



SUBMISSION: Climate Change Commission Draft Report (January 2021)

TO: Climate Change Commission

BY CONSULTATION HUB (On Climate Change Commission's website)

SUBMITTER: Environment Institute of Australia and New Zealand (**EIANZ**)

SERVICE: Dr Mark Bellingham

President

NZ Chapter of EIANZ

aristos.consultants@gmail.com

GENERAL COMMENTS ON THE DRAFT REPORT

The Draft Report is an impressive report in that it is tackling the broad climate change topic from a national perspective, considering **environmental, technical, political, economic, and social issues**. As far as we can understand all possible NZ options have been considered. It is in advance of any report attempted by the Australian Government, who haven't committed to a 2050 target as yet, let alone prepared a comprehensive overall document as to how national emissions could be reduced to achieve such a target.

The emphasis on **community consultation** is important as it helps people and industries to be involved and committed, and also educates them on the importance of the climate change issue and possible future actions.

New Zealand has considered policy initiatives and advice to government on climate change mitigation for 30 years. But whenever we set benchmarks to reduce climate-forcing gases we fail to meet the targets set. It is important that this socio-political issue is addressed in the final report and that the policy advice is acceptable to a wide range of political views.

There appears to be strong public support for decisive measures to reduce NZ's carbon footprint to zero, but on-going reluctance by politicians, the civil service and key industry sectors to commit to long-term transformational change to meet the reduction to 2035 and 2050 targets.

The Commission's recommendations need to map out how political, civil service and industrial sectors climate change mitigation expectations can be raised to meet public expectation on climate change mitigation. It needs to be up-front tackling the socio-political issue of NZ's continuing failure to meet climate mitigation targets, combined with short-term policies and measures that are unlikely to be relevant by 2050,

EIANZ agrees with the following analysis by Rod Oram for Newsroom.co.nz, which identifies chapters and topics in the Commission's Draft Report that highlight where the Commissioners and their staff particularly need far more input, new thinking, rigour and ambition:

Excellent: Chapter 1 on the science of climate change; 7 on where we are currently heading; and 10 on our UN commitment.

Good: Chapter 3 on how to measure progress; 6 on Maori perspectives; 16 on our approach to policy; and 17 on the direction of policy for Aotearoa.

Adequate: Chapter 4 on emissions reduction opportunities and challenges across sectors is OK only on heat, industry and power; and Chapter 5 on removing carbon from the atmosphere.

Disappointing: Sections of Chapter 4 on transport, particularly on active transport; Chapter 8 on what our future looks like; 9 on which path we should take; and 13 on households and communities.

Bad: Sections of Chapter 4 on buildings and urban form; and grievously so on agriculture; 2 on what other countries are doing; 11 on what could this transition to a low emissions economy and society mean for New Zealanders (astonishingly, just 1½ pages plus two individual references); 12 on how we earn our living (this is the economic analysis); 14 on environment and ecology; and 15 on the link between mitigation and adaptation (astonishingly, only 2½ pages plus two pages of references).

We strongly urge the Climate Commission to turn a good draft report into an outstanding final report – one which will inspire us all to rise to the towering challenges of the climate crisis and to make the most of the transformational opportunities those give us.

EIANZ overall response:

- The Government needs a cohesive strategy that includes water, biodiversity and climate. There are multiple benefits to taking a holistic view of how we use and protect our land.
- New Zealand has one of the largest stocks of natural capital per capita of any nation other than oil and gas producers, according to the World Bank.
- Natural capital is our largest single source of exports and it generates some 15 percent of our GDP.
- Natural capital is one of the four capitals, along with Social, Human and Financial/Physical, our government uses for its Living Standards Framework, and the Wellbeing Budgets and fiscal strategies flowing from it.
- Half our greenhouse gas emissions come from biological processes in farming; and forests are our main carbon sinks.

- We have a strong reputation internationally for innovation in environmental legislation, such as the RMA 30 years ago and legal personhood for the Whanganui River and the Te Urewera in recent years.
- Likewise, we have high ambitions and considerable skills in predator elimination, recovery of endangered species and ecosystem restoration. Biological sciences are our strong suit, and the ones we commercialise best.
- Above all, our natural, rural and wild places are central to how we see ourselves as a people and nation. The more we care about nature, the more ambitious and successful we'll be tackling the climate crisis.
- But the Draft Report has failed to investigate how nature, through ecosystems and biodiversity, is both our greatest climate change threat and our greatest climate change opportunity.

EIANZ topic responses:

Land

- Agriculture has a large role to play in reducing emissions, and farming needs to become even more efficient. There have been improvements in the last few decades, but more can happen.
- Aotearoa has been an agricultural world leader over recent decades. We must adapt and improve our use of our land to keep this status. This means developing, adopting and using practices and technologies that lower emissions and address climate change.
- Forests have an important role to play, in agriculture replacing marginal and erodible land with permanent forests. Incentives are needed to get more permanent native forests planted.
- There are changes farmers can make now to reduce emissions on their farms while maintaining, or even improving, productivity. This includes reducing animal numbers and better animal, pasture and feed management. Policy support is needed to make this happen, particularly with funding for demonstration farms to accelerate uptake of best practice.
- Planting exotic forestry provides minimal benefits in the long term. Soil erosion during harvesting depletes carbon capture in terrestrial, aquatic and coastal ecosystems downstream of pine plantations.
- Pine trees will still play a role in getting to 2050 and could support a future bioeconomy, as bioenergy to replace fossil fuels and as timber for building. But if large-scale industrial forestry is to continue, then the sector needs to change practices on steep land with carbon capture in soils being the primary output.
- Existing forests, small blocks of trees, soils and wetlands can all store more carbon. Work is needed to better understand this potential and how to include this in accounting systems.
- Native forests can create a long-term carbon sink while providing a range of other benefits, like improving biodiversity and erosion control. Incentives are needed to get more native trees planted.

Waste

- We support the Commission's recommendations.

Transport

- Reducing transport emissions is crucial to meeting our climate targets. Action here will have an immediate and lasting impact. Aotearoa can cut almost all transport emissions by 2050. The technology already exists and is improving fast.
- In Aotearoa we need to change the way we build and plan our towns and cities and the way people and products move around. This is critical for getting our transport emissions down to a sustainable level.
 - It includes making walking and cycling easier with good cycleways and footpaths.
 - It means moving freight off the road and onto rail and shipping.
 - It means reliable and affordable public and shared transport systems.
 - And it means an electric or low emissions transport fleet.
- Electric vehicles are key and need to be widely adopted. We want to see the majority of the vehicles coming into New Zealand for everyday use electric by 2035. The government will need to provide support and incentives to make this happen.
- Use of low carbon fuels, such as biofuels and hydrogen, needs to increase, particularly in heavy trucks, trains, planes, and ships.

Heat, industry and power

- Aotearoa needs to decarbonise how we produce and use energy. We need to move towards a set of diverse and low emission energy sources by 2050. We need to almost eliminate fossil fuels. This means ending the use of coal, starting with the public sector including Government agencies (e.g. DHBs, SOEs) and Local Government and CCOs.
- Aotearoa will need to maximise the use of electricity. This means generating and using more low emission electricity for vehicles and for process heat. Building more renewable generation such as wind, solar and geothermal will be required.
- Reducing emissions from process heat is key. Other low emission energy sources, such as bioenergy, will be needed.
- Emissions must be reduced at pace while allowing the country to continue to grow. Planning ahead so that technologies, assets and infrastructure can be replaced with low emissions choices on as natural a cycle as possible will help business and industry keep pace with the transition.

Emissions budgets

The first three emissions budgets need to be recalibrated to take into account our proposed changes above to the Report to incorporate through better management of our natural capital (ecosystems and biodiversity), to capitalise on our greatest climate change opportunity.

The first 5-year budget may fall under current predictions, but this approach is ambitious, but achievable. In the long term (2050) this will represent a significant reduction on current levels of emissions, and step down considerably over time.