Submission to WEAll Aotearoa's “Tomorrow Together” Discussion Document

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1-Dec-2025

Executive Summary

This submission strongly supports the "Tomorrow Together" campaign while identifying a critical gap in current intergenerational fairness discussions: the systematic exclusion of global catastrophic risks (GCRs) from Aotearoa's long-term planning. Analysis of national risk assessments across five countries, including New Zealand, reveals none adequately address emerging catastrophic risks like bioengineered pandemics, advanced AI failures, nuclear conflict, or global food system collapse—despite these potentially exceeding conventional hazards by orders of magnitude in expected harm. New Zealanders are ready for this conversation: 66% support government developing specific plans for catastrophic risks, with cross-political consensus. Mathematical modeling demonstrates that societal collapse scenarios are frighteningly easy to reach while hopeful futures require deliberate, carefully chosen interventions—and critically, maintaining democratic governance appears essential for reaching positive outcomes.

To truly protect future generations, Aotearoa needs a comprehensive Future Generations Act that extends planning horizons beyond the typical 10-60 years, explicitly includes global catastrophic risks, and establishes dedicated institutional mechanisms. This requires transparent public engagement on difficult trade-offs, ensuring continuity of basic needs (water, food, energy, communications) under catastrophic scenarios through "Plan B" infrastructure, and embedding Te Tiriti principles and kaitiakitanga frameworks throughout. By combining Tomorrow Together's vision with comprehensive catastrophic risk governance, Aotearoa can model how democratic societies address humanity's long-term challenges.

Key recommendations:

- **Establish a Parliamentary Commissioner for Catastrophic Risks** with mandate to assess global catastrophic risks, convene and conduct public deliberative democracy, and advise government with full transparency
- **Develop a comprehensive and publicly facing National Risk Assessment** that includes nuclear conflict, bioengineered pandemics, AI risks, and cascading systemic failures, with explicit assumptions open to democratic deliberation
- **Mandate basic needs continuity planning** ensuring access to food, water, energy, and communications under any scenario, including through distributed resilient infrastructure
- **Build public legitimacy through transparent engagement** on catastrophic risk trade-offs, learning from Wales while extending time horizons to a century or more and explicitly addressing existential risks

Introduction

I strongly support the "Tomorrow Together" campaign and its call for intergenerational fairness in Aotearoa. However, I want to contribute a critical dimension that is currently underrepresented in discussions about future generations: the need to address global catastrophic risks (GCRs) and systemic vulnerabilities that could fundamentally undermine the wellbeing of all future generations.

For discussions of how global catastrophe could wreak untold havoc for Aotearoa New Zealand and imperil the very survival of future generations, look to our peer-reviewed paper on the impact of nuclear war on remote island nations, in which we present a case-study of New Zealand (Boyd & Wilson 2022), alternatively our NZCat project Main Report goes into much more detail (Boyd et al. 2023).

Recent evidence suggests New Zealanders are ready for this conversation. Our 2025 peer-reviewed and published survey found that 66% of New Zealanders support government developing specific plans for catastrophic risks such as nuclear war and engineered pandemics, with only 8-15% opposed (Kerr, Boyd & Wilson, 2025). This cross-political consensus demonstrates that public opinion is ahead of current policy frameworks.

Question 1: What threats to future generations are being ignored because we're not planning ahead?

The biggest gap in Aotearoa's long-term planning is global catastrophic risk, threats that start elsewhere but could cascade here through broken supply chains, trade collapse, and failure of critical global systems.

Our analysis shows that current planning focuses on familiar local hazards while ignoring risks that could affect the entire world at once (Boyd & Wilson, 2025). This isn't unique to New Zealand. When we examined national risk assessments from five countries (UK, Switzerland, Netherlands, Norway, and New Zealand), none included emerging catastrophic risks from AI or bioengineered pandemics, most excluded asteroid impacts and global food shortages, and even risks like nuclear threats were assessed far from their worst-case scenarios (Boyd & Wilson, 2023).

The excluded risks include:

- **Large-scale conflict, especially nuclear war**, which would affect us primarily through long-term trade breakdown (cutting off fuel for farm machinery and other industrial inputs) and nuclear winter effects on farming (Boyd et al., 2023, 2024)
- **Bioengineered pandemics** - advances in biotechnology could enable pathogens far worse than COVID-19, whether released deliberately or accidentally
- **Major volcanic eruptions overseas**, particularly those affecting critical global infrastructure chokepoints or creating a volcanic winter that disrupts food supply (Wilson et al., 2023)
- **Advanced AI failures** with potential for rapid cascading breakdowns across the interconnected systems modern societies depend on
- **Global food system failures**, where production shortfalls across multiple breadbaskets could fundamentally reshape trade relationships (Wescombe et al., 2025)

A crucial insight: for many hazards, the worst-case scenarios contain almost all the actual risk (Boyd & Wilson, 2023). Approaches that focus on "challenging yet plausible" scenarios miss where most harm lies. COVID-19 demonstrated this, it was far worse than typical infectious disease outbreaks, yet still nowhere near the worst possible pandemic.

High uncertainty shouldn't exclude risks from assessment; it should trigger investment in monitoring and research. For risks with rising probability (like certain AI or biotechnology threats), early monitoring is essential. Waiting until we're "certain enough" means acting too late.

Beyond individual events, we face rising systemic risk from at least 14 interconnected global stresses: great-power transition, disease emergence, AI propagation, climate change, institutional decay, ideological polarization, concentrated food production, energy transition, economic headwinds, financial interconnectedness, ecological degradation, toxicity, demographic divergence, and economic inequality. Under a "stress-trigger-crisis" model, any single hazard becomes a trigger, but these underlying stresses determine whether systems tip into cascading failure (Lawrence et al., 2024).

The stakes are sobering. The Cascade Institute's Polycrisis Core Model, based on 1,800 expert judgments analyzing over 4 million possible futures, identifies three major trajectories: a "Mad Max" scenario of state failure and violence (attracting ~500,000 scenarios), "Illiberal Democracy" paths, and a narrow "Hope" attractor of positive futures (attracting only ~100,000 scenarios). Collapse scenarios are frighteningly easy to reach, while hopeful futures require deliberate, carefully chosen policy interventions. Critically, there's no single root cause; it's not just capitalism, carbon emissions, or particular leaders, but everything in conjunction. Single-point solutions won't work.

These risks share key characteristics that place them outside traditional planning: they typically originate elsewhere, spread globally through cascades, may make external assistance unavailable when most needed, and threaten infrastructure destruction (not just disruption), potentially isolating New Zealand through supply and trade collapse. While individually unlikely in any given year, collectively these risks are high-probability events over the decades we must consider for future generations.

Finally, we must address threats from competitive pressures that prevent coordination on collective challenges. The world saw success applying game theory to nuclear disarmament in the 1980s-90s. We now need systemic approaches that address the rules and incentives that encourage or discourage risk generation. A key threat we're ignoring is the failure to hold those who generate risk accountable.

Question 2: What responsibilities do we have to future generations?

Our primary responsibility is to avoid catastrophic and irreversible harms while preserving future generations' capacity to live flourishing lives. This extends beyond environmental sustainability to include democratic institutions, social cohesion, and adaptive capacity.

Democracy as a survival strategy: Research on historical societies shows that egalitarian institutions and transparent governance have superior adaptive capacity when facing collapse (Peregrine, 2021). This now has mathematical backing: the Cascade Institute's Polycrisis

Core Model (mentioned above) demonstrates that maintaining democracy appears essential for reaching positive futures — without democratic governance, there appears to be no pathway to hopeful outcomes. Our research on COVID-19 also emphasizes democracy and good governance as factors that reduced pandemic harms. This convergence of historical, mathematical, and recent evidence suggests we must nurture democratic institutions and social cohesion not as abstract values but as pragmatic survival strategies that protect against catastrophic risk. These must be nurtured, not exploited by political actors.

Maintaining adaptive capacity: We must preserve diversity in solutions, avoid homogenising critical systems, and ensure decision-making remains responsive to change rather than locked into rigid structures. Institutions must "change so that they are responsive to change." Monopolisation, homogenisation, and lack of flexible modularity is a losing strategy in a changing world.

Ensuring basic needs continuity: We must guarantee access to clean water, food, energy, shelter, transport, and communications under any scenario, including catastrophic ones. The 2022 US Global Catastrophic Risk Management Act offers one framework for defining basic needs. For an island nation dependent on global trade, this requires developing "Plan B" infrastructure: distributed food production, local energy generation (including renewable electricity and fossil fuel substitutes like liquid biofuels), resilient inter-island transport, and backup communications. These aren't luxuries but essential insurance. Future generations must inherit robust, resilient infrastructure offering diverse options when conditions change.

Honest communication: We must overcome institutional aversion to "scaring the public" so democratic resource allocation decisions can be made collectively (Boyd & Wilson, 2025). As the UK House of Lords report on extreme risks concluded, "only through transparency and a healthy culture of challenge can we provide society with a reliable foundation to respond to emerging risks." The fear of scaring people is misplaced: two-thirds of New Zealanders support government planning for catastrophic risks, with 60% backing dedicated institutional oversight (Kerr, Boyd & Wilson, 2025). Secrecy undermines trust and weakens resilience. Future generations deserve that we engage now with difficult truths rather than leaving them to inherit crises we failed to acknowledge.

Question 3: What really matters for future generations, and what conversations should we be having now to decide that?

What matters most is the capacity to survive and adapt through whatever challenges emerge. This requires functioning democratic institutions (local and national), social cohesion, diversity in food and energy systems, and transparent governance that can respond to rapid change. Evolution teaches us that systems that remain static collapse into extinction, while systems that diversify and change survive adapted to new circumstances.

Time horizons and risk tolerance. The fundamental conversation we need is about time frames. Current "long-term" policy thinking means 10-60 years at most, which von Knebel's (2023) analysis shows is inadequate for existential threats affecting humanity over centuries. We must explicitly discuss: What timeframe are we planning for? What discount rates, if any, should we apply to future wellbeing? How do we balance current versus future needs when resources are finite?

These assumptions materially affect how we characterize and prioritize risks, yet they're rarely transparent or subject to public debate (Boyd & Wilson, 2023). Analysis shows that varying time horizons (1 year versus 50 years), discount rates (0% versus 3%), and scenario choice ("reasonable" versus "worst-case") can completely reverse risk priorities. Some risks appear minor in a one-year frame but become dominant threats across decades, yet current assessments rarely make these temporal assumptions explicit.

Systems thinking. As Christiana Figueres, former Executive Secretary of the UN Framework Convention on Climate Change, emphasizes: "In the face of systemic risk, linear thinking has no place today." We need conversations that recognize our challenges are interconnected and cascading. Siloed approaches cannot address the polycrisis we face.

Defining basic needs. We need conversations about what constitutes "basic needs" and how to ensure their continuity under catastrophic scenarios. This should be defined in legislation with mandated provision during global catastrophe — moving beyond aspirational goals to concrete guarantees.

Efficiency versus resilience. Modern systems optimise for efficiency through just-in-time supply chains, concentrated production, and interconnected infrastructure. This creates systemic fragility. Future generations may need us to accept some inefficiency now — distributed food production, backup energy systems, strategic stockpiles — as insurance against cascading failures. Resilience shouldn't be framed as "tough trade-offs" but as a national opportunity: an investment in prosperity, security, and innovation.

New Zealand's position. We need honest dialogue about our unique vulnerabilities and advantages. Our geographic isolation, renewable energy potential, agricultural capacity, and democratic institutions position us well, but only if deliberately cultivated. Our greatest vulnerability, namely trade disruption (even our tractors run on imported fuel!), requires specific preparedness.

Systemic risk, not just hazards. Most importantly, we must discuss systemic risk and root causes, not just individual hazards. Current approaches treat symptoms; we must address competitive dynamics preventing coordination, technological acceleration creating risks faster than we can assess them, and resource degradation amid coordination failures. There's no single root cause — not capitalism alone, not carbon emissions alone, not particular leaders, but everything in conjunction. This demands holistic, systems-level interventions.

How we have these conversations. These discussions must be well-resourced, accessible to all, and involve genuine deliberative democracy: citizens' assemblies, community hui, youth-led forums — not technocratic decision-making behind closed doors. The Welsh experience shows that inclusive processes like the "Wales We Want" national conversation build legitimacy and public support essential for long-term implementation.

Question 4: How can Aotearoa New Zealand turn its global and Te Tiriti commitments into meaningful action that ensures Māori rights, addresses intergenerational inequity, and gives real voice to young people in shaping the future?

Aotearoa's Te Tiriti commitments and endorsement of the UN Pact for the Future create obligations that must translate into concrete institutional mechanisms.

Embed Te Tiriti principles in all future generations mechanisms. The Māori concept of kaitiakitanga (intergenerational guardianship) provides a powerful indigenous framework that should guide institutional design. Any Future Generations Act must uphold Te Tiriti commitments and ensure protection of Māori rights and rangatiratanga across generations. This means meaningful co-design with iwi, not consultation after decisions are made.

Establish a Parliamentary Commissioner for Catastrophic Risks with explicit mandate to consider global catastrophic risks (as per Boyd & Wilson 2021), including their impacts on Māori communities and taonga. This role should have:

- Advisory power to government and select committees
- Mandatory consultation requirements for major policy decisions
- Authority to conduct reviews and public inquiries
- Protection from politicisation through transparent appointment processes
- Adequate funding to conduct comprehensive risk assessment
- Full public transparency of deliberations and advice

Create formal mechanisms for rangatahi voice in governance. International precedents like Finland's Committee for the Future demonstrate that parliamentary structures can embed long-term thinking. New Zealand could establish a cross-party Select Committee on Future Generations with youth representatives and iwi partnership, reviewing legislation through intergenerational and catastrophic risk lenses.

Implement intergenerational impact assessments as mandatory for major legislation and infrastructure decisions, explicitly including assessment of contributions to global catastrophic risk, global catastrophic risk exposure, and resilience measures.

Prioritise regional cooperation with Australia and Pacific nations on shared catastrophic risks, particularly around cross-border risk assessment, trade resilience, including shipping sovereignty, around vaccine manufacturing capacity, biosecurity, and food and resource security. These arrangements should explicitly recognise Pacific sovereignty and incorporate tikanga-based approaches.

Address current intergenerational inequities that compound future vulnerability, particularly housing affordability and wealth concentration, which research shows both undermine social cohesion and reduce adaptive capacity, with rising inequity and concentrations of power being key historic drivers of societal collapse (Kemp, 2025).

Question 5: What would it take to move from scattered efforts to a shared, long-term vision, one that connects and strengthens Aotearoa's diverse approaches to intergenerational wellbeing?

This requires integrated institutional architecture rather than isolated initiatives. Von Knebel's (2023) comparative analysis reveals that successful institutions for future generations require clarity around power, scope, time horizon, legitimacy, and protection from politicisation.

Public readiness exists, as our recent survey evidence demonstrates (see above). New Zealanders across the political spectrum want government to develop specific plans for

catastrophic risks, and establishing a dedicated commission or agency to monitor these threats. Importantly, support shows no major differences across political orientation—rare consensus on a policy issue. This is corroborated by the Department of the Prime Minister and Cabinet's 2024 National Risks Public Survey, which found overwhelming support for government responsibility in managing threats from emerging technologies and critical infrastructure disruption. The public is ready; the question is whether institutions will respond.

A comprehensive National Risk Assessment encompassing both conventional hazards and global catastrophic risks, with transparent methodologies and public engagement. Current approaches systematically omit the largest-scale risks despite these potentially exceeding conventional hazards by orders of magnitude in expected harm.

This new and publicly facing assessment must:

- Include nuclear conflict, bioengineered pandemics, large foreign volcanic eruptions, advanced AI risks, and global food system failures
- Use stress-trigger-crisis frameworks to understand and illustrate cascade pathways
- Explicitly state assumptions about time horizons, discount rates, and scenario selection – and ensure these are open to debate
- Engage stakeholders through in-depth deliberative processes
- Draw on emerging tools like the Accelerator for Systemic Risk Assessment's (ASRA) STEER platform, which provides practical frameworks for systemic risk assessment and response
- Be publicly accessible, be publicly explained and interpreted, be comprehensive (not just a list of bad things), and a living document.
- All policy tabled must then demonstrate whether it worsens or mitigates the risks in this risk register

Interactive public risk communication tool (eg Boyd & Wilson 2023), To facilitate genuine two-way engagement, government could develop a web-based platform allowing citizens to explore risk characterisations under varying assumptions, eg different time horizons, discount rates, scenario choices, and decision rules. Users could see how priorities shift with different values, submit evidence on risks, and provide input on preferred assumptions. This would support informed democratic deliberation while identifying knowledge gaps and areas of consensus. Such tools have proven effective in other contexts for gathering public input on complex policy issues while building understanding of trade-offs. The platform would provide:

- Information on probability and impact of national risks, including uncertainty ranges
- Interactive exploration of how varying assumptions affects risk rankings
- Mechanism for collecting stakeholder preferences and expert knowledge
- Access to underlying data encouraging transparency and innovative analysis

Legislative framework connecting existing tools. New Zealand already has Long-term Insights Briefings, the Living Standards Framework, and various resilience initiatives. A Future Generations Act could provide "connective tissue" requiring these tools to explicitly address intergenerational fairness and catastrophic risk, with:

- Mandatory consideration of global catastrophic risks in policy development

- Requirements for basic needs continuity planning across all critical sectors
- Three-lines-of-defence risk governance across government agencies
- Cross-sector collaboration mandates for joint exercises and information sharing

A dedicated foresight and risk unit within central government (e.g., DPMC or Treasury) conducting horizon scanning, scenario analysis, and supporting agencies in global catastrophic risk assessment.

Public national conversation on priorities and values similar to Wales' "Wales We Want" process, but explicitly addressing global catastrophic risks and asking citizens to deliberate on trade-offs, investment priorities, and acceptable risk levels. Such curated, well-contextualized transparency empowers the public rather than merely alarming them.

Bipartisan political commitment protected through independent oversight mechanisms. International experience shows institutions for future generations face politicisation risks; von Knebel documents how Israel's Commissioner was abolished partly due to political interference. Neutral appointment processes and cross-party support are essential.

Question 6: What can we learn from other countries like Wales, Australia, or Scotland about long-term thinking?

Von Knebel's (2023) comparative analysis of institutions for future generations across nine countries provides crucial insights:

Wales demonstrates the power of comprehensive legislation. The Well-being of Future Generations (Wales) Act 2015 established:

- Clear legal mandate providing legitimacy for interventions
- Seven interconnected well-being goals developed through deep citizen engagement
- Five ways of working including long-term thinking and collaboration
- Commissioner with authority to conduct reviews and make recommendations
- Public support (97% of survey respondents) built through transparent engagement

Wales scored highest (4.1 out of 5) across evaluation criteria for a future generations entity including power, time horizon, scope, longevity, public reception, impartiality, and feasibility. Critically, the Welsh model succeeded partly because it balanced advisory power with political acceptability, enough authority to matter, not so much as to trigger abolition.

However, **Wales also reveals limitations**. The time horizon remains focused on 10-60 years, inadequate for global catastrophic risks affecting future centuries (or climate change, or even the full lifetime of someone born today!). The Commissioner faced accusations of politicisation when investigating partisan issues. And as von Knebel notes, success depends heavily on personalities and political will rather than structural guarantees.

Beyond national institutions, international modelling efforts provide valuable frameworks. The Cascade Institute's Polycrisis Core Model demonstrates sophisticated approaches to understanding systemic risk that New Zealand should aspire to in its own analytical capabilities. Such mathematical modelling of global system dynamics, identifying stable future states, intervention points, and pathways through complexity, represents the kind of

rigorous systems analysis currently missing from most national risk assessments and ad hoc policy announcements.

Critical lessons:

1. **Time horizons must be explicit and extended.** Most institutions consider 10-60 years "long-term," but this misses existential risks threatening humanity over centuries and even the lifetime of someone born today. If institutions are to protect humanity overall, not just the next two generations, they need to explicitly mention and work toward mitigating existential risks (von Knebel, 2023: 10).
2. **Power must be calibrated carefully.** Too much power triggers political backlash (Israel abolished its Commissioner); too little renders institutions ineffective. Soft power through mandatory consultation, public engagement, and thought leadership may prove more sustainable.
3. **Protection from politicisation is essential.** Transparent appointment processes, cross-party support, and explicit mandates help, but risk remains. Wales shows that even neutral commissioners face partisan criticism.
4. **Public legitimacy through engagement is foundational.** Wales' national conversation created support; Israel's top-down approach contributed to failure. Deliberative democracy isn't just good practice, it's a survival strategy for institutions.
5. **Adequate funding matters.** Von Knebel identifies funding as a key bottleneck. The Welsh Commissioner explicitly noted insufficient resources limited her capacity to monitor all public bodies and provide needed support.
6. **Existential and global catastrophic risks remain largely absent.** Von Knebel concludes: "their greatest potential to provide value to future generations by reducing existential risk remains largely unused" (p.11). No existing institution adequately addresses the full spectrum of risks threatening humanity's long-term future. Recent comparative analysis of national risk assessments from five countries found systematic exclusion of catastrophic-scale risks despite their potentially dominant expected impacts (Boyd & Wilson, 2023).

For Aotearoa, this suggests:

- Begin with comprehensive Future Generations Act providing legal foundation
- Establish independent Commissioner with adequate funding and clear mandate
- Explicitly extend time horizon beyond decades to a century or more
- Include global catastrophic risks in scope and potentially a specific Commissioner for Catastrophic Risk or Chief Risk Officer
- Build public legitimacy through extensive engagement before and during implementation
- Protect through cross-party support and transparent governance
- Learn from Wales' successes but address its limitations, particularly narrow time horizons and omission of a mandate to mitigate global catastrophic risks

Question 7: What would help to bring the long-term risks and opportunities we're ignoring into the spotlight?

Public readiness exists; institutional response lags. The cross-political public consensus, showing no major differences across political orientation, is rare and valuable. The

institutional aversion to "scaring the public" is misplaced. The public is not only ready for honest conversations but actively wants them.

Learning from past failures in risk assessment. International experience demonstrates the costs of inadequate risk frameworks:

- **Covid-19 underestimation**: The UK's 2017 National Risk Register anticipated non-influenza emerging infectious diseases would threaten "up to 100 deaths," this was despite the October 2019 "Event 201" coronavirus pandemic simulation that modelled 65 million deaths globally, showing that knowledge of severe scenarios existed but wasn't reflected in official risk assessments.
- **Eyjafjallajökull volcanic eruption**: Volcanic threats from Iceland were omitted from the UK's National Risk Register before the 2010 eruption that paralyzed European air travel, despite the predictable possibility of such events. Furthermore, a second undersea internet cable for Tonga was considered only after the Hunga Tonga-Hunga Ha'apai eruption destroyed the first. The world is highly vulnerable to massive volcanic eruptions that dwarf these recent warning shots (the Tambora eruption in 1815 was more than 50x larger than Hunga Tonga-Hunga Ha'apai).
- **Systemic exclusion**: Analysis of five countries' national risk assessments revealed that none adequately address emerging risks from AI, bioengineered pandemics, or global food system failures, despite these having potentially catastrophic consequences (Boyd & Wilson, 2023).

These examples underscore that **citizens must be given the opportunity to provide informed consent not only for government action but also for government inaction.** When risks are excluded from assessment or characterised with overly optimistic assumptions, the public cannot meaningfully participate in democratic resource allocation decisions.

Need for a comprehensive, transparent National Risk Register, eg following UK precedent, which is publicly accessible and includes both conventional hazards and global catastrophic risks. Current approaches lack justification and transparency around foundational assumptions (time horizons, discount rates, scenario selection), and they systematically omit the largest-scale risks.

Such a register must:

- Use stress-trigger-crisis frameworks to map how global systemic stresses interact
- Include nuclear conflict, bioengineered pandemics, large foreign volcanic eruptions, AI catastrophes, and cascading failures
- Explicitly state all assumptions and decision rules
- Present alternative scenarios with different time horizons and values
- Acknowledge uncertainty rather than creating false precision
- Provide detailed resilience options mapped to the risks (and common consequences across risks - analyse across not within organisational silos, eg facilitated by Commissioner for Catastrophic Risks) to facilitate public resource allocation deliberations

Government-facilitated deliberative forums enabling citizens to grapple with catastrophic risk trade-offs. The UK House of Lords report on extreme risks included a "presumption

towards publication" of security information, stating "only through transparency and a healthy culture of challenge can we provide society with a reliable foundation to respond to emerging risks" (House of Lords, 2021: 5).

These forums should present:

- Alternative resilience investment options across catastrophic risk with costs, benefits, and trade-offs
- Different financing models (borrowing now vs. pay-as-you-go)
- Scenarios showing how different choices affect both current and future generations
- Solutions-focused information that empowers rather than just alarms

Regular cross-sector exercises and simulations involving government, private sector, and civil society, practicing response to catastrophic scenarios. These create shared understanding, identify gaps, and build relationships essential during actual crises.

Media partnership and public education translating complex risk science into accessible narratives. The Tomorrow Together campaign demonstrates effective communication through hopeful framing ("standing for something better") rather than fear-based messaging. Curated, well-contextualised transparency empowers the public rather than alarming them.

Media should question the government, and answers that ‘we’ve addressed the risk with state-of-the-art processes consistent with international standards’ is not sufficient. It is exactly these international standards and practices that are wanting, and failed the world during Covid-19. Overconfidence is endemic in national government and the risk of government having not addressed risks adequately is actually one of the largest risks. This risk of inadequate risk governance should be in the National Risk Assessment and Register.

International engagement and comparison. New Zealand should actively participate in global discussions about catastrophic risk, learn from other nations' approaches, and contribute our unique perspective as an isolated island nation with specific vulnerabilities and advantages.

Academic-government-civil society collaboration building New Zealand's catastrophic risk research capacity. Currently, most work on global catastrophic risks is conducted internationally. We need domestic expertise understanding our specific context.

Integration into education systems so that younger generations understand the risks they'll inherit and the importance of long-term thinking. Rangatahi should be equipped with systems thinking, risk literacy, and democratic engagement skills.

Champions within Parliament and government willing to elevate these issues despite political risks. The Australian Bill's introduction by independent MP Dr. Sophie Scamps, seconded by Liberal MP Bridget Archer, shows that cross-party leadership can emerge when individuals prioritise long-term welfare over short-term political calculation.

Question 8: What values should we lock into law to make sure decisions today protect people tomorrow?

Intergenerational fairness as a foundational principle, requiring decision-makers to explicitly consider impacts on future generations and justify any actions imposing significant harms or constraints on those yet to be born.

Continuity of basic needs should be defined in legislation and mandated indefinitely, even during global catastrophe. This includes clean water, nutritious food, energy for heating and transport, communications systems, and healthcare. For an island nation vulnerable to trade disruption, this requires "Plan B" infrastructure, eg distributed food production, local energy generation (including liquid biofuels), resilient inter-island transport, and backup communications, not as luxury but as essential insurance. Government's primary focus must be on ensuring continuity of these fundamentals under all scenarios, including catastrophic ones. A simple example is illustrative: electrification reduces dependence on imported liquid fuels (and hedges against trade collapse), but electrification leaves us vulnerable to catastrophic electrical failure (eg from nuclear EMP, solar storm, cyberattack), this shows how diverse systems are needed for true resilience across time (see diversity and adaptive capacity discussed above).

Transparency and accountability in risk governance, including mandatory publication of risk assessments, explicit justification of methodological choices, and regular public reporting on resilience investments and their effectiveness.

Diversity and adaptability over efficiency, recognising that optimised systems are fragile. This means valuing redundancy, modularity, and distributed systems even when they appear inefficient by narrow economic metrics.

Democratic deliberation on major long-term decisions, with requirements for citizen engagement before committing to policies with significant intergenerational consequences.

Precautionary principle for catastrophic risks, where uncertainty about potential catastrophic outcomes justifies preventive action rather than waiting for conclusive evidence.

Systemic risk assessment, requiring analysis not just of individual hazards but of how multiple stresses interact, cascade pathways, and evolutionary dynamics driving risk generation.

Regional cooperation, particularly with Australia and Pacific nations, on shared catastrophic risks including biosecurity, food security, and critical infrastructure resilience.

Protection of democratic and egalitarian institutions, recognising these demonstrate superior adaptive capacity compared with hierarchical alternatives during collapse scenarios.

Critically, these values and processes must be entrenched against easy repeal. Many safeguards prove fragile, as governments can easily weaken or remove them when priorities change. This suggests either:

- Higher-than-normal majority required for amendments

- Independent oversight with power to challenge proposed changes
- Embedding in foundational documents or constitutional provisions
- Cross-party commitment maintained through transparent governance

Question 9: How could something like a Future Generations Act change how we lead?

A Future Generations Act could fundamentally shift governance from reactive crisis management toward anticipatory resilience-building, creating legal obligations and institutional structures that counter the "presentist bias" dominating three-year electoral cycles.

Key mechanisms would include:

- **Mandatory intergenerational impact assessments for major legislation and infrastructure decisions**, forcing explicit consideration of long-term consequences and catastrophic risk exposure
- **Cross-sector collaboration requirements**, breaking down silos and requiring integrated resilience planning across agencies
- **Independent Commissioner for risk oversight** (for Future Generations or Catastrophic Risks specifically) providing accountability beyond electoral considerations and monitoring emerging threats
- **Basic needs continuity planning** with legislative requirements for "Plan B" capabilities across water, food, energy, transport, and communications during catastrophic scenarios

Deeper transformation. The Act would change incentive structures for political leaders. Currently, electoral cycles reward short-term visible actions over long-term investments. Independent oversight reviewing government performance on intergenerational fairness creates accountability that transcends electoral pressures. As poet Ben Okri challenges: "We cannot combat the difficulty of our times as the people we used to be." A Future Generations Act would institutionalize this imperative.

The Act would build government capability in systems thinking, foresight, and systemic risk assessment. This could include frameworks like the Cascade Institute's succession analysis, which identifies "reverse tipping points", ie high-leverage interventions that trigger cascading transformations toward positive futures. Rather than treating symptoms, this maps pathways through complexity.

Fair financing across generations means borrowing now, building resilience immediately (so current citizens aren't disadvantaged), and repaying across generations according to benefits received. This avoids today's citizens bearing disproportionate risk while ensuring future citizens contribute to resilience they benefit from.

Limitations matter. Von Knebel's analysis shows success depends on sufficient power to influence decisions, resistance to politicization, adequate funding, and sustained political will. Welsh experience shows vague, aspirational legislation can limit effectiveness, we need specific obligations, clear enforcement mechanisms, adequate resourcing, and cross-party support.

Transformational potential. Most fundamentally, the Act could shift public discourse and expectations. Wales' biggest success was "normalising" the idea that future generations deserve consideration. For Aotearoa, combining Te Tiriti frameworks of kaitiakitanga with democratic deliberation and catastrophic risk awareness could create a unique model influencing global approaches to existential risk governance.

However, we must acknowledge the world's metacrisis dynamics: competitive pressures preventing coordination, technological acceleration creating risks faster than we can assess them, and resource degradation amid coordination failures. Without addressing these root causes, even sophisticated institutions may treat symptoms while underlying forces continue generating crises. A Future Generations Act must chart genuinely new territory, not merely refine outdated frameworks.

Conclusion

The Tomorrow Together campaign represents a crucial opportunity to strengthen Aotearoa's commitment to future generations. However, realising this vision requires explicitly addressing global catastrophic risks and systemic vulnerabilities currently absent from most intergenerational fairness discussions.

The evidence is clear:

- Current risk frameworks systematically exclude the largest-scale threats
- New Zealand's island geography makes us uniquely vulnerable to trade disruption from distant catastrophes
- These risks collectively represent high-probability events over the timeframes we must consider for future generations
- Mathematical modelling demonstrates that collapse scenarios (the "Mad Max" attractor) are frighteningly easy to reach, while hopeful outcomes are scarce, but critically, positive futures remain achievable through deliberate intervention
- International precedents exist for addressing catastrophic risks through institutional mechanisms
- Democratic engagement and social cohesion function as protective factors
- New Zealanders are ready: 66% support government developing specific plans for catastrophic risks, with cross-political consensus rare in contemporary policy debates.

I strongly support a Future Generations Act for Aotearoa. But to truly protect future generations, such an Act must:

- Extend time horizons beyond 10 years to a century or more
- Include global catastrophic risks explicitly in scope and mandate
- Use systemic risk frameworks addressing stresses, cascades, and evolutionary dynamics
- Establish dedicated institutional mechanisms like a Parliamentary Commissioner for Catastrophic Risks
- Engage the public transparently on difficult trade-offs and investment priorities
- Protect democratic and egalitarian institutions as pragmatic resilience strategies
- Ensure continuity of basic needs under any scenario, including through Plan B infrastructure
- Build regional cooperation with Australia and Pacific nations

This isn't about fear or pessimism. It's about being good ancestors, taking seriously our responsibility to bequeath a world where future generations can flourish. By combining Tomorrow Together's vision with comprehensive catastrophic risk governance, Aotearoa can model how democratic societies address humanity's long-term challenges.