

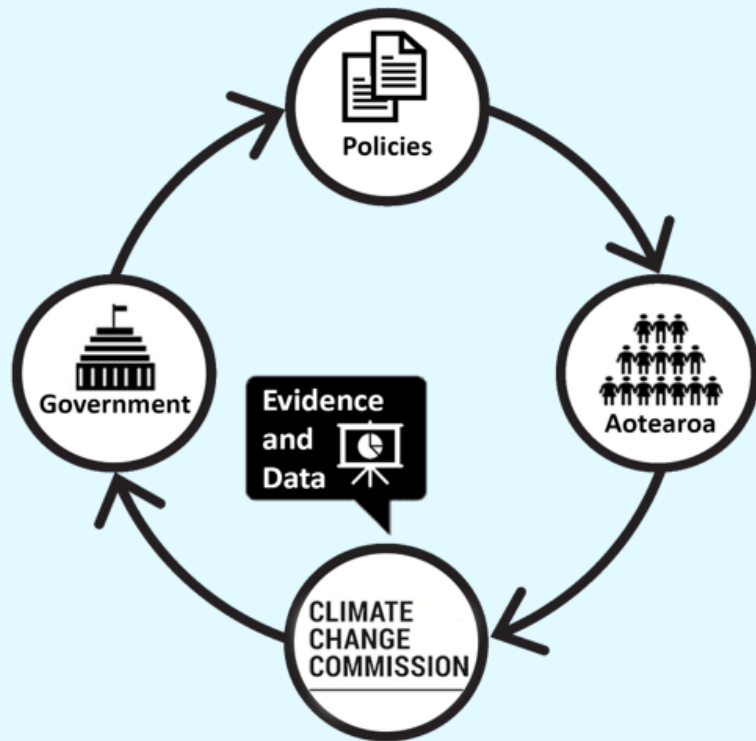
# Building for zero carbon by 2050

February 2021

Catherine Leining

# CLIMATE CHANGE COMMISSION 101

- We were established under the Climate Change Response (Zero Carbon) Amendment Act in 2019.
- We provide independent, evidence-based advice to government.
- We monitor the country's progress towards our climate change goals.
- We do this through research and analysis on different factors that can affect our emissions.
- Our team are a group of experienced analysts, who are supported by board of seven commissioners



## VISION

---

**We are committed to leading a fair and equitable transition that ensures a thriving, climate-resilient, low emissions Aotearoa for current and future generations.**

# OUR ADVICE

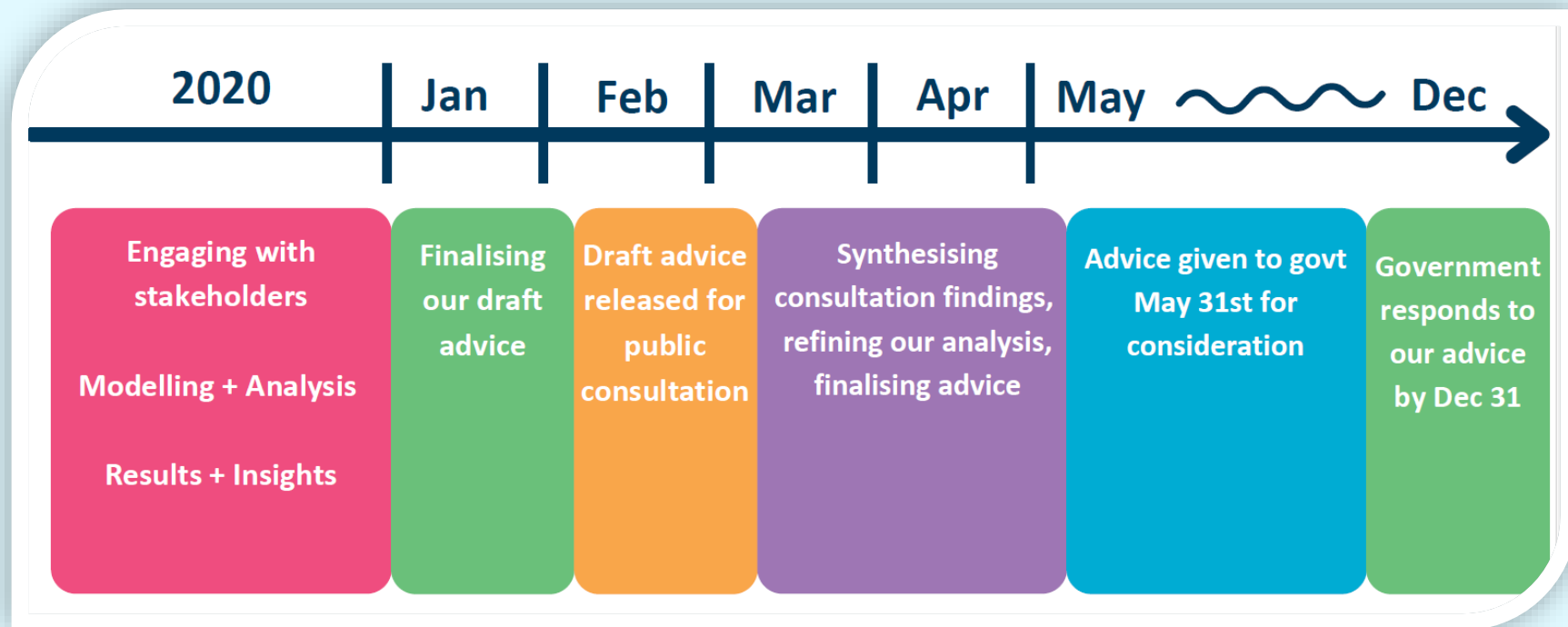
---

Our draft advice provides Aotearoa with a comprehensive strategy for tackling climate change.

## **FOUR AREAS:**

- Level of the first three emissions budgets from 2022-2035
- Direction of policy for the Government's Emissions Reduction Plan
- Consistency of New Zealand's first NDC with staying below 1.5 degrees of warming
- Eventual reductions in biogenic methane which might be required.

# TIMELINE



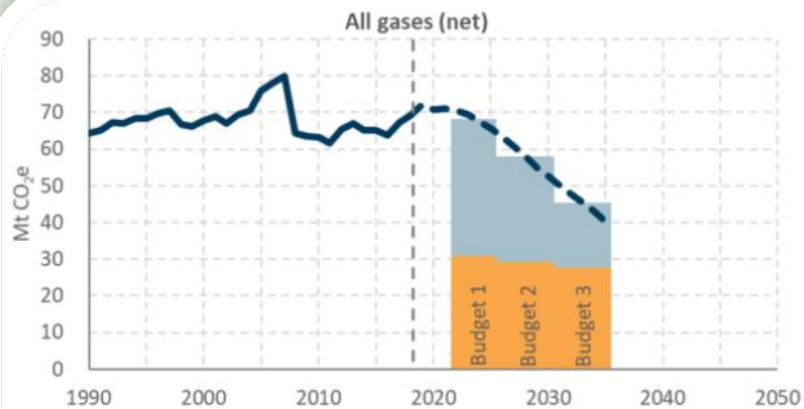
# KEY PRINCIPLES

---

We developed a set of key principles to help guide our advice:

- Align with the 2050 targets.
- Focus on decarbonising the economy.
- Create options.
- Avoid unnecessary cost.
- Transition in an equitable and inclusive way.
- Increase resilience to climate impacts.
- Leverage co-benefits.

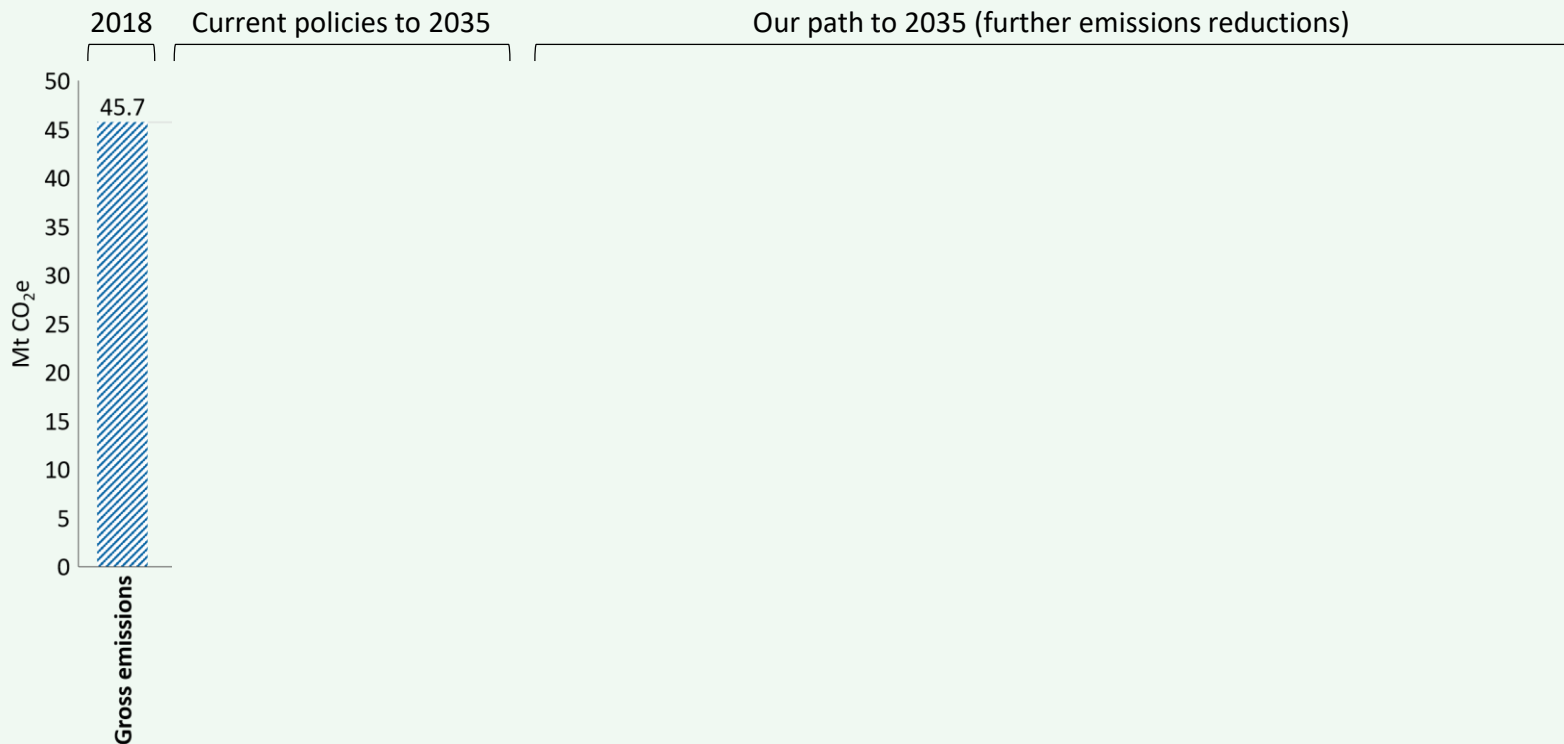
# PROPOSED EMISSIONS BUDGETS



*Our proposed emissions budgets – grey is emissions of long-lived gases; orange is biogenic methane emissions.*

	2018	EMISSIONS BUDGET 1 (2022 – 2025)	EMISSIONS BUDGET 2 (2026 – 2030)	EMISSIONS BUDGET 3 (2031 – 2035)
ALL GASES, NET (AR4)		271 Mt CO <sub>2</sub> e	286 Mt CO <sub>2</sub> e	223 Mt CO <sub>2</sub> e
ANNUAL AVERAGE	69.2 Mt CO <sub>2</sub> e	67.7 Mt CO <sub>2</sub> e/yr	57.3 Mt CO <sub>2</sub> e/yr	44.6 Mt CO <sub>2</sub> e/yr
AVERAGE REDUCTION ON 2018		2%	17%	36%

# OUR PATH TO 2035 – REDUCING LONG LIVED GASES





# OUR PATH TO 2035 – REDUCING BIOGENIC METHANE



# MEETING OUR EMISSIONS BUDGETS

---

- Our analysis has found that current policies will not be enough to meet the emissions budgets – a comprehensive package of policies will be needed to achieve the deep emissions reductions required.
- The Government has to show how it will deliver policies to meet our long-term goals. If we don't think that current policies are doing enough to meet our emissions budgets, we will hold the Government to account.

# TRANSITIONING TO LOW EMISSIONS BUILDINGS

Time-critical necessary action 3: Target 60% renewable energy by no later than 2035

Necessary action 1: An equitable, inclusive and well-planned climate transition

Necessary action 6: Scale up provision of low emissions energy sources (includes bioeconomy)

Necessary action 9: Improve energy efficiency in buildings

Necessary action 10: Reduce emissions from urban form

Necessary action 13: Reduce emissions from waste

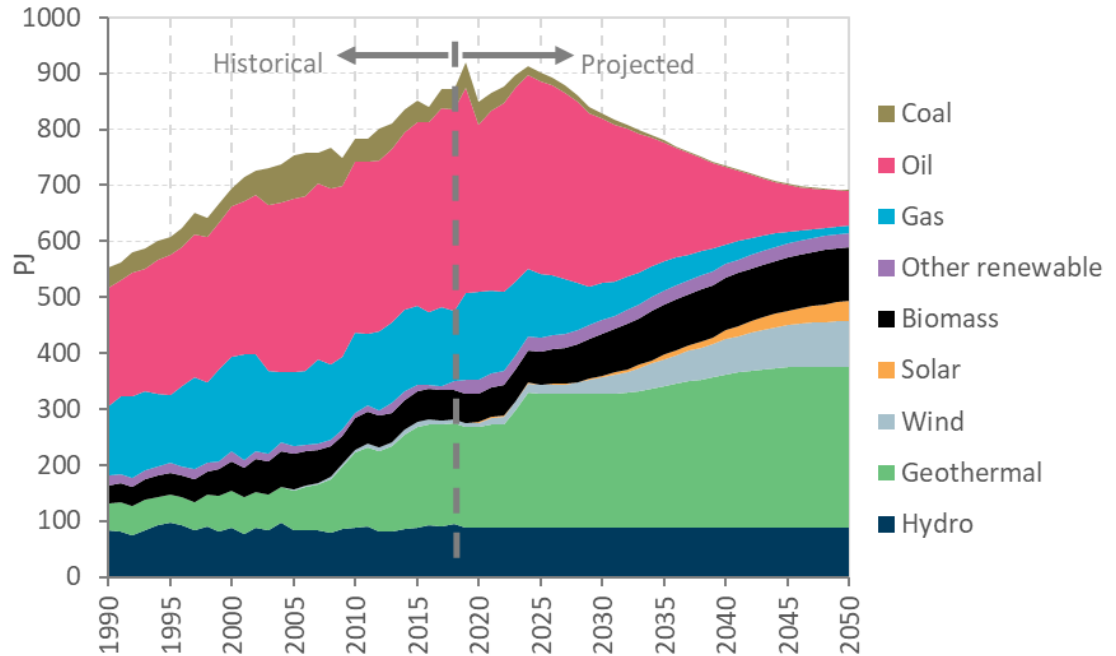
Necessary action 15: Integrate Government policy making across climate change and other domains

Time-critical necessary action 6: Align investments for climate outcomes

# DECARBONISING THE ENERGY SYSTEM

*Time-critical necessary action 3:*

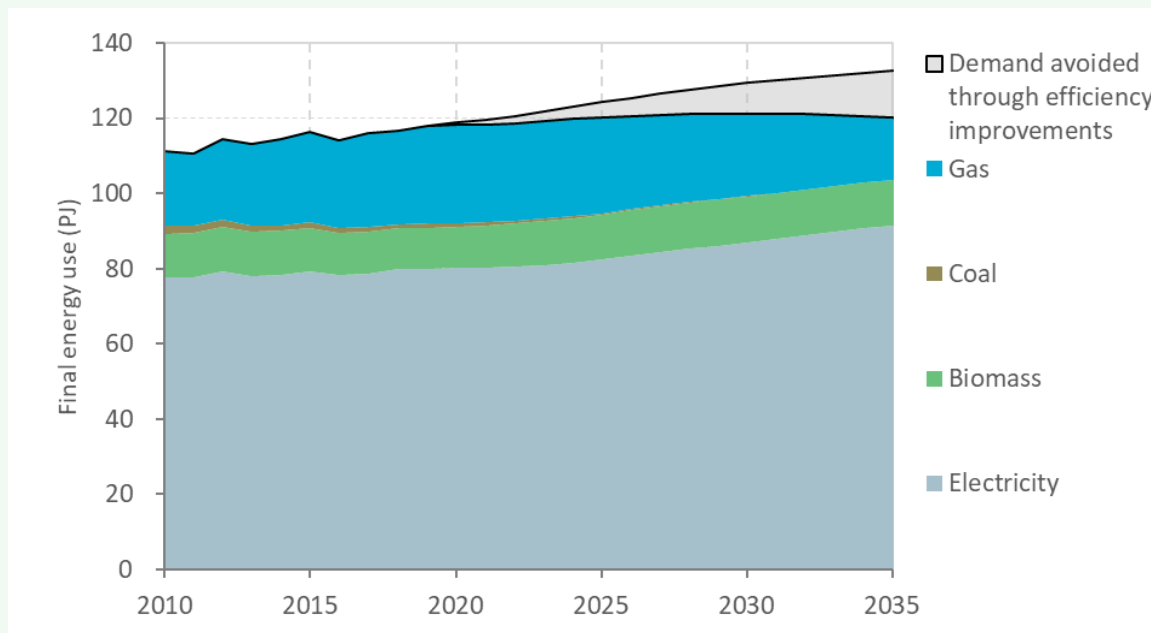
- a) Develop a long-term national energy strategy
- b) Target 60% renewable energy no later than 2035



*Total primary energy in the Tailwinds scenario*

# IMPROVE ENERGY USE IN BUILDINGS

## *Necessary action 9: Increase energy efficiency in buildings*

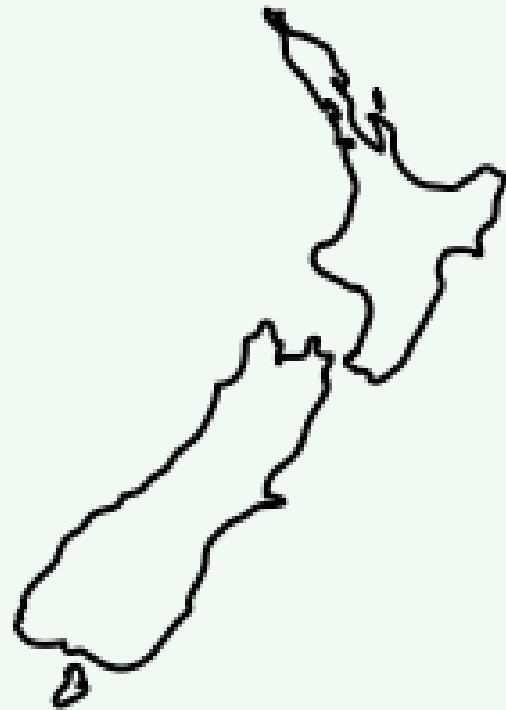


***Final energy use (PJ) in buildings in our path to 2035***

# WHAT DOES THIS MEAN FOR NEW ZEALANDERS?

*Necessary action 1: An equitable, inclusive and well-planned climate transition*

- Change in energy bills
- Warmer, drier and safer homes and workplaces
- Preventing emissions lock-in while avoiding unnecessary future costs
- Increasing resilience against future climatic changes
- Providing targeted assistance



# URBAN FORM AND EMBODIED EMISSIONS

*Necessary action 6(a): Develop a plan for the bioeconomy alongside the new national energy strategy, across transport, buildings, energy, waste, land use and industry.*

*Necessary action 10: Reduce emissions from urban form.*

*Necessary action 13: Reduce emissions from waste.*

- Transforming energy use in buildings is a key near-term emissions reduction opportunity. Long-term parallel action is needed to address embodied emissions, improve resource use, shift urban form and increase the circularity of the economy.

# HOW TO SUBMIT!

## OUR CONSULTATION RUNS FROM FEB 1 – MARCH 14

HEAD TO [HTTPS://HAVEYOURSAY.CLIMATECOMMISSION.GOV.T.NZ/](https://haveyoursay.climatecommission.govt.nz/)  
TO READ OUR ADVICE AND SUBMIT YOUR FEEDBACK.

YOU CAN STAY IN THE LOOP ON OUR CONSULTATION VIA OUR  
TWITTER @CLIMATECOMMNZ AND LINKEDIN.



# Thanks



Want to get in touch?  
[hello@climatecommission.govt.nz](mailto:hello@climatecommission.govt.nz)

