



EIANZ Submission: Aotearoa New Zealand Fourth Emissions Budget (2036-2040)

About EIANZ

The Environment Institute of Australia and New Zealand (EIANZ) is the peak body for environmental professionals in Aotearoa New Zealand and Australia. Our membership spans a diverse range of technical professions including scientists, policy makers, engineers, lawyers and economists. We advocate for environmental knowledge and evidence-based practice and set high ethical standards for environmental practitioners through our Code of Ethics and Professional Conduct.

This submission has been prepared by EIANZ's Climate Change Special Interest Section, which is made up of professional experts in climate policy and emissions and mitigation practices.

Introduction

The He Pou a Rangi Climate Change Commission has put forward its draft advice on the fourth emissions budget for the period of 2036 to 2040.

This submission affirms EIANZ's support for climate action and recommends steps that should be taken to meet the national emissions targets set as a net volume of greenhouse gas emissions.

EIANZ supports the Commission's proposed quantitative reduction in the net emissions budget to 132-134 million tons of carbon dioxide equivalents for the period of 2036 to 2040. We welcome the ambition of this target.

The Commission's fourth emissions budget for the period of 2036 to 2040 provides a clear framework for national action. This submission considers strategies to reduce greenhouse gas emissions and facilitate an equitable transition for individuals, households, and businesses.

Goals and Objectives

The primary goal of the fourth emissions budget is to ensure that Aotearoa New Zealand adheres to its commitments to its Nationally Determined Contribution under international climate agreements and national legislation. This will require meticulous accounting of the net volume of greenhouse gas emissions with robust and agreed standards which reflect ongoing changes in practice and technology.

EIANZ is committed to supporting Aotearoa New Zealand (and Australia and our Pacific partner nations) to achieve a significant reduction each reporting period, and importantly to setting an ambitious yet attainable goal for the 2036-2040 budget reporting period.

Actions to Achieve Emission Reduction Targets

Achieving the proposed reduction will require coordination of the individual sectors contributing to the emissions budgets, the parties developing the mitigation technologies, and organisations who will take responsibility for the performance measurements, reporting and verification of reductions or stock changes to the achieve a significant reduction in national emissions.

We recommend encouraging and developing a skilled workforce to deliver across the following areas:

Reducing Gross Emissions

Expertise in energy efficiency, renewable energy, and industrial processes can drive substantial reductions in gross emissions. Key recommendations include:

- **Transitioning to Renewable Energy:** Develop robust support systems for the adoption of wind, solar, and hydroelectric power. Provide technical support and assist with developing policy incentives to encourage widespread adoption.
- **Enhancing Energy Efficiency:** Implement cutting-edge technologies and stringent efficiency standards in homes, businesses, and industries to minimise energy consumption.
- **Sustainable Agricultural Practices:** Advise on innovative farming techniques that lower methane emissions and promote carbon sequestration to inset on farm to reduce scope three emissions liabilities.
- **Industrial Emissions Regulations:** Formulate and advise on strict regulations on industrial emissions, coupled with guidance on adopting cleaner technologies.
- **Carbon-based Financial Instruments:** Explore opportunities to price sources of carbon, encouraging financial mechanisms for emissions reduction.

Removing Excess Carbon Dioxide from the Atmosphere

Leveraging knowledge in carbon capture, to support the enhancement of both natural and technological solutions to remove CO₂ from the atmosphere. Existing and future strategies include:

- **Reforestation and Afforestation:** Implement large-scale indigenous forestry planting projects while ensuring biodiversity and ecological balance.
- **Soil Carbon Sequestration:** Apply advanced agricultural practices to increase the carbon storing capacity of soils.
- **Carbon Capture and Storage (CCS):** Promote the development and deployment of CCS technologies to capture emissions from industrial sources and store them safely underground.
- **Research and Development:** Invest in the innovation and advancement of negative emissions technologies to offer sustainable long-term solutions.

Offshore Mitigation

Drawing on international climate policy expertise, we recommend only introducing targeted offshore mitigation efforts where domestic reductions are unattainable. Our recommendations are:

- **Financing International Emission Reduction Projects:** Provide support for credible and verifiable emissions reduction initiatives in the South Pacific.
- **Global Collaboration:** Foster partnerships with Pacific nations to share knowledge and foster collective climate action.
- **Avoid Purchasing Carbon Credits:** Carbon credits should be avoided unless they meet rigorous and globally accepted standards (qualitative and quantitative) to genuinely reduce atmospheric emissions associated with an equitable transition across the Pacific region to a low carbon economy.

Facilitating an Equitable Transition

Training and developing experts to ensure that the transition to a low-carbon economy is equitable and beneficial for all. We recommend:

- **Inclusive Policy Development:** Engage with communities, particularly marginalised groups, to ensure their needs and voices are heard in policy formulation.
- **Economic Support Mechanisms:** Create financial instruments, education, and training programs to support households and businesses in adapting to new energy systems.
- **Public Awareness Campaigns:** Educate the public on the benefits of renewable energy and efficient practices through targeted information dissemination.
- **Job Creation:** Foster job creation in renewable energy sectors, ensuring a just transition for workers from fossil fuel industries.

Emissions Reduction Plans and Sectoral Responsibility

Achieving this ambitious target will require a collective effort across multiple agencies, communities and commercial sectors, with each sector bearing a proportional responsibility for emissions reductions. We recommend developing policy advice that supports the uptake and adoption of the below changes to our significant contributors to the emissions budget. Governments should lead this collective effort by developing Emissions Reduction Plans for sectors with major emissions to achieve reductions, support communities and people as follows:

Energy Sector

- **Adoption of Renewables:** Accelerate the integration of renewable energy sources such as wind, solar, and hydroelectric power.
- **Efficiency Improvements:** Invest in energy efficiency technologies and practices to reduce consumption and emissions.
- **Grid Modernisation:** Upgrade the national grid to better distribute renewable energy, increase incentives and reduce transmission losses.

Transport Sector

- **Electrification of Transport:** Promote electric vehicle (EV) adoption through reduced tariffs and investments in charging infrastructure.

- Public Transportation Enhancement: Expand and improve public transport systems to reduce individual car usage.
- Sustainable Fuels: Encourage the development and use of low-emission fuels and technologies for aviation and shipping.

Industrial Processes and Products

- Clean Technologies: Implement clean and efficient technologies in manufacturing and production processes.
- Material Substitution: Use alternative materials that generate lower emissions throughout their lifecycle.
- Process Optimisation: Optimise industrial processes to minimise energy use and emissions.

Agriculture

- Sustainable Farming Practices: Encourage interventions and practices that reduce methane emissions and enhance carbon sequestration.
- Soil Health Management: Promote soil carbon sequestration through regenerative agriculture techniques.
- Nutrient Management: Optimise the use of fertilisers to reduce nitrous oxide emissions.
- Wetland/Peat Management: Educate and promote practices which maintain and enhance practices on wetland and peat areas to avoid and reduce emissions to atmosphere.

Waste Sector

- Waste Reduction: Implement robust waste reduction and recycling programs to minimise landfill emissions.
- Composting and Bioenergy: Increase composting and the use of waste-to-energy technologies to manage organic waste.
- Landfill Management: Improve landfill gas capture and utilisation systems.

Forestry

- Reforestation and Afforestation: Targeted planting of native/indigenous forests and restoration of degraded forested areas to enhance atmospheric carbon removals.
- Sustainable Forest Management: Develop and employ practices that maintain and increase carbon stocks in pre 1990 forests.
- Urban Forestry: Expand urban green spaces to contribute to carbon sequestration and improve local air quality.
- Agroforestry: Encourage and develop integrated forestry within highly productive grasslands.

Financial Institutes

- Finance and debt servicing: Lending criteria and debt risk assessments consistent with relevant industries contributions and reductions. Incentives for individual actions to support funding of innovation and practice adoption..
- Insurance: Transparent risk assessments based on exposure to emissions contributions and incentives for practice adoption for emission profile reductions by customers. Avoid insurance retreat due to poor practice..

- Local Government: Expand functions of local government to provide leadership, support and regulation to promote the adoption of locally designed and delivered emission reduction programmes.

Conclusion

The fourth emissions budget represents Aotearoa New Zealand's ambitious yet achievable pathway toward a low-carbon future. Integrating actions across reducing gross emissions, enhancing carbon dioxide removal capacity within the workforce, and cautiously utilising offshore mitigation will collectively contribute to meeting and exceeding national and international climate goals.

It is important for all parts of the community, government and economic sectors to contribute proactively to this national endeavour, ensuring a sustainable and healthier environment for future generations. The introduction of focused Emissions Reduction Plans that have clear reporting metrics which correspond to the emissions budget will allow each sector to evaluate their commitments and provide a response.

Through a growing body of professional expertise and targeted actions in reducing emissions, enhancing CO₂ removal, and equitable transition strategies, Aotearoa New Zealand can meet its climate goals sustainably and inclusively.

EIANZ's endorsement of reducing the net emissions budget to 132-134 million tons of carbon dioxide equivalents is given with an understanding of the necessity of each sector contributing to this goal.

We believe it is critical to distribute the responsibility proportionally (by contribution) across energy, transport, industrial processes, agriculture, waste, and forestry, commercial sectors. This will allow Aotearoa New Zealand to effectively reduce its exposure to international markets and loss of access to finance and at the same time provide locally developed and funded solutions without sending limited resources offshore. Where out of necessity we are required to fund offshore mitigations, we should use this climate-orientated funding to enhance the opportunities for the transition of our Pacific neighbours to meet their own climate commitments.

Our collective efforts are crucial to ensuring a resilient, equitable, and sustainable future for all New Zealanders.