He Pou a Rangi
Climate Change Commission

Energy, industry and buildings sector

This summary gives a snapshot of greenhouse gas emissions in four areas: fossil fuel supply, buildings, industry, and electricity supply

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 energy, industry and buildings sector in the 'Opportunities for further reductions' section below.

Snapshot of energy, industry and buildings emissions

Total sector emissions
18.3 $MtCO_2e$ (2022)
17.6 $MtCO_2e$ (2023)

Percentage of country's gross emissions
23% (2023)

Contribution to emissions reductions sought in the second emissions budget period (2026–2030)
60%

Change in emissions between 2022 and 2023
–4% in total energy and industry emissions
–6% in electricity generation emissions
–23% in domestic fuel supply emissions

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 **n/a** Not previously assessed

Policy area	Overall risk assessment	
	EB2	EB3
Reduce emissions in gas networks	**n/a**	**n/a**
Reduce upstream emissions from oil and gas	**n/a**	**n/a**
Phase out fossil fuels for operational energy and reduce energy demand in buildings	↑	↑
Reduce emissions intensity of production	↑	↑
Reduce electricity generation emissions	↑	↑
Fit-for-purpose networks	–	–

Moderate risks Significant risks Insufficient policy

Key sector findings

Changes in emissions

- The 4% reduction in total energy and industry emissions from 2022 to 2023 comes on top of a 12% reduction in 2021. This continues the downward trend since emissions peaked in the mid-2000s.
- Electricity generation emissions reduced by 6% between 2022 and 2023, following a 33% decrease the year before.
- Provisional data for 2024 shows a 0.06 $MtCO_2e$ increase in energy and industry emissions, due to lower-than-usual hydro inflows.

Policy changes in the last year

- The Government introduced "Electrify NZ" amendments to the Resource Management Act 1991 and passed the Fast-Track Approvals Act 2024 (FTAA) to streamline consenting and better enable renewable energy development.
- Electrification projects at Fonterra and NZ Steel co-funded by the now disestablished Government Investment in Decarbonising Industry fund have recently opened or are underway.

Challenges to achieving planned emissions reductions

- There is increasing risk that under its current settings, the New Zealand Emissions Trading Scheme will not sustain a strong enough long-term price signal to drive emissions reductions.
- The Budget 2025 Investment Boost policy may help reduce capital cost barriers to investing in actions or technologies that reduce emissions, however, it is not targeted at emissions reductions, and firms may still opt for cheaper, higher-emission equipment.
- The significant emissions reductions projected from the Kapuni carbon capture and storage project may not be realised.
- Repealing the ban on offshore oil and gas exploration could raise emissions by potentially increasing production beyond transition-aligned demand.

Areas for attention

- Recent high energy prices have brought energy affordability and supply reliability into sharper focus. Long-standing issues, including underinvestment in new generation and declining gas supplies, have contributed to recent industrial closures. Government action could improve access to affordable, reliable energy while reducing emissions: accelerating renewable electricity development, enhancing system flexibility through deploying new technologies, and reducing residential and commercial energy through energy efficiency.
- A long-term plan is needed for the energy transition, covering all sectors and energy sources. This could outline pathways for addressing energy system demand, fuel availability and energy security, and workforce planning.
- Training and development to bolster workforce and skills, with a focus on addressing current and predicted shortages.
- A considered, well-signalled evolution of the NZ ETS structure is needed to drive emissions reductions. This includes developing an approach to industrial allocation that protects against emissions leakage in a manner consistent with achieving emissions budgets and the 2050 target.
- The FTAA may reduce delays and costs for energy projects by streamlining approvals. However, it risks undermining climate goals due to weak links to national policies, limited engagement with electricity providers, and insufficient emphasis on emissions reductions and infrastructure coordination.

Opportunities for further reductions

- Solar and battery storage prices continue to drop, which could accelerate adoption and contribute to an additional 3.9 $MtCO_2e$ reduction of emissions from electricity generation in the third emissions budget.
- There is a growing appetite within industry to switch from fossil gas, driven in part by concerns over gas prices and availability. This could contribute to 2.6 $MtCO_2e$ of further industrial emissions reduction in the third emissions budget. Further phase out of fossil fuels in buildings could contribute an additional 1.1 $MtCO_2e$ in reductions.
- Embodied emissions in the buildings sector are sometimes seen as hard to reduce; however, lower-carbon options are generally available. The real barrier is not technical feasibility; rather, it is limited awareness and capability stemming from institutional lock-in. Current monitoring focuses on production and operational emissions, while there's interest from the industry to address them through a consumption-based approach.

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; waste and fluorinated gases; transport; and removals 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.