

Removals sector

This summary gives a snapshot of greenhouse gas emissions removals through carbon dioxide absorption by forests. Non-forest removals are also considered.

Overall findings of the 2025 report

- Aotearoa New Zealand is making progress on reducing greenhouse gas emissions – net emissions fell by 2% between 2022 and 2023.
- Emissions are on track for the first budget (for 2022–2025) but will need more work – urgently – to set up for future budgets and the 2050 target.
- Action across a wide range of sectors can strengthen the country’s resilience to changing global conditions. There are many viable opportunities for further reductions that could reduce risk for the economy and return other benefits to the country. Read more about further reductions in the removals sector in the ‘Opportunities for further reductions’ section below.

Snapshot of removals

Total sector emissions

–5.4 MtCO_{2e} (2022)

–5.3 MtCO_{2e} (2023)

Change in emissions between 2022 and 2023

–1.5% in forestry removals

Contribution to emissions reductions sought in the second emissions budget period (2026–2030)

33%

Policy scorecard

Scorecards assess the adequacy of current policy and plans for reducing emissions in each sector, and determine if the risk has increased, decreased or remained the same as in our 2024 assessment.

↑ Increased risk since 2024 – No change in risk since 2024

Policy area	Overall risk assessment	
	EB2	EB3
Forestry removals	–	↑

● Moderate risks ● Significant risks

Key sector findings

Changes in removals

- The amount of net removals has been declining since 2020. This is largely due to planted forests maturing into harvest cycles.
- Exotic afforestation in 2023 remained high, following a peak in 2022.
- Native afforestation continued at similar levels observed since 2017 (less than 10% of exotic afforestation amount).

Policy changes in the last year

- The Government has introduced several policy changes, notably restrictions on registering whole-farm conversions to exotic forest in the New Zealand Emissions Trading Scheme (NZ ETS) based on land-use capability class.
- Amendments to the first emissions reduction plan discontinued several programmes, creating funding gaps in key areas such as native afforestation, biodiversity and biosecurity. Legacy programmes are either closed or winding up in 2028.

Challenges to achieving planned emissions reductions

- Current actions are insufficient to support the level and type of forest planting and forestry management practices needed to ensure sustained long-term forest carbon sinks.
- While carbon removals are largely locked in by existing forests, there are outstanding risks to meeting budgets if more afforestation and/or deforestation occurs than anticipated, with insufficient policy mechanisms to prevent this.
- Uncertainty around the impact of restrictions on registering exotic forests in the NZ ETS and a lack of information on the proposal to afforest Crown-owned land leads to an increased risk in the third emissions budget period.

Areas for attention

- Under the Government’s second emissions reduction plan, forestry removals are expected to comprise 33% of net emissions reductions sought in the second emissions budget and 46% in the third emissions budget. This emphasis on removals instead of reductions would require higher

levels of planting past 2050 to counterbalance ongoing emissions and that forests are maintained to ensure that emissions remain net zero.

- Prioritising reducing emissions at the source across all sectors would limit reliance on removals to meet emissions budgets. This approach would reserve forest removals for emissions that are more difficult to address.
- Rebuilding confidence in the NZ ETS by ensuring decisions on the scheme are timely, well considered, and clearly signalled to support afforestation and deter deforestation.
- The proposal for planting on Crown-owned land requires careful consideration and public consultation, as well as further investigation of its potential contribution and how it would be implemented. It is important that a large-scale afforestation programme on Crown-owned land be guided by ecologically and culturally appropriate land management.
- Further incentivising indigenous afforestation, particularly as enduring carbon sinks, would likely be beneficial across social, economic and environmental considerations.

Opportunities for further reductions

- Research continues into afforestation and forestry management, including maximising carbon sequestration potential, improving indigenous afforestation methods, and investigating associated cost savings.
- One option for expanding permanent indigenous afforestation and developing nature-based non-forestry removals could be to make them the focus of a Crown-owned land policy focused on ecologically appropriate, restorative carbon sequestration.
- The Government is exploring expanding recognised carbon dioxide removal (CDR) activities to include non-forest options. Introducing new CDR activities would require close analysis, as well as changes to national target accounting and setting emissions budgets and the 2050 target in a way that has environmental integrity and meets international standards.

About emissions reduction monitoring

Each year, He Pou a Rangi Climate Change Commission (the Commission) independently monitors Aotearoa New Zealand's progress on reducing greenhouse gas emissions. These reports form a picture over time, showing how the country is tracking towards its climate change goals.

The 2025 report tracks emissions reductions overall, as well as the government's progress towards meeting the first, second and third emissions budgets, which cover 2022–2025, 2026–2030 and 2031–2035 respectively. These emissions budgets are the stepping stones towards the country's 2050 target.

New Zealand's Greenhouse Gas Inventory provides emissions data up until the end of 2023; Stats NZ estimates and Government projections supplement this to provide a more up-to-date picture.

Want to read more?

There are also summaries of the agriculture; transport; energy, industry and buildings; waste and fluorinated gases sectors, as well as on progress, risks and further opportunities centred on iwi/Māori.

The summaries and full report – along with an 'At a glance' overview and a one-page summary of our findings – are on the Commission's website: climatecommission.govt.nz/ERM-2025.