



3 June 2022

Ministry for the Environment
Climate Policy

Email: adaptation@mfe.govt.nz

Tēnā koutou

RE DRAFT NATIONAL ADAPTATION PLAN

Thank you for the opportunity to submit on the draft National Adaptation Plan. Engineering New Zealand Te Ao Rangahau represents over 22,000 engineers. Climate change, and our response to it, significantly impacts all of us.

Engineers are at the forefront of our collective response to climate change. The engineering profession designs and drives the technology and systems needed to achieve net carbon zero and to develop solutions that support society to adapt to the effects of climate change. We shape what is possible in society, directly affecting our ability to mitigate, adapt and influence behaviours, technology.

Te Ao Rangahau supports the profession, industry, and government to respond to the challenges posed by climate change, including how we adapt to our changing environment. It is with this goal in mind that we form this submission. Our collective desire is to support a clear, pragmatic and action-orientated pathway ahead to address the challenges we face.

Our response

This letter provides a high-level response to the Ministry for the Environment on its draft National Adaptation Plan. In this letter we signal our general support for the direction of the plan and highlight several areas of concern.

We challenge the Ministry of the Environment to provide further clarity, wherever possible, on funding, timeframes, roles, and responsibilities. We need to clearly understand the cost benefit analysis of different options. We encourage government to focus on standards, regulations, and guidance, as well as clear investment strategies to impact change. We also question the skills and capabilities needed to achieve the actions of this plan and encourage the Ministry to include an analysis of skills and capabilities in its final plan. Finally, we signal our support for the draft plan's focus on partnership with iwi.

In general, we support the direction of the draft National Adaptation Plan

We understand the government's work to form Aotearoa's first National Adaptation Plan follows international precedent. We are pleased to see that this work builds on the work of the National

Climate Change Risk Assessment for Aotearoa New Zealand and links it to our collective need to address at least the 10 most significant risks Aotearoa will face from climate change. We also encourage the Ministry to take into account risk assessments from different perspectives, including the identification and classification of risk from indigenous perspectives. We recommend [He huringa āhuarangi, he huringa ao: a changing climate, a changing world](#), a report prepared for Ngā Pae o te Māramatanga by Manaaki Whenua Landcare Research.

Overall, we agree with the focus of the consultation on system-wide actions, the natural environment, homes, buildings and places, infrastructure, communities, and the economy and financial systems. We are also pleased to see the start of national information on frameworks to consider managed retreat.

Further information on funding, timeframes, roles, and responsibilities would support our understanding of how the plan will impact work ‘on the ground’

Being the first National Adaptation Plan, we understand that this plan signals a collective shift from inertia to a shared direction of travel. The plan reads as a guidebook to the work government departments are planning to do or have already initiated. While this is useful for us to see, the impact of this for our work ‘on the ground’ feels distant. We see little assessment of the costs and benefits of each intended action.

In the final Plan, we would encourage more synergy between the recommendations of the Climate Change Adaptation Technical Working Group’s [Adapting to Climate Change in New Zealand](#) and the draft Plan, namely that scientific evidence leads to a clear analysis of options and intended outcomes. One example of this is that the plan does not give much prominence to the fluctuation of the ground water table and salinity intrusion (part of sea level rise), two other climate change related issues.

There is a sense of disconnect and “lag” between central government decisions and actions and what is happening on the ground. We encourage the final Plan to consider a focus on more decentralisation to provide resources, direction, and empowerment at the local level to allow on-the-ground actors like council, communities, and practitioners act as fast as needed. It is probably more appropriate for the Plan to be a central point of coordination to support local actors.

Some delivery dates are given in the plan; however, many are vague, and it is hard to understand roles, responsibilities, and accountabilities. For example, within the homes building and places section of the report, commitment is made to ensure minimum regulatory requirements for buildings take into account future climate data (page 58). The dates for this work are between 2024 and 2028. This action has the potential to significantly impact the work of engineers and support the future resiliency of Aotearoa’s built environment, but it is a long way off, with a status of ‘proposed’. As we will comment further, it is our view that one of the biggest levers available to impact change is regulation, particularly the Building Code.

Uncertainty on many of the actions makes us query who is ultimately responsible for ensuring work is undertaken under this plan and within what timeframes and with what resources. This is unhelpful as we are currently struggling to respond to the challenges of needing to build homes,

buildings, and infrastructure to see us through many of the accelerated environmental changes ahead.

The draft Plan, and supplementary documents, focus on retreat without clarity on what we need to advance. So, while the case for change in the draft National Adaptation Plan is clear, delivery is uncertain. We therefore encourage the Ministry for the Environment to be clearer in its final plan on funding, timeframes, roles, responsibilities, and accountabilities.

Focus on standards, regulations, and guidance

Standards, regulations, and guidance change the behaviour of industry. We therefore encourage government to focus on these to impact change, particularly in the built environment. It is our view that the plan's focus on standards, regulations (particularly the Building Code) and guidance documents should be strengthened. We know a lot about what is needed to support resilience and adaptive capacity, but we need this disseminated into the standards, regulations and guidance documents that shape our work. These documents provide clarity to all industry players on expectations and reduce arbitration in projects, where resiliency is often competing with the need to drive costs down or meet other client demands.

To this end, we are pleased to see the commitment of Te Waihanga (page 66) to scope a resilience standard or code for infrastructure. We support this work and look forward to the outcomes of it.

We encourage this sort of action under the homes, buildings, and places section of the plan. Our view is that work to strengthen adaptive capacity principles in standards, regulation and guidance will strengthen our ability to design and build more resilient homes and buildings, fit for the challenges of climate change adaptation.

Reviewing and updating the Building Act, Code, standards, and guidance documents will need a different approach to the status quo. Climate change brings forth a series of uncertainties in impacts, risk, and cascading risks. Regulations need to be developed that accommodate these uncertainties. We need to consider flexible designs, liability impacts and designing for unknown (and unprecedented) risk. We also need consistent ways of measuring the impacts of the actions undertaken.

Clear investment strategies

We support the plan's focus on investment planning, particularly regarding the integration of adaptation into Treasury decisions on infrastructure (page 66).

We note that the infrastructure section highlights investment in public transport and active transport, as well as progress on the rail network investment programme (pages 68-69). As we have written in other submissions to government, we are strongly supportive of these actions, as are professionals working in these industries. Progress against these plans is welcomed and supported.

Skills and capability

The draft National Adaptation Plan makes little mention of the skills and capabilities needed to enact the plan, across government, industry, and iwi. We are very concerned that this is not addressed.

First, we note the number of actions assigned to the Ministry for the Environment. The Ministry's work programme is tremendous. How will government resource the skills and capability needed to deliver this ambitious plan, alongside its other ambitious work programmes? How is this work prioritised when competing with our need to mitigate our emissions, as well as clean up our resource management system, three waters system and other systems? Without appropriate resource, we are overcommitting and wasting precious time.

Secondly, we are very concerned that there is no mention of the technical and professional skills and capabilities needed to adapt. Engineers, like many other professions, are fundamental to supporting Aotearoa's adaptation. However, engineers are in short supply in Aotearoa and the plan gives no mention to this, or other skill shortages, and how we can collectively address these. Education is one pathway to developing the skills and capabilities we need. However, the only mention in the plan of education is supporting our tamariki to understand climate change. While this is important, we would like to see our curriculum strengthened to support future generations of scientists, engineers and planners who will take us through the transition ahead.

Finally, the Plan makes little mention of how we can support the capacity of tangata whenua to lead our efforts to adapt. Without this, our good intent to partner with iwi cannot be actioned.

Support for partnerships with iwi

Our final point relates to the plan's focus on working in partnership with iwi and recognising the indigenous worldview. We are encouraged to see this throughout the plan and the actions of the plan.

We acknowledge that climate action in Aotearoa must be informed and guided by Te Tiriti o Waitangi and te ao Māori. Māori, as the long-standing kaitiaki of Aotearoa New Zealand, have extensive knowledge and experience when it comes to our natural environment and climatic systems. It is vital that we engage with tangata whenua and incorporate opportunities for mātauranga Māori to be applied in climate solutions. Indigenous and alternative worldviews are indispensable in rethinking the way we do things, to live within our planetary boundaries.

Conclusion

Thank you again for the opportunity to submit on the draft National Adaptation Plan. We look forward to seeing the final plan later this year and to working with engineers, industry, and government to continue to strengthen our ability to adapt to our changing environment.

Yours sincerely



Dr Richard Templer
Chief Executive