

Meeting Date: 10 August 2022

PRESENTATION FROM THE CLIMATE CHANGE COMMISSION

SECURITY AND RELIABILITY COUNCIL

This paper introduces a presentation from the Climate Change Commission on its role in the transition to a low emissions future for New Zealand.

Note: This paper has been prepared for the purpose of the Security and Reliability Council (SRC). Content should not be interpreted as representing the views or policy of the Electricity Authority.

The Climate Change Commission

- 1.1.1 As part of its theme of climate change for the August meeting, the SRC has asked the secretariat to invite the Climate Change Commission (CCC) to present on their role and aspects of its work relevant to the electricity industry.
- 1.1.2 The purpose of the CCC is to provide independent advice to government on mitigating climate change and adapting to its effects. Three key functions under this remit are to:
- provide advice to government to enable preparation of an emissions reduction plan (released May 2022);
 - to prepare national climate change risk assessments, at least every 6 years; and
 - review the 2050 target and, if necessary, recommend changes to the target.
- 1.1.3 When undertaking this work the CCC must consider a range of factors, including, where relevant:
- existing and anticipated technological developments, including the costs and benefits of early adoption
 - likely economic effects
 - social, cultural, environmental, and ecological circumstances
 - the distribution of benefits, costs, and risks between generations
- 1.1.4 The national climate change risk assessments the CCC prepares aim to identify the most significant risks and opportunities for New Zealand and highlight gaps in the information and data needed to make the assessment. The first (and most recent) climate change risk assessment was published in August 2020. A snapshot of the 2020 risk assessment is available [here](#), with links to the main report for additional reading, if required.
- 1.1.5 Some key trends noted in the first risk assessment, potentially impacting electricity are:
- *Extreme weather events such as storms, heatwaves and heavy rainfall are likely to be more frequent and intense. Large increases in extreme rainfall are expected everywhere in the country*
 - *The number of frost and snow days are projected to decrease*
 - *Drought is predicted to increase in frequency and severity, particularly along the eastern side of the Southern Alps*
 - *Wildfire risk is predicted to increase.*
- 1.1.6 The 2020 risk assessment document records¹ risks to electricity infrastructure as one of the priority risks of climate change on the built environment. Table 1 below shows how this consequential risk increases over time from moderate to major.

¹ On p11 of the *snapshot* document

The urgency rating (ranging from 44-94) reflects a number of factors, particularly whether an adequate response is under way or planned.

Table 1: Priority risk of climate change impacts on electricity infrastructure.

B8 Risks to electricity infrastructure, due to changes in temperature, rainfall, snow, extreme weather events, wind and increased fire weather.	Urgency		55
	Consequence	Now	Mod
		2050	Mod
		2100	Major

- 1.1.7 The Minister must prepare a national adaptation plan (within two years) in response to each national climate change risk assessment, setting out the government's objectives and underlying strategies to meet them, including timeframes and how they address identified risks. The CCC has a monitoring function to ensure accountability and report to the Minister on the plan's effectiveness.
- 1.1.8 The CCC must proactively engage with relevant sectors of the industry and, where it considers it necessary, participation by the public.
- 1.1.9 The aim of the presentation is to provide the SRC with an understanding of the CCC's work and how the CCC is guiding the sector to best address the global problem of climate change, as it impacts the electricity sector.
- 1.1.10 The presentation gives an overview of the CCC's varied roles and its deliverables to achieve the government's renewable energy and decarbonisation ambitions. It covers the CCC's monitoring function and potential impacts on relationships within the sector as that evolves.
- 1.1.11 The CCC will also outline what it sees as the electricity industry's role in assisting the transition and what issues it considers need to be managed to ensure reliable supply during the transition to a low emissions future.
- 1.1.12 The CCC has also been asked to give its view of how the government's Emissions Reduction Plan addresses the advice in the CCC's final report.
- 1.1.13 This presentation complements presentations by MBIE and the Infrastructure Commission at this meeting, all of which are focusing on the various roles of industry and regulators in meeting the government's aspirations, as New Zealand transitions to a climate resilient, low emissions future.
- 1.1.14 The Chief Executive of the Climate Change Commission will attend and present, and be available for questions.

Questions for the SRC to consider

The SRC is asked to consider the following general questions.

- Q1. What questions does the SRC have for the CCC?**
- Q2. What gaps, if any, in the CCC's approach does the SRC consider should be addressed?**
- Q3. How can the SRC support the CCC to monitor progress toward the country's goals**
- Q4. What advice, if any, does the SRC wish to provide to the Authority?**

Appendix A: Presentation from the Climate Change Commission

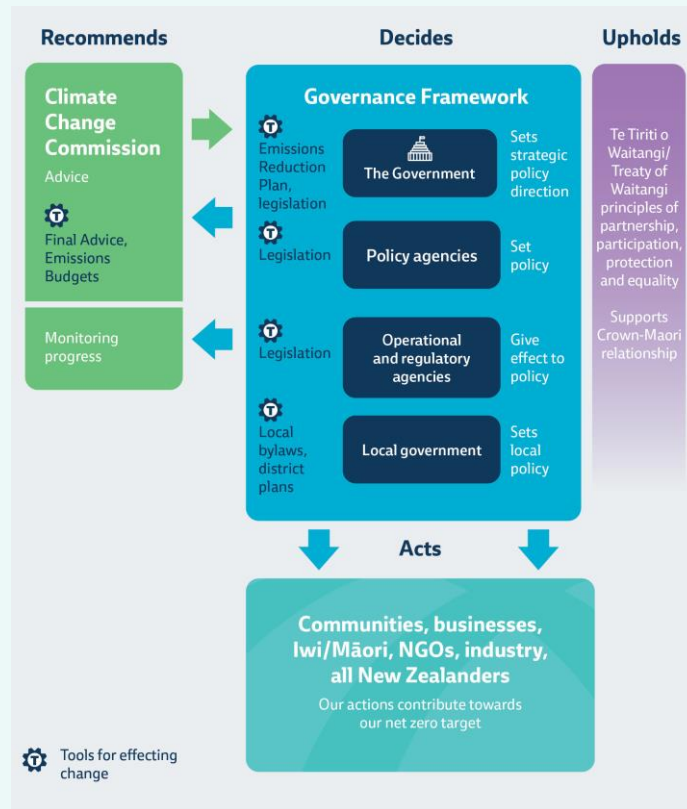
Electricity Authority - Security and Reliability Council

10 August 2022

Jo Hendy
Chief Executive

THE ROLE OF THE COMMISSION

- Part of a broader policy landscape
- We have varied roles under the Climate Change Response Act



OVERVIEW OF THE COMMISSION'S ADVICE IN THE ELECTRICITY SECTOR



- Provided direction of policy to the Government on decarbonising the energy system and ensuring that the regulatory regime is ready to meet future needs
- Undertook modelling and analysis including electricity market modelling
- Engaged broadly

THE ELECTRICITY SECTOR WILL BE CRITICAL IN THE TRANSITION

- Organise to assess options, maximise innovation, and deploy technologies
- Accelerate build of new renewable electricity generation and network connections
- Ensure the electricity system and market can support high levels of renewables
- Support development and efficient use of transmission and distribution infrastructure to further electrify the economy
- Examine what system availability looks like in a highly electrified economy
- Balance the energy trilemma

THE GOVERNMENT'S EMISSIONS REDUCTION PLAN IS A MAJOR LEAP FORWARD

- The Government's Emissions Reduction Plan outlines over 50 actions for the energy and industry sector
- A step change in our country's response must follow – at pace and in the right direction
- We will monitor and report on the Government's progress towards meeting the emissions budgets and the 2050 targets, and delivering on the emissions reduction plan

SO WHAT'S NEXT

- The Commission's forthcoming work programme includes nine statutory deliverables by December 2024
- The relationship we have with the sector and government agencies will change as we take up our monitoring role later this year
- Monitor and report on the Government's progress towards meeting the emissions budgets and the 2050 targets, and delivering on the emissions reduction plan

Thanks



Want to get in touch?
hello@climatecommission.govt.nz



He Pou a Rangi
Climate Change Commission