Ināia tonu nei: the Commission's advice

29th July 2021

Presented at the New Zealand Geothermal Association Seminar 2021: Geothermal in a Low Carbon Future

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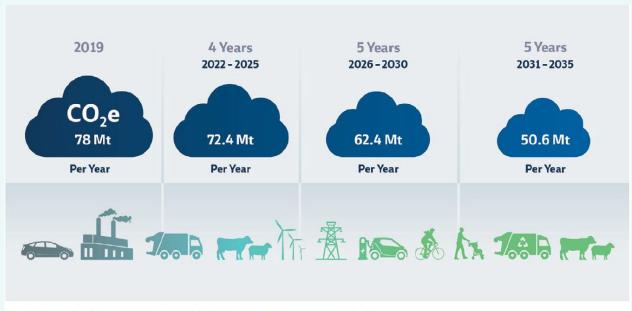


OUR ADVICE

- 1) The levels of the first three emissions budgets out to 2035
- 2) Direction on the policies and strategies needed in the emissions reduction plan
- 3) Advice on:
 - the Nationally Determined Contribution (NDC); and
 - the eventual reduction in biogenic methane as requested by the Minister of Climate Change.

The Government must have set the first three emissions budgets out to 2035 and released its first emissions reduction plan by 31 December 2021.

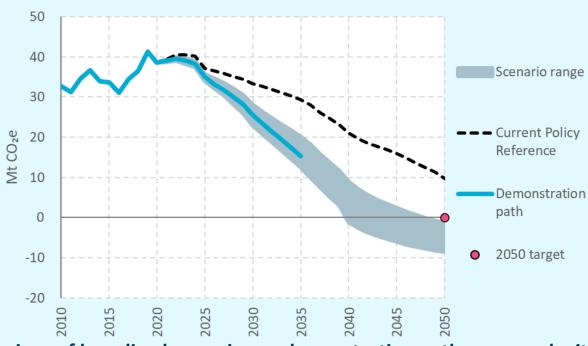
EMISSIONS BUDGETS



Emissions budgets 2022 - 2035 (AR5) annual average emissions

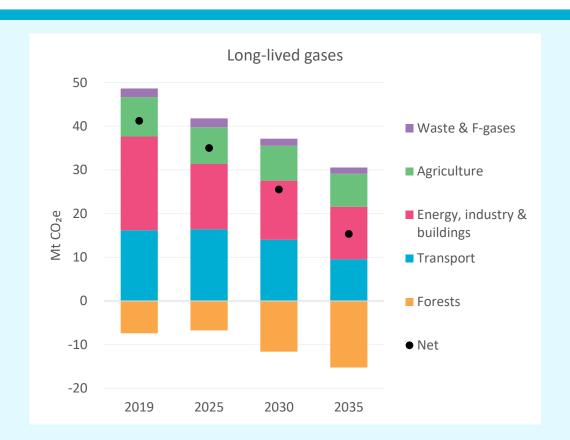
Zoom sessions: https://www.climatecommission.govt.nz/events/

DEMOSTRATION PATH TO 2035 & SCENARIOS



Net emissions of long-lived gases in our demonstration path compared with the scenario range and reference case

DEMONSTRATION PATH TO 2035 – EMISSIONS REDUCTIONS BY SECTOR

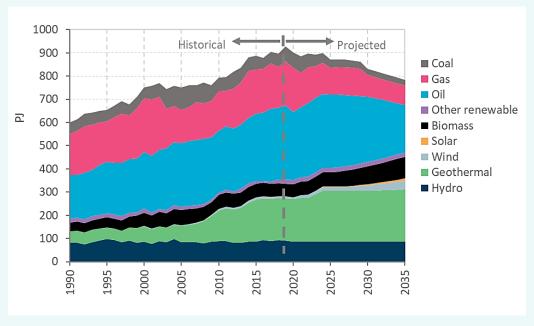


KEY TRANSITIONS ALONG THE DEMONSTRATION PATH - EIB

		Budget 1 (2022-2025)	Budget 2 (2026-2030)	Budget 3 (2031-2035)
Energy, industry and buildings	Buildings	No new fossil gas heating systems installed after 2025 Improve thermal efficiency		Start phasing out existing fossil gas use in buildings
	Electricity	Phase out fossil base-load generation	Expand renewable generation base and network upgrades	Achieve ~95% renewable generation
	Industrial process heat	Replace coal with biomass and electricity		Replace coal and fossil gas with biomass and electricity

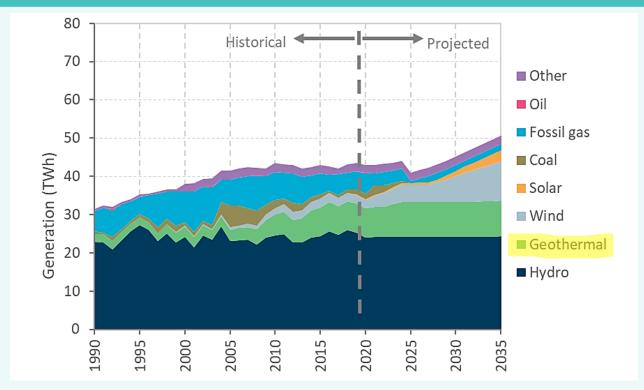
TRANSFORMING THE ENERGY SYSTEM

Recommendation 20: Decarbonise the energy system and ensure the electricity sector is ready to meet future needs



Total primary energy supply in our demonstration path

NEW GENERATION WILL BE NEEDED TO MEET INCREASED ELECTRICITY DEMAND

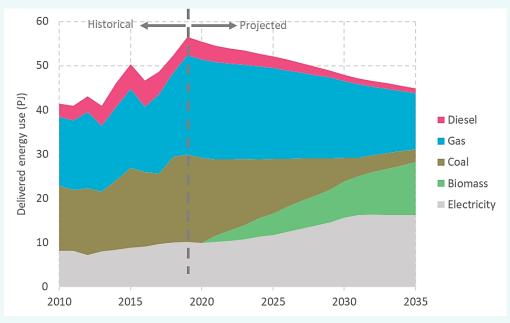


Electricity generation in our demonstration path

DECARBONISING THE INDUSTRIAL SECTOR

Recommendation 21: Reduce emissions from industry

- 1. Acting in partnership
- 2. Collaborate with industrial and manufacturing stakeholders
- 3. Measures to reduce barriers to accelerating emissions reductions from process heat
- 4. No new coal boilers and timetable to phase out other fossil fuel boilers
- 5. Support innovation for hard-to-abate industries

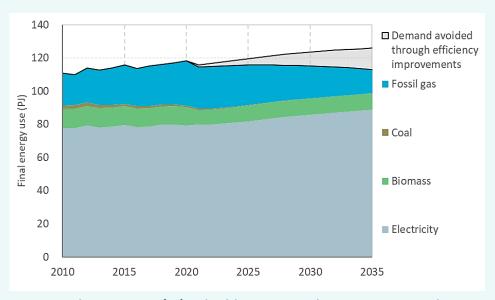


Fuel mix in the food processing industry in our demonstration path

ENSURING BUILDINGS ARE LOW EMISSIONS AND CLIMATE RESILIENT

Recommendation 22: Upgrade existing buildings and construct new buildings that are low emissions, healthier and climate resilient

- 1. Acting in partnership
- 2. Collaborate with building and construction sector stakeholders
- Measures such as mandatory participation in energy performance programmes, continued Building Code improvements and others



Final energy use (PJ) in buildings in our demonstration path

BIOECONOMY

We have recommended that the Government commit to developing and delivering a strategy for a thriving, climate-resilient bioeconomy that delivers emissions reductions. This should include:

- A clear governance structure, including a lead Minister and agency
- Mechanism to enable active collaboration
- Integration of considerations across agriculture, forestry, land, transport, waste, energy, industry and buildings including provision of better data and regulatory settings that attracts and encourages investment and innovation.

Treaty of Waitangi and the Crown-Māori relationship

Recommendation 6: Treaty of Waitangi and the Crown-Māori relationship

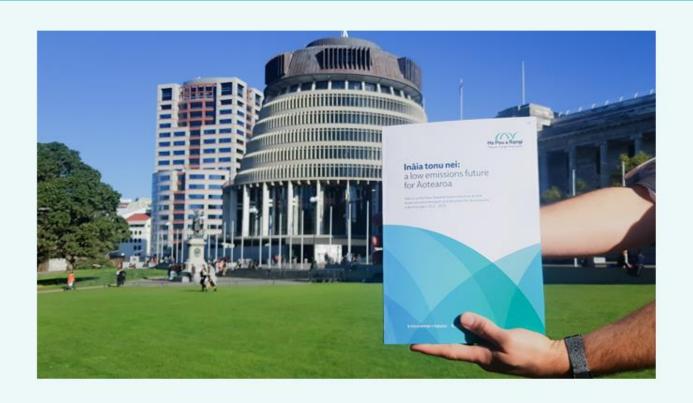
• Working in partnership with Iwi/Māori and local government to develop a strategy to ensure the principles of Te Tiriti o Waitangi/The Treaty of Waitangi are embedded in subsequent emissions reduction plans.

Recommendation 26: An equitable transition for Iwi/Māori

Recommendation 27: A Māori-led approach to an equitable transition for Iwi/Māori and the Māori economy

Sector specific recommendations focused on partnership with iwi/Māori.

Over to government





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