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POWERING A BETTER NEW ZEALAND TOGETHER

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Finance and Expenditure Select Committee

via email: fe@parliament.govt.nz

Submission on inquiry into climate adaptation

Introduction

1. Energy Resources Aotearoa is New Zealand's peak energy sector advocacy organisation. We represent participants right across the energy system, providing a strategic sector perspective on energy issues and their adjacent portfolios. Our purpose is to enable constructive collaboration to bring coherence across the energy sector through and beyond New Zealand's journey to net zero carbon emissions by 2050.

2. This document constitutes our submission to the Finance and Expenditure Select Committee (the 'Committee') on climate adaptation.

3. The energy sector was minimally mentioned in the previous summary of submissions, and our previous submission was not at all reflected. Given the seemingly low understanding or appreciation by officials of the fundamental role of the energy sector in enabling and ensuring New Zealand's adaptation to climate impacts across all sectors, as well as achieving the goals of the Paris Agreement, including on adaptation, mitigation and food security, as well as the UNFCCC global adaptation goals, we reiterate the key points of our submission to the Environment Select Committee on the same matter.[1]

Submission

4. The crucial role of a resilient energy system allowing for New Zealand's energy security and affordable energy, should be adequately reflected as a fundamental principle of any climate adaptation framework and/or resulting legislation. Energy Resources Aotearoa cannot understate the importance of climate adaptation for New Zealand. A climate resilient energy system is fundamental to enabling climate resilience and adaptation, across all sectors. At the same time,

[1] We note in the entire 55 page summary of submissions to the Environment Committee a single explicit reference to energy and of the energy system (and in the specific and extremely narrow context of energy efficiency).

New Zealand's energy sector is increasingly vulnerable to the increasing impacts of climate change.

5. In our view the current approach to adaptation in New Zealand is both overly complicated and inadequate. It is not helpful to be focussing New Zealand's climate adaptation approach as simply preparing to respond, saying that 'our approach to climate adaptation should follow a disaster recovery approach; a 'responding to earthquakes' mentality'. In our view, this approach will not allow New Zealand to make the most of the opportunity to invest in and benefit from long-term, transformational and effective climate change adaptation measures.

It is important to have a common understanding of the term "adaptation"

6. A common understanding of what is encompassed by the term "adaptation" is important in framing any public policy discourse on the matters. This definitional point is critical as it is important for the subsequent framing of policy responses. Getting this first step wrong will result in a waste of precious financial and other resources, both public and private.

7. Our preference is to use the Intergovernmental Panel on Climate Change (IPCC) definition of adaptation. The IPCC define adaptation as:

> *'In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effect'.*[2]

8. Importantly, this definition moves thinking beyond a focus on risk reduction and disaster response. The more positive framing to "exploit beneficial opportunities" importantly encourages finding innovative solutions to climate risks, including frameworks for investment and cost-sharing, the focus of this inquiry.

9. We have attached to this submission, as Appendix One, a short, explanatory note about how we think about climate adaptation, and the links to sustainable development synergies, and achieving the government's priorities, including increasing New Zealand's productivity.

Key issues highlighted in our previous submission

10. We again reiterate our concern, raised in our previous submission, that the role of the energy sector in climate adaptation has largely been overlooked. The aftermath of Cyclone Gabrielle was a clear demonstration of the vital role that access to diverse, reliable and secure energy plays in ensuring our comfort and wellbeing. Access to natural gas proved invaluable in assisting in the response to

[2] IPCC glossary, available at: https://apps.ipcc.ch/glossary/.

the devastation wrought by the cyclone, with households otherwise being left bereft of a source of heating and cooking.

11. The Ministry for the Environment's August 2023 issues and options paper for climate adaption, did not consider energy supply and infrastructure. We consider this a grave oversight, especially given the response to the effects of Cyclone Gabrielle in Hawke's Bay had a strong focus on restoring energy to isolated communities.

12. The broad and proactive response from the energy sector demonstrated the sector plays a vital role in New Zealand's climate resilience, alongside our climate mitigation and adaptation goals.[3] We note the crucial role that the energy sector plays in responding to extreme weather events and climate impacts, and ensuring New Zealand's prosperity, sustainable development, and transition to a low carbon future, for all New Zealanders, including adapting energy systems and supporting managed retreat.

13. In response to the terms of reference for the inquiry that this submission responds to, Energy Resources Aotearoa and its members have an interest in, and expectation of advancing and collaborating on the following, as set out on the Parliament NZ website:

> *(1) The purpose of the inquiry is to develop and recommend high-level objectives and principles for the design of a climate change adaptation model for New Zealand, to support the development of policy and legislation to address climate adaptation:*

Energy Resources Aotearoa submits the following high level objectives and principles for consideration by the Committee:

a. ***inclusion, equity and cost effectiveness/affordability, energy security***: building climate resilience in the energy sector, should be for the benefit of all New Zealanders, for instance ensuring supply of energy in extreme weather events, as well as a future-proof, resilient energy system, including consideration of the energy mix needed for resilience, acknowledging the important role of natural gas;

b. ***encouraging innovation and technology development***: for climate adaptation in the energy sector and exploiting market potential to help grow New Zealand's economy;

c. ***contributing to supporting communities, Iwi/Māori with community and ecosystem -based adaptation***; and

[3] EDBs, such as Powerco, proactively stood up emergency response teams in anticipation of outages cause by severe weather in advance of the cyclone making landfall. See here, and continued to provide updates to affected customers throughout the recovery effort.

d. ***ensuring a context-specific approach to adaptation*** - recognising the localised nature of climate impacts, and therefore the responses needed.

(2) For this purpose, the committee must consider the following topics:

(a) *the nature of the climate adaptation problem New Zealand faces:*

- the development of standardised terminology and risk assessment methodology to ensure risks can be appropriately managed and suitable mitigations identified; and

- refer to point (*d*) below on the knowledge and information base for adaptation and decision making;

(b) frameworks for investment and cost-sharing:

- investing in climate resilient energy infrastructure, including the role of natural gas in ensuring resilience, energy security and affordability in the context of the journey to a low carbon future; and

- the development of frameworks for investment and cost-sharing for pre-emptively building resilience as well as dealing with climate impacts in the energy sector should be developed on a case by case basis, in close collaboration the energy sector, in a way that ensures energy security and provision of affordable energy to consumers;

(c) roles and responsibilities:

- allowing for open and meaningful collaboration and mapping of roles and responsibilities across the energy sector with Ministers, as well as with energy support sectors such as finance and insurance, as well as communities and Iwi; and

(d) climate risk and response information-sharing:

- mapping of and provision of Information on the impacts of climate change on New Zealand's energy sector, developing the knowledge base and building a better understanding of the risks faced by the energy sector in particular, alongside how to and how to build resilience into our energy systems, and also allowing private sector access to such information to enable effective long term decision making for climate adaptation.

Energy Resources Aotearoa welcomes this inquiry's focus on funding and investment

14. Our energy mix is constantly evolving. Lower emission energy sources such as wind, solar, and biomass are becoming the preferred solutions to meet our energy needs as we consider the environmental effects of our energy choices.

However, how we choose to source, distribute, and consume the energy needs requires careful consideration as our society grows and adapts to a changing climate.

15. There is no one solution to meet New Zealand's energy needs. Indeed, achieving our net-zero goals, while ensuring the continued health, wealth, and wellbeing of all New Zealanders, will require an understanding of the complex, interconnected nature of our energy infrastructure. Importantly, the policy choices we make now have long term effects for both the affordability and security of energy in New Zealand.

16. The importance of supporting confidence to investment, by providing clear, long-term direction for firms operating in our energy sector cannot be overstated.

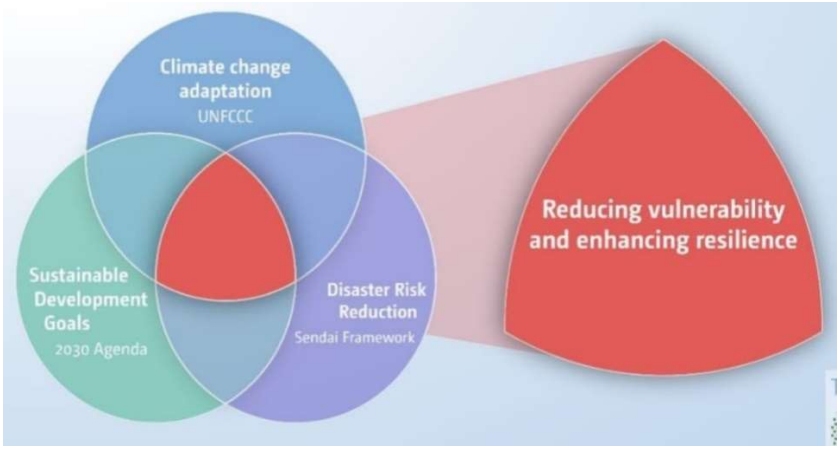
Conclusion

17. Energy Resources Aotearoa and its members understand the importance of adaptation, and the risks and opportunities associated with it. We thank the Committee for the opportunity to submit on climate adaptation.

18. We look forward to presenting our submission to the Committee, should the opportunity arise.

Appendix One: Adaptation – A Framing Note

1. Is adaptation the same, or similar to addressing natural hazards, like earthquakes?
2. The key difference is in the name - being prepared to reduce risk when a disaster happens - 'disaster risk reduction' - vs climate adaptation, where you are reducing and addressing systemic risks on an on-going basis, 'adapting' and changing entire systems to function better in a climate changed world.
3. Adaptation is full system and on-going. It is *not* responsive, unless you are doing a poor job (e.g. Gabrielle). Fault lines are not moving. We learn more about them, yes, but they are static and can be easily confined.
4. For dealing with climate impacts, we need to look at risks across all parts of the system and all kinds of climate impacts. Then we need to strategically invest *now* to lower costs in the future. But also allowing for learning and taking in new information in a changing context.
5. Earthquakes fall into the category of 'disaster risk reduction ' i.e. the approach is reactive, when the thing happens, you're prepared and can deal with it.
6. Climate adaptation is not 'disaster risk reduction' because it's about whole systems, livelihoods, economy, etc and our way of life changing to take into account on-going risk.
7. There are some useful learnings from disaster risk reduction for climate adaptation, but they're different things. Hence the UN system has separate processes for these things. Here's a useful diagrammatic way of looking at the issue:[4]



8. So, it's a matter of 'framing' - framing adaptation as the same as earthquakes will result in a responsive reaction, rather than one that deals with exponentially increasing risk by using climate science to plan and implement things in advance of climate impacts.

[4] Technical paper by the Secretariat, https://unfccc.int/documents/28265