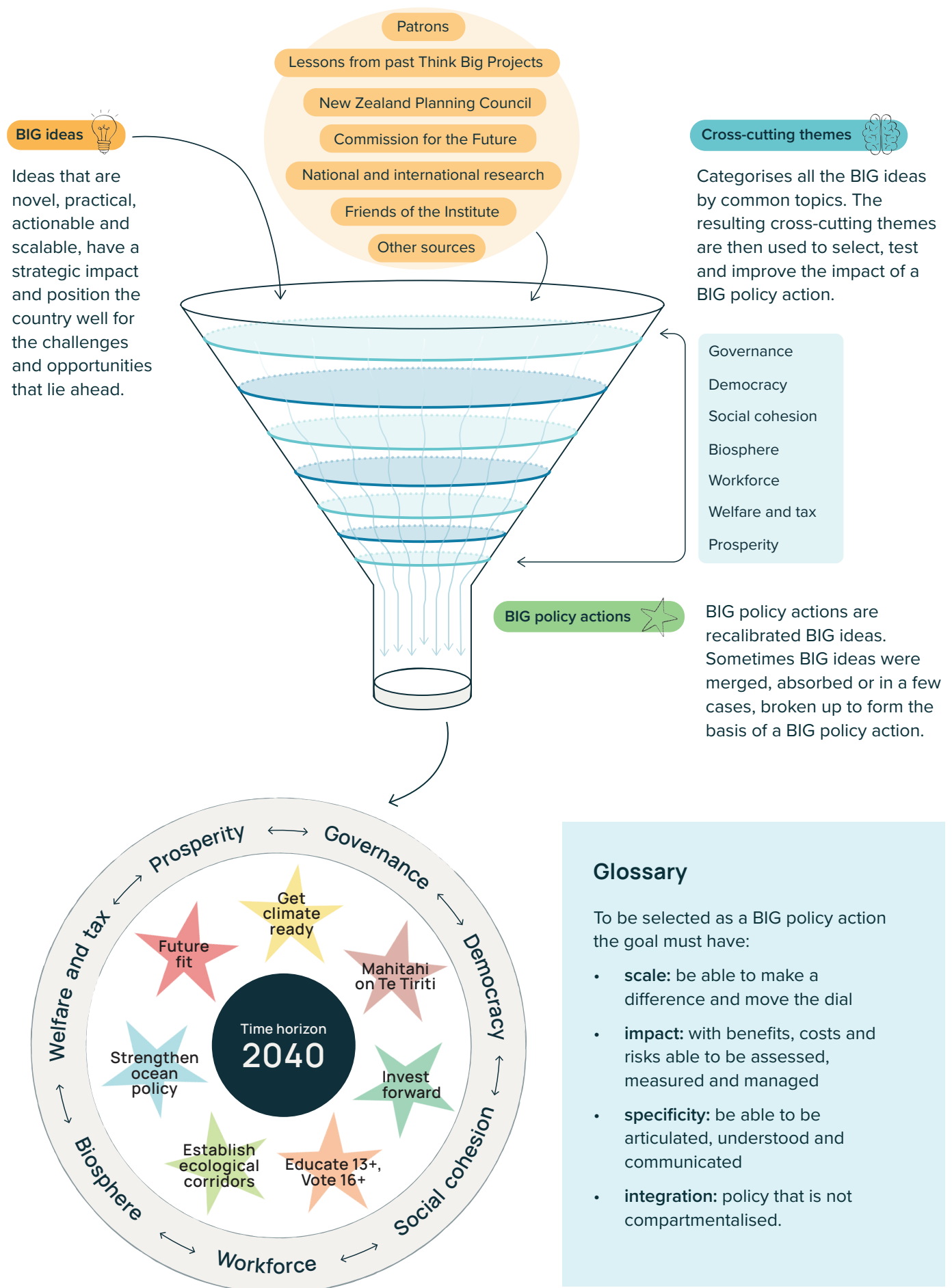


Figure 2: Our method: the funnel



Glossary

To be selected as a BIG policy action the goal must have:

- **scale:** be able to make a difference and move the dial
- **impact:** with benefits, costs and risks able to be assessed, measured and managed
- **specificity:** be able to be articulated, understood and communicated
- **integration:** policy that is not compartmentalised.

BIG Policy Action #1: Get climate ready

Getting climate ready means actively working on ways to help New Zealand and New Zealanders reconsider and organise their assets, prepare plans for climate events and build the capability of their mokopuna for a major systemic shift in the way we live.

Being 'climate ready' recognises that government and business are not solely responsible for adapting all of society to the impacts of climate change. The idea of being 'climate ready' aims to communicate that climate resilience is a shared responsibility which requires equal focus across government, business, local council, community and individual levels.

BROADER CONTEXT

The central government 'sets the direction so that New Zealand's people, environment, economy and national infrastructure, are more resilient to the impacts of climate change'. Specifically, this is achieved by:

- providing the supporting legislative and policy framework,
- providing information and guidance to support local government and business to make effective adaptation decisions,
- funding research on climate change impacts, and
- preparing for and responding to major natural hazard events.

As part of the Institute's most recent analysis of government department strategies (GDSs), researchers analysed each GDS with regard to implicit and explicit mentions of climate change. GDSs are important strategy documents as they provide citizens with a window into the workings of government and act as critical instruments for policy-makers in bringing about change.

It is apparent that not enough is being done across the whole of government. For example, The Treasury is taking climate change into consideration in its GDSs, but the Ministry of Health and the Ministry of Social Development are yet to do so in a meaningful way. This provides an interesting yet unsettling observation, as the impacts of climate change will be felt more by the vulnerable (e.g. with poor health and/or financial constraints such as difficulty in relocating or inability to purchase an electric car).

The fact that vulnerable communities are likely to be hit hardest reinforces the need for such individuals and communities to be supported to adapt to the impacts of climate change.

The concept of being 'climate ready' aims to communicate that climate preparedness and resilience is a shared responsibility. We all have a role to play in

understanding how climate change will impact us, not only at a regional and/or national level, but also at an individual and community level.

WHY?

The impacts of climate change will be felt by everyone, but disproportionately so by those people and communities that face disadvantage and/or are vulnerable.

Being 'climate ready' prioritises proactive and anticipatory (rather than reactive) policy and planning around what actions can be taken now, as well as in the future, to ensure a climate-resilient society. While there is growing awareness regarding the risks associated with climate change at individual and community levels, there remains a large knowledge gap regarding the effectiveness of different adaptation measures; for example, how to best prepare for severe weather events and what to do during such an event. Being 'climate ready' will raise awareness, strengthen resilience and place people in safer positions to navigate the impacts of climate change as they occur. Examples of positive outcomes include:

- Increased individual and community awareness about the impacts of climate change and how to best prepare for them.
- Increased individual and community ability to respond to the impacts of climate change when they occur.
- Reduced vulnerability to the impacts of climate change.
- Increased ability for individuals and communities to provide aid and assistance when emergency services are at maximum capacity or are unable to reach the location.
- Reduced demand for emergency services.
- Reduced insurance claims.
- Less deaths and other losses (e.g. financial, vehicles, resources, homes, infrastructure).
- Newly created jobs and skills.

HOW?

At a decision-making level, uncertainty and risk exist in terms of planning for the impacts of climate change. However, at individual and community levels, this should not restrict progress toward being prepared – it should encourage it.

Focus initially on the following actions:

A. Information-led change (equitable, accurate and timely)

1. Develop a set of 2040 climate reference scenarios. These will help inform and shape decisions by government, iwi, business, councils, NGOs and communities, create information equity and align decision making. The New Zealand reference scenarios would ideally be completed by NIWA every five years. To help in this process, the Institute has compiled a table of existing national scenarios on our website.
2. Prioritise the sharing of and access to information. Information gaps exist across different sectors of society. Good planning needs good information, which is why accessible, accurate and relevant research is an essential component of being climate ready (especially for the most vulnerable when managing rapid and uncertain change). We need stronger, better funded and more connected climate-related research focused on delivering data that can be turned into information and ultimately provide knowledge for the resilience of individuals, council, iwi, business and government in the face of climate change impacts.

The External Reporting Board's (XRB's) climate-related disclosures (NZ CS 1) should cover a wider range of public and private entities. A robust climate-related disclosure framework should evidence how the entity is 'climate ready' and communicate this information in a timely and accessible manner via a public register of all climate statements. This should consider the double materiality perspective (i.e. the impacts of climate change on the company and the impacts of the company on climate change).
3. Require all government department strategies and long-term plans to be reviewed against the climate change reference scenarios.
4. Require councils with sea coasts to prepare shoreline management plans backed up by LiDAR surveys.
5. Develop a body (perhaps within an existing body such as the Climate Change Commission) to review significant climate events that occur both domestically and internationally. Ensure that lessons are learned and action is taken.

B. Consumer-led change

6. The New Zealand Parliament should go into urgency to make progress on the Climate Change Adaptation Bill to help speed up the process of communities becoming climate ready.
7. Shift the lens from production to consumption. In 2017, households were the largest contributor to New Zealand's carbon footprint (at 71%).

Focusing more on the implications of a nation's consumption and lifestyle choices shifts the spotlight (and cost) onto polluters. Having consumers pay for pollution, ideally through pricing carbon, will directly influence environmentally negative consumption habits, incentivising sustainable decision-making.

8. Promote the concept of being 'climate ready' in order to build climate resilience through a ground-up approach. This could sit alongside or form part of the National Adaptation Plan. Specifically, this action would increase opportunities, raise awareness, strengthen resilience and, in turn, help reduce the adverse consequences of climate change.
9. Develop a climate-ready checklist for consumers. While consumers may, generally, be aware that their consumption habits are environmentally degrading, there exists a gap between understanding the actual impacts and identifying what behavioural changes are worth making. Developing and distributing a basic checklist for consumers will help fill these knowledge gaps.

Here is an example of a checklist adapted from the World Economic Forum:

 - Understand your own carbon footprint.
 - Seek out as much trustworthy information as possible about the products you purchase.
 - Make smarter, more cautious consumer choices with this information.
 - Create demand for higher quality lower emissions products (if you can afford it).
 - Spread the word and help others increase their awareness.

C. Geography-focused change

10. Develop accurate and updated risk mapping. The vulnerability of individuals, councils, iwi, business and government to climate change impacts varies greatly depending on location. Furthermore, while some impacts of climate change are certain, others are unpredictable. Regular and accurate risk maps could be developed annually and used to inform the National Climate Change Risk Assessment for New Zealand (which occurs at least once every six years).
11. Progress the Climate Change Adaptation Bill (in particular managed retreat). Firstly, no new builds should be permitted on flood plains, beachfronts, unstable hillsides and clifftops. Secondly, where houses exist on flood plains, beachfronts, unstable hillsides or clifftops, they should be assessed for their ability to withstand

storms and floods. Thirdly, storm water and sewerage infrastructure should be reviewed and where appropriate prioritised. Further, it is clear that adaptation and managed retreat at a national scale will be very costly (with managed retreat of vulnerable properties alone estimated to cost \$50 billion). This reason alone is enough to progress the Climate Change Adaptation Bill to give effect and traction toward delivering meaningful solutions in the face of severity, complexity and uncertainty. The recent Environmental Defence Society (EDS) report, *Funding Managed Retreat, Designing a Public Compensation Scheme for Private Property Losses: Policy Issues and Options*, by Jonathan Boston, makes many useful financing suggestions. Lastly, we must provide information (e.g. risk and threat lines need to be put on maps), and have conversations regarding how to administer reactive managed retreat and anticipatory managed retreat.

D. Fire weather ready

12. Review the climate change effects on fire likelihood and impact throughout New Zealand.
13. Prepare for increased fire weather incidence through data gathering technology (heat sensors, AI modelling etc), forest management and upgraded fire response capability (water bombers, training, international collaboration) to ensure fires are extinguished early.
14. Move fire management from the Department of Internal Affairs to the Ministry of Business, Innovation and Employment (MBIE).

E. House and community ready

15. Develop disaster management plans for home and community, building on existing relationships with Civil Defence and Neighbourly (a website that connects neighbours).
16. Provide fire weather guidance (such as types of planting around homes to prevent fires, ensuring fire hydrants are identifiable and water tanks adequate).
17. Ensure water drainage pipes are sufficiently large to cope with storms.
18. Establish a new unit in central government to work closely with local government to prioritise long-term protection from sea-level rise through construction of sea defences (rock rip-rap, pumps, pipes, ponds) – or, ultimately, through managed retreat.

19. Create a programme of financial assistance in collaboration with councils, banks, and the insurance industry to cover adaptation costs, ensuring the least-resourced councils are not left behind and adaptation work is not piecemeal.

F. Water ready

20. Establish a Minister of Water.
21. Modify the existing three waters reform. For example, establish a Water Services Council or even a Crown entity (adopting the Scottish model). Either option would reduce risk and complexity and increase public trust and community control. Water security is fundamental to New Zealand's productivity and prosperity.

G. Farm ready

22. Encourage local food systems to support resilience in case of disasters. Highlight the need to not rely on technological solutions. The agricultural sector is a good example; we need to 'do more, with less'.
23. Encourage a range of diverse food production systems located throughout the country. As recent events have illustrated, livestock can move themselves or be moved to higher ground while plants and orchards cannot. Sole reliance on a plant-based system has risks.
24. Encourage integrated whole-of-farm plans that adopt a systems approach. MPI and/or MBIE could provide more detailed guidance for farmers, by type of farm.
25. These whole-of-farm plans could be placed on a public register, enabling good practices to be shared and emerging problems to be identified; for example, emerging water or disease issues.
26. Explore with farmers incentives to decrease stock numbers.
27. Breed livestock for temperature and drought resilience and ability to minimise erosion (e.g. type of hooves).

H. Energy ready

28. Prioritise energy security and decarbonise New Zealand's transport sector in order to decrease vulnerability to international shocks and supply chain issues.
29. Rewiring New Zealand (following the example of Rewiring Australia). Recently National leader Christopher Luxon announced the first part of the party's 'Electrify NZ' plan, which will cut red tape to significantly increase investment in renewable energy.
30. Electric planes are showing promise, as is electrifying more of New Zealand's railway system.

31. Smart flying: our national carrier Air New Zealand could develop a public strategy to reduce carbon, including better flight scheduling, lower altitudes, greener fuels, more efficient engines and ideally electric planes.

I. Infrastructure ready

32. Establish a Minister of Works and have Te Waihanga New Zealand Infrastructure Commission report to the Minister of Works.

J. Business and innovation ready

33. Ask businesses and BusinessNZ to suggest ways to support climate innovation.
34. Establish a systemic investment fund to fund and co-fund the innovation and response to climate change that is needed.
35. Create a government-verified carbon-offset registration system. Charge registrants an annual percentage of their fees to clients and use those funds to create climate innovation prizes for communities. This would give businesses reputable ways to offset carbon, while returning money to New Zealand communities.

K. Education ready

36. Raise awareness by improving climate change education in schools (e.g. a work programme for 14-and 15-year-olds – something similar to the NIWA Climate Change Adaptation Toolbox and Enviroschools [an environmental action-based programme where young people are empowered to design and lead sustainability projects in their schools]).
37. Develop a set of guidance documents toward becoming ‘climate ready’ at multiple levels (e.g. individual, council, iwi and business). Ideally, the Ministry for the Environment (MfE) would hold this responsibility and it could follow a similar structure to MfE’s Coastal Hazards and Climate Change Guidance for Local Government (2017).

WHO?

Led by MBIE, with support from the Ministry for Primary Industries and the Environment, Education, Social Development and Health Ministries, as well as local government and iwi.

BIG Policy Action #2: Mahitahi on Te Tiriti

Putting time and effort into the relationship that exists between Māori and Pākehā is critical; it shows respect for our past and breeds confidence in our future.

BROADER CONTEXT

The New Zealand constitution increasingly reflects the fact that Te Tiriti o Waitangi is regarded as a founding document of the government of New Zealand. In this way, Te Tiriti is for everyone in our society. Today, many families are a living testament to the relationship of the parties to Te Tiriti, as they include both Māori and Pākehā. There is also increasing engagement with te ao Māori, particularly in speaking te reo, practising kaitiakitanga and pursuing mātauranga. However, at another level, we have significant work to do; the Crown and iwi must find better ways to create a more positive, trusted and durable working relationship. It is in all our interests that these relationships are trusted and enduring, that different viewpoints are sought, complex and difficult issues are discussed, and both the Crown and iwi share responsibility for delivering mutually beneficial outcomes.

It is noticeable that success in the past has come about by focusing on the importance of an effective and long-term working relationship between iwi and the Crown. For example, the late Dr Apirana Mahuika (past Chairman of Te Rūnanga o Ngāti Porou) noted that relationships are forward looking whereas partnerships are backward looking – hence why he focused on developing a long-term working relationship with the Crown.

Hon Christopher Finlayson, previous Minister for Treaty of Waitangi Negotiations, illustrated the emerging Crown–iwi relationships when he noted on the third reading of the Tūhoe Claims Settlement Bill and Te Urewera Bill, that ‘[f]rom the day this legislation comes into force, Tūhoe will play the leading role in the future of their homeland, Te Urewera. More than that, what this House does today will provide the foundation for a new relationship between the Crown and Ngāi Tūhoe—a relationship in which I hope we will together walk and work for our mutual honour, dignity, advantage, and progress.’ Finlayson also acknowledged Tāmati Kruger for his hard work and commitment to the interests of Ngāi Tūhoe. Kruger spoke at a 2019 event the Institute hosted at the National Library where he emphasised the importance of relationships and connections with everything around him, including his past and his future. He closed by defining success in 2040 as our children’s children deciding to call themselves tangata whenua (people of this land).

By the year 2040, the demographics of the country will have significantly changed. Stats NZ projections suggest that by 2043 the 'European or Other' ethnic group will be 64% of the population, down from 70% in 2018. All other ethnic groups are projected to increase their population share, with the Asian group having the largest rise, from 16% of the population in 2018 to 26% in 2043. We need to look at ways to ensure all New Zealanders understand and support Te Tiriti o Waitangi.

Lastly, there exists an opportunity to explore and build on a diverse range of wisdom and ideas, as well as values and assumptions in the public management system to better reflect te ao Māori or indigenous values, such as interconnection, belonging and the importance of considering the rights and responsibilities we have today to future generations. There are a number of publicly available reports that are starting to explore this space.

WHY?

'Building a nation that is robust, yet sufficiently flexible to manage risks and pursue opportunities, depends on the ability of all its peoples to live and work together with a high level of harmony.' – Project 2058 *Report 8: Effective Māori Representation in Parliament – Working towards a National Sustainable Development Strategy.*

HOW?

We could initially focus on the following actions:

1. Build on the mana of the Waitangi Tribunal.
The Waitangi Tribunal has now become a major repository of New Zealand history. This could be reviewed in order to improve accessibility and usability for citizens.
2. Find new ways to better acknowledge Ngā Pakanga o Aotearoa (the New Zealand wars), for example a permanent exhibition at Te Papa or a separate museum.
3. Explore the implications and opportunities for Te Tiriti of New Zealand becoming a republic.
Engage early with this idea; try and understand the legal nuances. For example, can New Zealand have a treaty without the British Crown? When would treaty obligations switch from the British Crown to the New Zealand Crown? If not, what would need to happen to make that full and final? Is it possible to have a treaty where you represent both parties?
4. Redefine co-governance in the 21st century.
Try and create a deeper understanding of the different interpretations and types of co-governance. If the goal is to deliver mutually beneficial outcomes, the Crown and iwi will need to explore and test new funding and accountability models. At the local level, many iwi are hamstrung by limited finances, human resources and time constraints.

Being transparent regarding rights and responsibilities and developing regular reporting systems is likely to help gain wider public support for some types of co-governance models.

5. Reimagine how better public policy outcomes (e.g. education, health, prisons etc) might be delivered to Māori.

We must find a way to change the statistics. We wonder how policies affecting Māori could be better embedded and debated inside political parties.

6. Replace the existing Māori roll with a Māori MP representation roll.

This idea may enable Māori policy and ideas to be better integrated into political priorities. A Māori MP representation roll is a roll where New Zealanders can vote on the level of representation of Māori MPs in the House. To make this work, each MP of Māori descent would need to register as a Māori MP and outline their whakapapa. Each political party would also create their own Māori MP list. The Māori MP representation roll would determine the number of Māori MPs in the House, using the Māori MP list. Hence it would not change representation by political parties but the representation within the political parties. The current system separates political party voting into two rolls, whereas the proposed system unifies voting but guarantees minimum Māori representation as determined by all voting New Zealanders.

Establish a working group to reimagine and reconsider what a successful bicentennial celebration in 2040 might look and feel like. Engaging with and listening to youth will be key.

For example, is a new public building appropriate (e.g. a national marae)? Could we create a bicentennial currency? What institutions and/or policy instruments could be established? What would success look like?

7. Explore Tāmami Kruger's idea that all New Zealanders become 'tangata whenua', which is both inclusive (for all New Zealanders) and exclusive (unique internationally). This could be acknowledged in law.

WHO?

Led by Cabinet, ideally with support across the House. A select committee could establish an inquiry into what co-governance looks like in the 21st century.

BIG Policy Action #3: Invest forward

A strong platform for sustainable wellbeing has to be founded on shared prosperity.

BROADER CONTEXT

To that end, there is an urgent need to enhance intergenerational equity. This needs to be achieved effectively and efficiently, through integrated and coordinated welfare and tax reforms. There is no better place to start than the newly born, so that their futures are less limited by their circumstances.

WHY?

Economist Paul Krugman said in 1994 that '[p]roductivity isn't everything, but, in the long run, it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.' Productivity Commission Chair Dr Ganesh Nana emphasises that productivity matters – how productive we are as a country affects our daily lives and overall wellbeing.

The Productivity Commission's 2021 report *Productivity by the Numbers* notes that New Zealand's productivity growth has declined, which has significant implications for wellbeing. This means New Zealanders are working hard but producing less. New Zealanders work longer hours (i.e. 34.2 hours per week compared with 31.9 hours per week in other OECD countries) but produce less (\$68 of output per hour, compared with \$85 of output per hour in other OECD countries). Ganesh Nana noted that 'New Zealanders are working harder rather than smarter, this makes improving living standards even more difficult'. The Commission concluded innovation is the key to lifting productivity.

Sustained improvements in our aggregate or average productivity as a nation provide a necessary platform for sustained improvements in our collective wellbeing. It is critical that we measure productivity not exclusively as income or output per head of population, but rather overall wellbeing per head of population. Implementing this has its own challenges, but it is a worthy aspiration to pursue.

However, even if achieved, this is not sufficient. We must be equally concerned about the distribution of wellbeing across society and across generations. We cannot have social stability and sustained wellbeing unless we have equity. This means providing everyone with an opportunity to become a stakeholder in our society, by:

- giving everyone access to education, healthcare and housing
- providing employment opportunities to everyone who is able to be employed

- ensuring everyone has a minimum level of adequate income
- looking after those who cannot look after themselves
- ensuring everyone has a voice in matters that affect them.

As Raghuram Rajan puts it, 'Inequality is a real problem today, but it is the inequality of opportunity, of access to capabilities, of place, not just of incomes and wealth. Higher spending and thus taxes may be necessary, not to punish the rich but to help the left-behind find new opportunity. This requires fresh policies not discredited old ones.'

HOW?

1. Establish a Mokopuna Fund (equivalent to our New Zealand Super Fund).

We can make a strong case for this on grounds of both fairness and equity (both intra- and intergenerational). Each child from a low income/wealth family will be gifted an investment fund at birth, to be accessed when they reach the age of 18, for specific uses, such as education, establishing a business, or buying a home. This would be funded primarily through a land tax levied on the value of unimproved land. As Andrew Coleman carefully explains, a land tax is effective (hard to avoid), efficient (causes minimum distortions in decisions relating to the allocation of economic resources), and intergenerationally equitable (partly through lower house prices, it transfers resources from current to future generations). A land tax may not generate sufficient funding for what we are trying to achieve, but it is a useful place to start because it clearly signals what we are trying to enhance – i.e. intergenerational equity. Once this principle is accepted, we can explore alternative means of contributing to the Mokopuna Fund effectively and efficiently.

Access to assets provides a source of opportunities and capabilities. In this vein, Conal Smith argues for asset-based assistance for high-risk children. He proposes that the state provide wards of the state with a reasonably generous cash endowment at the age of 18, so that they have the foundation for a positive start to their adult lives. We are proposing a general Mokopuna Fund, as well as a targeted fund for wards of the state. The purposes for which this asset can be used – such as education, upskilling and housing (for first home buyers), as well as small-business investments supported by mentoring programmes – would be strictly prescribed. Such an approach could be implemented through public and private sector partnerships.

To generate support for such a land tax, we would make it a hypothecated (or ring-fenced or earmarked) tax, dedicating the revenue from it specifically and exclusively to the Mokopuna Fund. Such a proposal may prove palatable to the land-owning part of the population if they believe and trust that this will genuinely improve the life-chances of young people from low-income/wealth families.

Establishing such an infrastructure is an example of the deliberate creation of an institution specifically targeted to building trust, through transparency and accountability, for serving a highly desirable social purpose – for the benefit of everyone, wealthy and poor.

2. Improve financial capability training in schools. Currently financial capability is a subject in the school curriculum. However it is arguably still underemphasised. Financial capability is one of the reasons financially challenged people fail to become wealthy. If you do not understand the financial system, in particular the current risks and opportunities, the chances of remaining poor are high. Our ability to confidently manage our own assets and debts, and support those of our whānau, is a key skill. Skills are required to understand and manage financial instruments such as insurance (including house, car, travel and healthcare), car WOF and driver licence, trusts and wills, bank accounts and loans, differences between invoices and statements, and hire purchase. Skills are also needed to manage the risks of cybersecurity and identity theft.

3. Grow, attract, retain and connect talent. Immigration processes should be reviewed. Ways to reduce wait times, fast-track skills that are urgently required (e.g. nurses and doctors), and increase dual/multi citizenship opportunities are ideas worth exploring. (See also the Institute's work on talent, based on the work and thinking of Sir Paul Callaghan.)
4. Increase our refugee quota. The latest United Nations figures state that as of May 2022, 100 million people were forcibly displaced (more than double the figure 10 years ago). New Zealand accepts 1500 refugees per year (an increase on the previous quota of 1000); however, this only keeps track with population growth since the quota began in 1987. The equity of the overall tax and welfare system can also be enhanced by introducing means-testing for superannuation payments.

WHO?

- Establish a task force to investigate the Mokopuna Fund proposal, and report back. If the report is favourable, and is universally supported by all political parties, the Fund needs to be established through an Act of Parliament. The benefits from the Fund would be available to all newly born children who come from families with 'low financial resources' (to be defined in the Act). It would apply everywhere in New Zealand, and to all children who meet the criteria specified in the Act.
- MBIE and the Ministry of Education (MoE) should lead initiative 2.
- MBIE should lead initiative 3.
- The Minister of Immigration, with Immigration NZ, should lead initiative 4.

BIG Policy Action #4: Educate 13+, Vote 16+

Lowering the overall voting age to 16 would be a step forward in the process of strengthening democracy, pursuing effective future governance and enhancing intergenerational equity.

BROADER CONTEXT

The legal voting age in New Zealand has been lowered twice previously. In 1969, the voting age was lowered from 21 to 20; it was lowered from 20 to 18 in 1974. While both changes occurred under a first-past-the-post electoral system, meaning government majorities were more easily won, the legislation still required a parliamentary supermajority, and the support of the opposition was crucial in each instance. Following the Supreme Court's decision in *Make It 16 v Attorney*

General in November 2022, the Labour government led by Jacinda Ardern promised that government legislation would be drafted and presented to the House of Representatives with the aim of lowering the voting age to 16. Importantly, though, this proposed legislation requires the support of the opposition to pass.

It has been noted that the higher bar requiring a 75% parliamentary majority only applies to amending the voting age in general elections. The government, under Ardern, was considering pursuing a change in the voting age from 18 to 16 for local elections – a far more achievable action, and one that seems to have more cross-party support. This would be an important step in moving forward to full enfranchisement for 16- and 17-year-olds.

The 2020 election had an 82.24% turnout of enrolled voters – the highest turnout since 1999. However, this was possibly due to the two controversial referendums being held: the cannabis referendum and end-of-life choice referendum. Notably, there was an increase of 18.8% in voters aged 18 to 24. This suggests that youth will enrol and turn out if they think the issues are important and that they can make an impact.

WHY?

Fundamentally, this action would systemically strengthen Aotearoa New Zealand's democracy and increase social cohesion through advancing intergenerational equity. Including our young people in the political decisions of today will help ensure our society is better prepared to govern for the future.

Broadly, such action is beneficial in aligning with opportunities for education and motivation for our youth. Allowing young people to vote while still in high school opens the classroom to teaching more thorough civics programmes that, importantly, can be readily actioned and applied by students.

In a ripple effect, such educational opportunities can further promote the fundamental skills of informed, critical thinking and productive discourse around often contentious topics. While civics education should be increased regardless, the immediate real-world action of voting demonstrates a ready avenue for students to enact their learning and see the effects of their actions. The general health of democracy can be advanced through increased voter participation, in conjunction with better civics education, as the Scottish case shows.

The 2014 Scottish Independence Referendum included 16- and 17-year-old voters. It was found that this group was positively affected by their enfranchisement, with elevated interest and engagement in politics. When the Westminster Parliament transferred power over franchise to the Scottish Parliament, the voting age was lowered to 16 for all Scottish elections, including the Scottish Parliament, local government, and Scottish referendums, but not general UK-wide elections. It was found that the new voters had an increased sense of empowerment but also growing resentment at their exclusion from other UK elections.

A Royal Commission Report on the Electoral System acknowledged the 'strong case' for lowering the voting age even in 1986. This report traversed many of the current arguments against lowering the voting age, including alleged youth incompetence in making political decisions. It concluded that young people's understanding of the social and political world 'is not very different' to that of mature adults.

It would also be beneficial in terms of social cohesion. Current issues, notably climate change, will reach breaking point in the years when today's youth will

be making decisions to combat them. Allowing and encouraging political participation by young people now will enable them to realise and effect the full potential of their autonomy going forward. Further, embracing youth in our political system at a younger age would acknowledge the contributions they already make to society and include them in the democratic process. This is a meaningful action to show youth that society, as a whole, values their input.

The enfranchisement of women in 1893 and changes to voting laws that effectively excluded Māori from voting were other important steps forward in strengthening democracy and social cohesion which we now consider fundamental, but were hard-won battles. Additionally, a voting age of 16 is not new territory internationally. The cases of both Scotland (above) and Austria (below) show positive results following 16- and 17-year-old enfranchisement, with engagement and participation on par with or above that of the rest of the voting population.

In Austria, the voting age for general elections was lowered to 16 in 2007. Since then, several studies focused on the voting behaviour of 16- and 17-year-olds. It was found that this group had the second-highest interest in politics out of all age groups, and that while their general political knowledge was slightly lower than other groups, the difference was insignificant. Voting participation of 16- and 17-year-olds was contrary to 'the general trend that turnout of young voters is far lower than in the overall electorate'. This case shows that not only are young people as interested in politics as the rest of the electorate, they translate that interest into casting their vote.

HOW?

1. Change New Zealand's current electoral laws to make the legal voting age for general elections 16 years.
2. Given the relevant legislative provisions are entrenched – meaning they are subject to special protections – this would require the approval of 75% of Parliament, or, alternatively, a 50% majority in a nationwide referendum.
3. To promote effective results following a change, strengthen and improve civics education in the New Zealand school curriculum.

WHO?

Such a legislative change requires an Act of Parliament to pass, amending existing legislation. This can be effected through either support of 75% of MPs or by the majority support of the electorate in a referendum. Judging from prior changes, this means cross-party support is crucial. Lowering the voting age for local elections would simply require an Act of Parliament supported by a majority of MPs.

BIG Policy Action #5: Establish ecological corridors

Indigenous ecosystems and species in Aotearoa New Zealand, like most of the world, are in a state of rapid decline due to a combination of factors, including land use, pollution, resource extraction, the increasing presence of invasive pests and diseases, and increasing climate change and extreme weather effects. This idea aims to help make New Zealand and its flora and fauna more resilient.

BROADER CONTEXT

Ecological corridors, also known as wildlife corridors or habitat corridors, are physical connections that link different areas of habitat to facilitate the movement of species between them. These corridors play a critical role in the conservation of biodiversity by promoting genetic diversity, reducing the risk of extinction of isolated populations, and allowing for the spread of species to new areas. New Zealand is a country with unique flora and fauna, and ecological corridors have been identified as an important tool for conservation efforts.

New Zealand's geographical isolation has resulted in the evolution of a distinct flora and fauna, including many endemic species. However, human activities, such as land use change, fragmentation of habitat, and invasive species, have had a significant impact on the country's biodiversity. In response, conservation organisations have identified the need for ecological corridors to connect fragmented habitats, allowing for the movement of species and the exchange of genetic material.

WHY?

- Establish New Zealand as a world leader in conservation, biodiversity protection and climate change mitigation.
- Enable New Zealand to meet the 30% by 2030 global target agreed to at the December 2022 UN Convention on Biological Diversity agreement for the effective conservation and management of land.
- Build on the intent of Te Tiriti o Waitangi and Te Tiriti principles.
- Mitigate the biodiversity crisis by protecting and restoring the environment. Around 4000 of New Zealand's native species are threatened or at risk of extinction.
- Prevent ecosystem collapse by 'rewilding', protecting native forests and allowing native flora and fauna to thrive.
- Align restoration policy with carbon sinks. Forests have an important role in reducing greenhouse gas emissions. They are often classified as natural

forests (30%) or planted forests (7%); however, not all natural forests are protected.

- Ensure reforestation targets are met. Climate Change Commission recommendations to Government include creating 300,000ha of new native forest between 2021 and 2035.
- Safeguard public and iwi access. Ecological corridors will improve local and national recreation and amenity. They will help connect people to nature whilst enhancing local utility, community connection and local and national tourism value.
- Protect and mitigate the impacts of climate change and extreme weather. Climate change means our biodiversity will come under growing pressure. Restoring a damaged ecosystem will help make it more resilient to climate change in the future. 'Sponge cities' are an example of how ecology can benefit the surrounding environment.
- Maintain and improve soil, air, and water health. A thriving ecosystem is an essential part of protecting Aotearoa's food security and food quality. Healthy natural environments will also have positive impacts on human health (both mental and physical) and overall societal wellbeing.
- Consider carbon sequestration. Ecological corridors will require new forms of protection and restoration. As such, ecological corridors could be designed to provide income from carbon sequestration. This could also be a way of ensuring local councils and government institutions meet their net zero goals for the future.
- Create jobs, education and skills in regional areas. Examples include tourism, pest control, horticulture and planting.

HOW?

1. Establish ecological corridors connecting national parks and other conservation areas across the country. Options include:
 - Option 1: Start on the West Coast of the South Island as it already has a significant block of interconnected native forest which is home to a substantial amount of indigenous flora and fauna. That would provide an opportunity to invest and test the idea, explore proof of concept and learn lessons on how best to scale the idea. The Department of Conservation's (DOC's) current reclassification programme provides a further opportunity for land to be reclassified as ecological corridors. DOC is currently working through a process of reclassifying stewardship

land, starting with 504 pieces of land on the West Coast. Stewardship land is a category of conservation land that contained conservation values when it was first assigned to DOC in 1987, but was not classified into a specific category (such as park areas, wildlife and habitat protections or reserves and specially protected areas).

- Option 2: Start from Northland and continue all the way to Stewart Island.
2. Establish as part of Aotearoa New Zealand's unwritten constitution a commitment to preserve and protect a certain percentage of land. For example, Bhutan's constitution mandates the preservation of 60% of its land under forest cover.

3. Increase funding for DOC.
4. Increase funding for the Predator Free NZ 2050 programme.
5. Expedite predator-free status for islands such as Rakiura Stewart, Aotea Great Barrier and Resolution Island, which already have head starts and could become models on how to tackle mainland animal pest eradication.
6. Explore ways to create 'spongy coastlines' that are designed to absorb and filter water.

WHO?

Led by DOC and iwi, in collaboration with regional and territorial councils, local communities and NGOs.

BIG Policy Action #6: Strengthen ocean policy

This policy aims to deliver a healthy ocean that sustains marine biodiversity, while optimising the climate change mitigation role of oceans and enabling a high-value sustainable blue economy. Interestingly, ocean policy has evolved to combine climate and biodiversity rather than treating them separately.

The purpose of this BIG policy action is fourfold: to redesign the intersection between land and ocean policy (e.g. deal with run-off), integrate and align existing ocean policy, rewild our territorial sea (reversing current trends), and protect our exclusive economic zone (EEZ).

BROADER CONTEXT

In late 2020, the Minister of Fisheries became the Minister for Oceans and Fisheries (raising the role of oceans and acknowledging the natural tension and interdependence between ocean management and the fishing industry). In June 2021, Minister David Parker announced a multi-agency approach to protecting New Zealand's marine ecosystems and fisheries.

The newly established Oceans Secretariat, comprising officials from the Department of Conservation, Ministry for Primary Industries and the Ministry for the Environment, would lead the long-term ecosystem-focused project. Other agencies would participate when required.

In July 2022, after two years in the role, Minister Parker reflected on his portfolio of eight existing initiatives, of which seven had been started. Only one was not under way – the reform of rules around marine protected areas. The Minister has acknowledged that the 'marine management system is fragmented, with difficulty responding to growing pressures in a holistic, timely manner; and management decisions have too often been taken without regard to ecosystem-based management.

This has created uncertainty for stakeholders, hindered growth and innovation, limited progress on marine protection, and generally impeded the optimal use and protection of marine space and resources.'

WHY?

- New Zealand is a signatory to multiple global commitments, including the UN Law of the Sea, the UN Framework Convention on Climate Change and the UN Convention on Biological Diversity. A focus on an integrated ocean policy might enable New Zealand to meet the December 2022 UN Convention on Biological Diversity agreement: 'Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems ...'
- We have the fourth-largest exclusive economic zone (EEZ) in the world, covering approximately 8% of the earth's surface.
- There are multiple laws, plans and agencies governing our coasts and oceans, many of which are outdated, conflicting and no longer fit for purpose.
- There are also significant commitments arising from Te Tiriti obligations, and existing or pending settlements.
- New Zealand has lost its place as a global leader in coastal and ocean management and is seen in many quarters as a global laggard in implementing its commitments in areas such as marine protection, climate change, fisheries management and ocean governance.

HOW?

A. Creating new institutions

1. Establish an Oceans Research Institute.

The main purpose would be to build an informed and science-based oceans constituency that includes policy, governance and social research, and identifies limits, targets and solutions. Independence from Government, including funding, will be essential to ensure the Institute is trusted by all stakeholders. The outputs of the Institute could include:

- a written response to the three-yearly environmental report on the marine domain (published by MfE and Stats NZ). The latest report was published in 2022. The response should form a report tabled in the House and should include observations and suggestions on the way forward.
- a publicly available sensing map of the territorial sea, using remote and direct sensing. Remote sensing is the ability to obtain information from a distance, usually by aircraft or satellites. The aim is to provide an integrated approach to ocean management to better understand place-based impacts. This could include monitoring wave heights, sea-level storm surges, ocean circulation, water temperatures and marine life.
- an annual report on the state of our territorial sea.
- an annual report on the state of the EEZ.
- leading consultation on a rewilding sea strategy (e.g. kelp forest restoration).
- identifying limits and targets (to align with the proposed resource management reforms).
- collating a research archive.
- collating and identifying research gaps.
- for the Minister for Oceans and Fisheries to table a comprehensive annual report in the House.

2. Establish an Ocean Commission to hold government accountable against agreed policy goals.

B. Protecting more ocean space using existing tools and instruments

3. Establish as part of Aotearoa New Zealand's unwritten constitution a commitment to preserve a certain percentage of our territorial sea (along the lines of number 2, in BIG Policy Action #5: Establish ecological corridors, see p. 14).

4. Establish a Rangitāhua/Kermadec Ocean Sanctuary.

5. Establish a new marine park in the inner Queen Charlotte Sound (and possibly the Pelorus Sound). Queen Charlotte Sound has always been kept relatively free of commercial enterprises.

6. Establish a new marine mammal sanctuary connecting Clifford and Cloudy Bay Marine Mammal Sanctuary (Marlborough) and Te Rohe o Te Whānau Puha Whale Sanctuary (Kaikōura). This would help connect the west coast of the North Island with the other protections on the east coast of the South Island. The current gap in protection may simply be an historical error that could easily be rectified.

7. Implement the South-East Marine Protection Forum recommendations for a network of marine reserves and marine protected areas between Timaru and South Catlins.

8. Ban bottom-trawling. Prevent damage to delicate ecosystems (like seamounts and slow-growing corals and sponges) that provide habitat for a diverse range of ocean creatures.

C. Exploring and testing new tools and instruments

9. Rewild Auckland Gulf Harbour and develop new types of protection for the Hauraki Gulf Marine Park.

10. Create new marine mammal protections, regulation and monitoring.

11. Establish seabird protections. New Zealand is considered to have a greater diversity of seabirds breeding on its shores and islands and feeding from the sea than any other country in the world.

D. Integrating and connecting existing ocean policy

12. Create a network of national marine protected areas (such as marine reserves, marine mammal sanctuaries and seabird protections), which contribute to the development of an overall national plan for our territorial sea.

13. Establish a marine spatial plan for Queen Charlotte Sound and Pelorus Sound, including marine protected areas and protections for blue cod, scallops, crayfish, kelp and other important species.

E. Integrating land and ocean policy

14. Consider ways to build capability within the existing system to implement and enforce regulations to reduce land-based sources of marine pollution. Key areas of focus include agricultural and urban runoff, minimising plastic, fertiliser, sewage and forestry slash (forestry waste product, debris and logs).

F. Undertaking new research

15. Research ways to sequester blue carbon, and encourage the government to include blue carbon in our Nationally Determined Contribution.
16. Support the Sustainable Seas National Science Challenge by researching the extent to which seaweed can be farmed and managed while minimising negative impacts.

G. Reconsidering animal welfare issues

17. Apply animal welfare protection more explicitly to protect farmed fish from climate change impacts, including setting out standards for euthanasia. The New Zealand Animal Welfare Strategy (2013) should be updated for climate change impacts. The Animal Welfare Act 1999 defines animals broadly to include mammals, birds, reptiles, amphibians, fish, and other aquatic animals.

H. Supporting global initiatives

18. Support the United Nations Environment Assembly to establish a legally binding global plastics treaty to address the whole life cycle of plastic pollution.
19. Work globally to establish a network of ocean sanctuaries across the planet. This idea is being promoted by Greenpeace, which is advocating for a UN Global Ocean Treaty.

20. Consider and ideally support a global moratorium on seabed mining.

WHO?

Minister for Oceans and Fisheries (lead). Government organisations supporting this include regional councils and territorial authorities with coastal boundaries, DOC, the Ministry for Primary Industries (MPI), Land Information New Zealand (LINZ) and the Ministry of Foreign Affairs and Trade (MFAT).

There is also a wide range of business and non-government organisations interested in this space (such as iwi, QEII National Trust, Greenpeace, Fish and Game New Zealand, the Game Animal Council, the Environmental Defence Society and other community groups).

A key tool will be implementing the scope of our national climate commitments and Te Mana o te Taiao (New Zealand Biodiversity Strategy), which sets a strategic direction for the protection, restoration and sustainable use of biodiversity. The strategy was ranked very highly in the Institute's Government Department Strategy Index (10 out of 221). In contrast, the New Zealand Animal Welfare Strategy, mentioned in G:17 above, was ranked 171= out of 221.

Given their national significance, we suggest starting with the Hauraki Gulf and the Marlborough Sounds.

BIG Policy Action #7: Future fit

This specific policy action directly targets the cross-cutting theme of 'governance', to establish the broader governance ecosystem for all sustainable wellbeing-focused policies to be properly prioritised, funded, implemented, and evaluated.

BROADER CONTEXT

What are the BIG changes we need to implement to make our wider governance and government arrangements fit for purpose: balancing the interests of future generations with those of the current generation, taking a systems approach, accounting for the interconnectedness and interdependence of both policy outcomes and policy interventions, while following genuinely collaborative and inclusive decision processes?

At the heart of this reimagined governance and government arrangements is a set of institutions that are deliberately created to be the stewards for the sustainable wellbeing of New Zealanders, current and future, and are protected from the political pressures of the day. It is precisely in this spirit that Parliament previously legislated the Reserve Bank of New Zealand

Act 2021 and the Public Finance Act 1989, but there is a lot more to be done. The good news is, we can learn a lot from the rest of the world – we do not have to reinvent the wheel.

Good governance alone cannot deliver the wellbeing outcomes we are looking for – it needs to be complemented and supported by good government. A trusted, competent, effective, efficient public service with a stewardship ethos provides the crucial buckle which fastens good governance to good government.

WHY?

You can actually have a creative and dynamic civil service ... By design, we're making it much more interesting to work in the Googles, the Goldman Sachs and the McKinseys. How do you revive the civil service? It's not by the Dominic Cummings 'we need geeks in government'. It's by changing the remit of government. We need to make it really cool.

– Economist Mariana Mazzucato

Exploring ways to make the public service 'cool' and future-focused brings to mind a number of underlying questions for consideration.

- How can we make the public service attractive and 'cool' to graduates and trained professionals, particularly those interested in resolving both intergenerational and intragenerational challenges? Intergenerational refers to challenges which exist between generations while intragenerational refers to challenges between members of a single generation.
- How can politicians create an authorising environment so that public sector organisations can deliver on their functions? The public sector has a critical role to play in creating the right enabling environment, one that aligns funding and finance with resilience goals. This authorising environment is likely to come in different forms and from different sources but it should enable the public service to look ahead into the future, bring the future to the decision-making table, and make strategic long-term investments; we need an enabling environment that acknowledges transformative change is needed.
- How can governance in Aotearoa New Zealand become more conducive to enhancing the citizens' overall wellbeing across generations? Sustainable development was defined in the World Commission on Environment and Development's 1987 Brundtland report as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' – i.e. that protects and enhances intergenerational wellbeing – our current policies are not delivering this outcome. We are missing the broader governance framework and supporting institutions to pursue the policy objective of intergenerational wellbeing.
- How can the public service create a durable, reliable, consistent, trusted, informed and flexible workforce?
 - The significant use of consultants by the public service is a symptom that the system is failing to build capability. Further, there appears to be a lack of clarity in the public service as to when consultants are appropriate and needed and when they are not.
 - Technology plays an important part in capacity building. It can be used to solve some poor performing areas of the public service (e.g. housing and medical wait-lists) but also, more than ever, complex issues such as climate change.
 - With increasing threats of hacking, bad actors, and the challenges of increasingly complex problems, there is urgent need for government to invest in the latest policy tools and technological expertise.
- How can we focus on fostering our public service leaders to think long-term? While we reshape and make our governance institutions better fit for purpose, how can we equip leaders to not discount the future when making public policy decisions? Officials often prioritise the needs of current generations in their policy decision-making (e.g. climate change); this needs to change. There is currently a lot of talk of 'bread and butter' politics, but this overlooks the fact that many of the major challenges we face, such as housing, poverty, climate change and urban flooding, are the result of this 'here and now' short-termism. The pursuit of intergenerational wellbeing (i.e. the wellbeing of both current and future generations) requires institutions that are fit for the purpose of genuine stewardship.

HOW?

Below we provide a brief description of the critical institutional transformations that are required, in the New Zealand context, to make our governance and government arrangements fit for the purpose of stewardship.

A. Investing in basic governance and management skills, and experience

1. Build the literacy of all parliamentarians and political staff in policy development/ commissioning/foresight/futures studies.
2. Provide opportunity for more sabbaticals for the public sector. Public sector leaders can get burned out due to events and/or busy minister/CEO.
3. Provide options for practical work experience to be gained at the coalface in challenged communities for short periods, so that officials gain insights and innovations from members of society, in order to understand underlying drivers and community solutions.
4. Create short-term private-sector placements for public servants (and vice versa) in order to cross-pollinate the public and private sectors, thus building a team that is better able to work together towards solving complex challenges or optimising opportunities.
5. Review and consider the Singapore approach to building foresight capability in the public service. Singapore has a well-established and funded Centre for Strategic Futures. The Centre aims to build a strategically agile public service ready to manage a complex and fast-changing environment.
6. Provide more guidance on benefits, costs and risks, especially ability to better undertake risk assessments and communicate risks.

7. Prepare a regular and independent assessment of national risks facing the country and table the report in the House. This idea has been an ongoing area of public interest and debate. See, for example, the work of botany professor Sir Alan Mark, poet Brian Turner, and energy expert Associate Professor Bob Lloyd.

B. Transforming governance institutions

8. On behalf of the citizens of the country, current and future, Parliament should unanimously specify the pursuit of sustainable intergenerational wellbeing as the core objective of good governance. Although material prosperity is an integral part of wellbeing, also critically important are non-material criteria (i.e. mana-enhancing dimensions of wellbeing: the mana of individuals, whānau, and communities).
9. To give credibility and effect to this commitment, form a cross-Parliament Parliamentary Governance Group (PGG) as a steward for intergenerational wellbeing.
10. Have the PGG advised by an advisory group that is genuinely diverse (in the broadest sense of that term), representing all the people of the country, including future generations through youth representation.
11. Develop and regularly communicate a shared narrative (by the PGG) as to why it is imperative that we look after the environmental, social, and economic health of our nation in a coordinated way, for our collective wellbeing now and into the distant future.
12. Make every level of government (local, regional, and central) accountable to the corresponding governance body in presenting a coherent programme of initiatives to give effect to this shared narrative, by pursuing policies that aim to achieve sustainable intergenerational wellbeing.
13. Enact legislation, similar to the Well-being of Future Generations (Wales) Act 2015, to require the public service to actively consider the long-term security of sustainable intergenerational wellbeing within policy.
14. At an operational level, the new cross-Parliament Parliamentary Governance Group (PGG) would be advised by an independent Parliamentary Commissioner for Intergenerational Wellbeing (PCIW), emulating Wales or Finland, on whether the Government's programme of work is consistent with the pursuit of sustainable intergenerational wellbeing. For example, the current Productivity Commission could be converted to a PCIW for New Zealand. It could also borrow ideas from Singapore's Futures Units, which have a stewardship function within the

public service and can facilitate foresight thinking, including developing meta-trends and national scenarios to inform 20–50-year policy pathways.

15. In terms of reflecting the wellbeing of future generations in our current decisions, an option to consider is creating ecological, climate, and social policy discount rates. Economists use discounting to weigh the pros and cons of getting things sooner rather than later, such as in the case of costing carbon. 'A high discount rate places less value on the future and results in a lower social cost of carbon. A low discount rate, conversely, places a greater emphasis on the benefits of avoided emissions to future generations, and therefore results in a higher social cost of carbon. These social costs are then used in cost-benefit analyses of proposed projects or policies.'
16. Consistent with the Parliamentary Commissioner for the Environment's (PCE's) recent report, we need to ensure broader, systemic conversations about public policy, including exploring ways of instituting new substantive commitment devices, along the lines recommended by Jonathan Boston.
17. The PCIW itself is advised by the equivalent of the UK What Works Wellbeing institute (which provides a warehouse for all the policy-informing research in this broad area). The PCIW's reports are made public.
18. The measures of effectiveness, efficiency and equity of the policy programme proposed by the government (to be used by the new PCIW) would be based on the development and operationalisation of metrics of resilience (environmental, social, human, and economic resilience) – assisted by Stats NZ.
19. The Productivity Commission and the Auditor-General are calling for a first principles review of the accountability settings within the public management system. In line with this development, we have an opportunity here to rethink some of the independent commission functions (e.g. should the Infrastructure Commission be responsible for climate change adaptation and a systemic investment fund?) As we are seeing in Auckland, we need to address systems problems, with systems solutions.
20. The Infrastructure Commission (IC) acts as the governance group for all major infrastructure projects (with 'infrastructure' conceptualised and operationalised to include environmental, social, and economic infrastructure) that require government funding, and reports to the PGG.

21. We could establish a long-term dedicated investment fund (along the lines of the Scottish National Investment Bank) as a transition intermediary to enable public–private sector partnerships at scale, addressing challenges such as energy inequality, climate change adaptation finance and redeveloping our bio-economy. Agencies from every level of governance and government (local, regional, national) can bid for these funds.
 22. The assessment and prioritisation of proposed infrastructure projects (properly informed by models that show the interdependencies of various investments in generating wellbeing outcomes) is based not only on cost-benefit analyses in terms of outcomes, but also on the additional criteria of:
 - just and viable transitions, supported by a detailed implementation plan – ‘transition engineering’
 - inclusive engagement with all stakeholders in all key decisions
 - appropriate public and private funding arrangements.
 23. The Infrastructure Commission (IC) also monitors the health of the infrastructure of the country (‘infrastructure’ broadly defined), working very closely with the new PCIW. Its reports are made public.
 24. The ‘Ministry of Works’, or its equivalent, coordinates and monitors infrastructure investments to ensure that they are delivered effectively, efficiently and on time.
 25. Revisit and redesign the Provincial Growth Fund (PGF) to help tackle regional inequality in poorer regions. This could build on the ‘Levelling Up’ idea that has been successful in the UK.
 26. Consider councils holding a more significant role in the housing market, particularly social housing.
- C. Investing in resilience, anti-fragility, and foresight**
 Note: The following list of ideas may be something the Productivity Commission might like to consider and recommend in its upcoming report on New Zealand’s economic resilience to persistent supply chain disruptions.
27. Consider legislating a Global Catastrophic Risk Management Act. Lawmakers in the United States have recently passed the US Global Catastrophic Risk Management Act, which requires a broad assessment of all such risks within one year and every ten years thereafter. The Act defines global catastrophes as well as existential risks to human civilisation, namely: severe global pandemics, nuclear war, asteroid and comet impacts, supervolcanoes, sudden and severe changes to the climate, and intentional or accidental threats arising from the use and development of emerging technologies.
 28. Establish an Office of Supply Chain Resilience (following the Australian Government example) to identify and monitor critical supply chain vulnerabilities.
 29. Identify critical products, services and skills that are required in the country at all times, and then determine the best ways to ensure they are manufactured or retained in New Zealand.
 30. Undertake sensitivity analyses on supply and export risks to understand what is important to watch, hoard and/or manage, for example, the additional cost of shipping containers or air transport. Identify when certain types of exports become uneconomic, and what alternative uses/options exist.
 31. Analyse the WHO *Model Lists of Essential Medicines*. The goal is to identify what medicines are not made in New Zealand or Australia and either consider ways to manufacture those products domestically or secure products/contracts in advance from trusted suppliers.
 32. Seek to join the Supply Chain Resilience Initiative, which is an international collaboration between Australia, India and Japan, whose aim is to promote best practice national supply chain policy and principles in the Indo-Pacific.
 33. Build on the climate change reference scenarios discussed in the ‘get climate ready’ policy action. The reference scenarios should be national in nature and be required to illustrate what 2040 might look like with no major change in policy. They are to provide a framework for the reporting of government departments, local authorities, and businesses so that there is an aligned and informed focus on decision making.
 34. Align foresight, strategy and reporting between central and local government. Local authorities are required to publish material, such as long-term plans and regional policy statements, that set time horizons for the decision-making and objectives of the council. These are guided by other documents, such as National Policy Statements. However, there appears to be a lack of alignment in the time horizons set by different types of plans published by local authorities. This is an issue as these documents should be providing the focus for the decisions and activities required to meet objectives and goals. There are three ways to shape the plans: reporting against a time period (e.g. ten years), reporting against a milestone (e.g. achieving

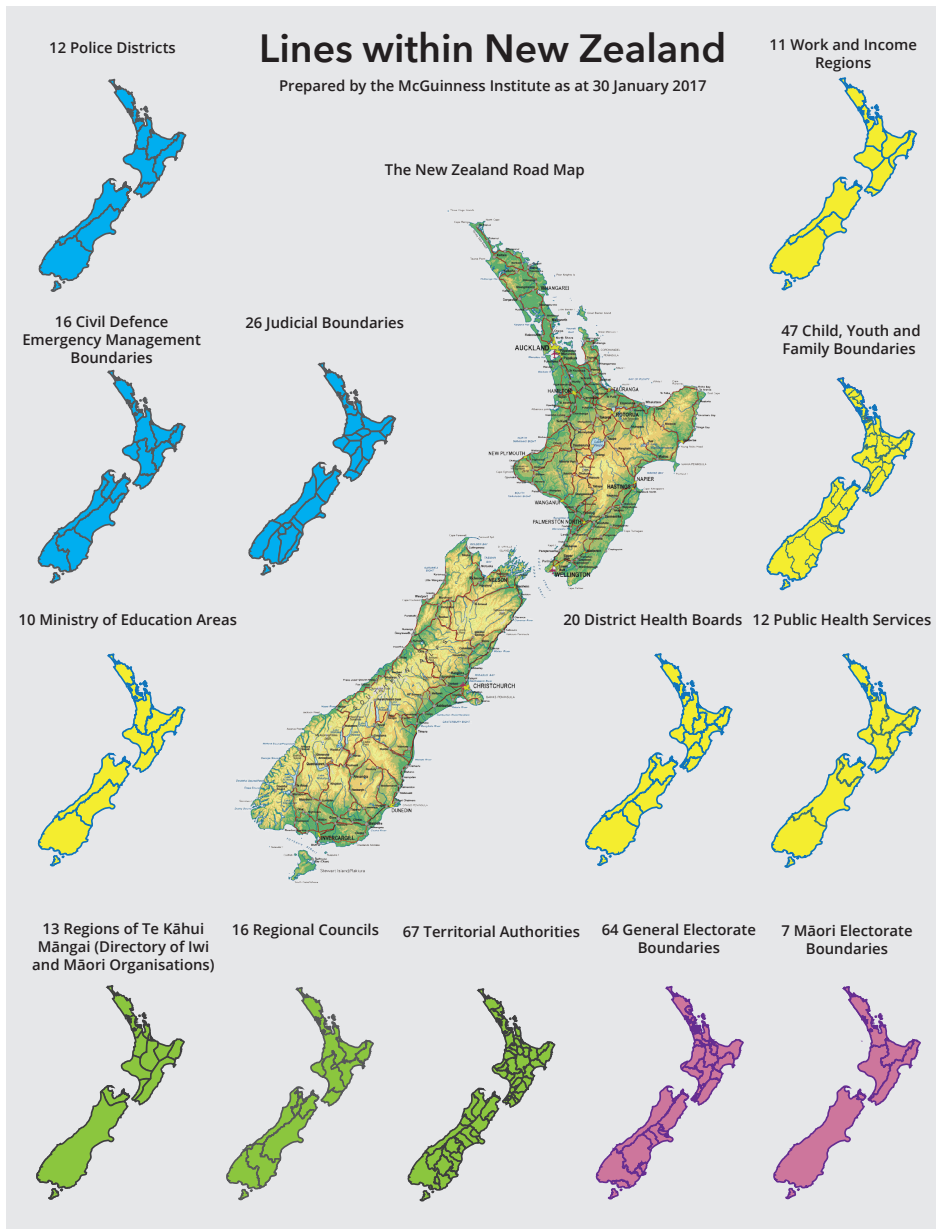
a specific outcome), or reporting against a particular future time (e.g. 2040). We consider the latter is more conducive to improving outcomes, enabling us to refocus on the actions we can take to reach the same outcome. Focusing all plans on a particular year in the future would align critical council plans and policies, and improve the shape of decision-making by government departments.

- 35. Aligned with the above, we consider government departments should be required to provide forward-looking plans of at least ten years. Such an approach would help align public policy decision making and help central government to be fit for the future.
- 36. Realign governance boundaries nationwide so that communities are better positioned to drive change and implement solutions to issues such as health, justice, general electorates, education, civil defence emergency management, etc.

Figure 3 below illustrates the number of different governance boundaries that existed in 2016. The infographic suggests how difficult it is to solve complex problems when there is poor alignment.

- 37. Appoint a ‘National Risk and Resilience Officer’ for government, to mirror the increasingly important role of the Chief Risk Officer in the private sector (see discussion in Section 2.2 in Long Read).
- 38. Establish a ‘foresight review service’, by asking a cohort of department staff under 30 to test public policy from a length of work perspective (e.g. 45 years is the average length of a career). Such an approach would help ensure the public service looks out at least 45 years and knowledge about those policy decisions is embedded in the public service over that time. (See Goal 1.9 in Section 4.2 in Long Read).
- 39. Establish a Royal Commission on the Cost of Living (similar to 1912). (See Goal 6.5 in Section 4.2 in Long Read).

Figure 3: Lines within New Zealand








Appendix 1: Megatrends and wild cards

These tables were crowd-sourced from patrons and others. They aim to identify examples of megatrends and wild cards (e.g. low probability/high magnitude events) shaping the challenges and opportunities facing public policy.

Megatrends are trends that have an effect on a global scale. Weak signals and trends sometimes develop into megatrends. Wild cards are different, but our response to a wild card can accelerate a trend (e.g. the pandemic has accelerated the trend to work from home). Wild cards tend to be binary in nature; they are often irreversible, remain relatively difficult to predict and tend to have a negative impact. Wild cards are sudden events that create a significant change; they are often described as low probability/high magnitude events. Importantly, when an event has a higher probability of occurring (e.g. the Alpine Fault) it would not be considered a wild card. There are many global lists, but the following tables include examples particularly specific to New Zealand.

Table 1: List of megatrends

Type of megatrend	Examples of megatrends
 Consumer Behaviour	<ul style="list-style-type: none"> • Frictionless retail • Change in diet (e.g. uptake of plant-based milks) • Connected health • Change in education and work
 Digital World	<ul style="list-style-type: none"> • Information overload • Data as a moat • Cyber's Wild West • Technology exacerbating inequality • Cybersecurity risks
 Economy and Financial Markets	<ul style="list-style-type: none"> • Indebted world • Rising interest rates • Central bank impotence • Stock market concentration • Dwindling corporate longevity • Sustainable investing • Recession looming
 Geopolitical Landscape	<ul style="list-style-type: none"> • Bipolar world • Peak globalisation • Splinternet • Large-scale involuntary migration • Growing divergence and polarisation within and across countries • Fragmentation of the global system • Shifts in economic power (towards Asia and Africa) • The rise of gullible leaders and gullible followers
 Natural Environment	<ul style="list-style-type: none"> • Climate pressures • Extreme weather: hotter, colder, wetter, dryer are first level effects, known also as rising temperatures (land and ocean), flooding and slips, wildfires, heatwaves, air turbulence and rogue waves. Second level effects are reduced production, supply chain issues, less diversity, transport issues (e.g. impacting tourism), more diseases in humans (e.g. dengue fever) and in animals (e.g. new viruses). • Biodiversity degradation • Water, food and energy crises • Electrification of everything









Type of megatrend	Examples of megatrends
 Society and Demographics	<ul style="list-style-type: none"> • Aging world • Urban evolution • Rising middle class • Decentralisation of media • Rising wealth inequality • Mental health deterioration • Regional inequality • Increasingly divided society
 Technological Innovation	<ul style="list-style-type: none"> • Artificial intelligence (e.g. ChatGPT) • Robotics and automation • The 5G revolution • The new space race • CRISPR: gene editing at scale • Lab meat and protein (e.g. made in tanks close to large populations)

Table 2: List of wild cards

Type of wild card	Examples of wild cards (often negative, but can be positive)
 Attacks	<ul style="list-style-type: none"> • Cyber-attack/s that brings down critical infrastructure for a significant period • Protests, poisoning or bombing on key institutions or infrastructure
 Health	<ul style="list-style-type: none"> • Cure for all cancer • New antibiotic (or equivalent medical breakthrough) • Treatments that significantly lengthen life • Severe pandemic (natural or engineered) from a bacteria, virus or even a fungus • Novel dairy or cattle disease (with milk or meat impacting the health of humans)
 Nation states	<ul style="list-style-type: none"> • A climate change invasion (e.g. a large nation state attempts to take possession of New Zealand). • New Zealand becomes a state of Australia • Collapse of international governance (e.g. UN)
 Environment and society	<ul style="list-style-type: none"> • Asteroid or comet hits earth • Stellar explosion, including a solar flare • Super volcanic eruption in highly populated area (e.g. Auckland or Taupō). Such an event would likely result in significant fatalities and long term negative impacts on food production for years to come. Responses could include mobile burns unit and diverse food production located in several parts of the country. • Major earthquake/ tsunami in city centre (e.g. Wellington) • A novel and cost-effective technological solution to climate change • Aquifers become significantly contaminated • First contact with extraterrestrial life (ET)
 Nuclear war	<ul style="list-style-type: none"> • Global tensions give rise to a nuclear war in: (i) the northern hemisphere only, (ii) the southern hemisphere (e.g. Australia) or (iii) both
 Trade and the economy	<ul style="list-style-type: none"> • Identification of a new low-carbon energy source • International carbon tax on exports/imports • Creation of a Pacific Union (modelled on the EU) • Precision protein fermentation ending the global dairy and livestock industries • Cost effective and scalable fusion power generating electricity by using heat from nuclear fusion reactions

Appendix 2: Implementation checklist

Below we share a few suggestions on how to successfully implement BIG ideas. More detail can be found in the long read, *Discussion Paper 2023/01 – BIG Ideas: Brief to the Incoming Government (B.I.G.)*.

- Political commitment
- Shared narrative (including a set of clear goals and objectives)
- Supportive governance arrangements
- Anticipatory governance arrangements
- Stakeholder engagement and inclusive processes
- Financial budgets, financial controls, and a feasibility study
- Key institutions established and/or strengthened
- Co-designed investment prioritisation processes
- Appropriate (co-)funding
- Clear and transparent accountabilities for delivery
- Effective and efficient implementation
- Ongoing independent evaluation
- Seek out challenge-led policy options (also called purpose- or mission-led policy)
- Reporting and measuring: regular, milestone and reporting against a year (or period of time) in the future.

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