



**Target 9 Quarterly Report**

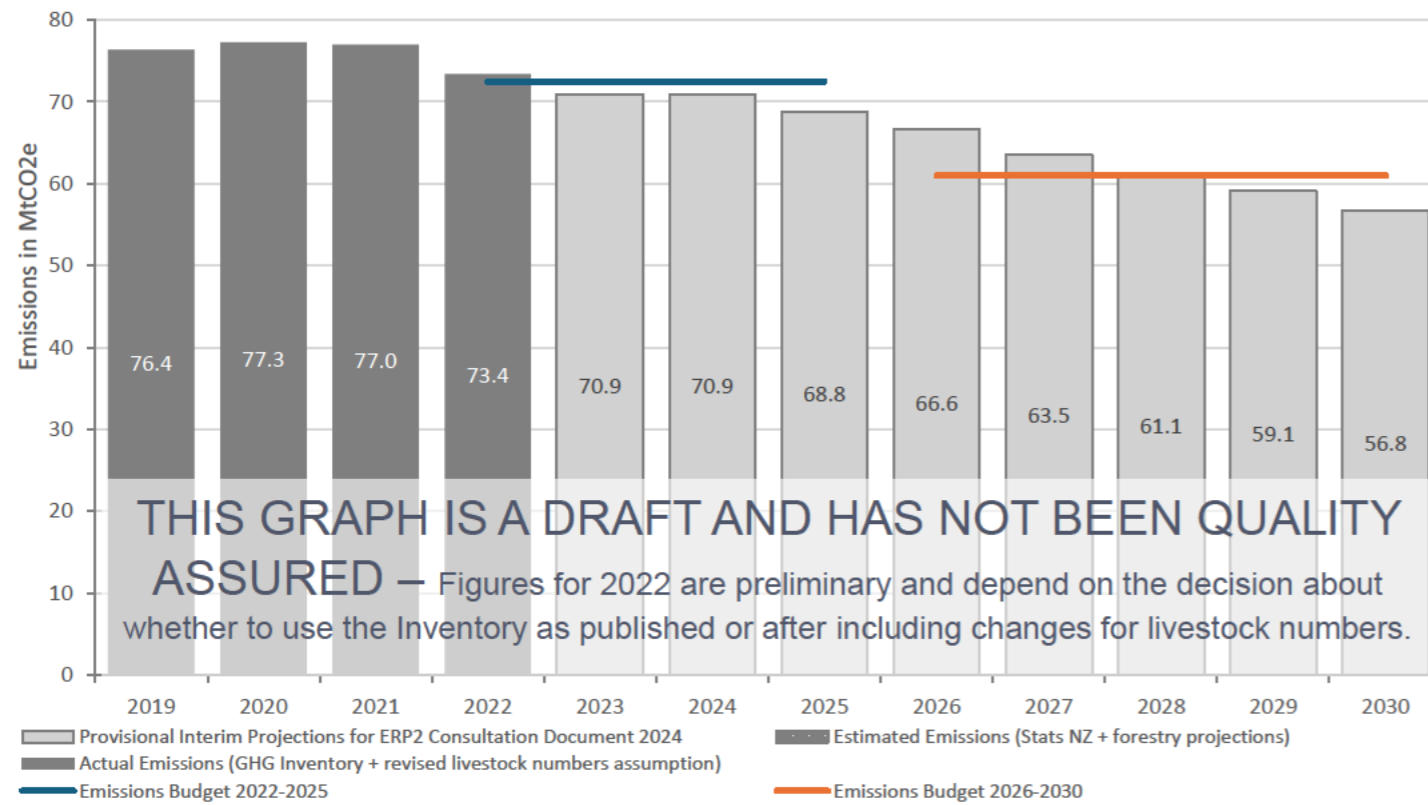
Target 9 - On track to meet New Zealand's 2050 net zero climate change targets with total net emissions of no more than 290 megatonnes from 2022 to 2025 (EB1) and 305 megatonnes from 2026 to 2030 (EB2)

**Current Target Performance**

Status EB1 & EB2	Target	Performance at	Change vs last quarter
	2022 to 2025 net emissions ≤ 290 MtCO <sub>2</sub> e 2026 to 2030 net emissions ≤ 305 MtCO <sub>2</sub> e	JUNE 2024	 -1% change -0.4 MtCO <sub>2</sub> e (emissions year to date)

**Trajectory towards target**

Technical version of Target 9 - Provisional interim projections



**Actions and insights**

What is driving changes in performance vs last quarter?

We expect New Zealand will meet EB1 due to lower livestock numbers than previously understood and can stay within the limit of EB2 when the impact of ERP2 policy proposals are taken into account.

What is the progress of key initiatives that support target delivery?

- The Government is preparing its climate change strategy document for publication. This sets out the Government's approach to achieving its mitigation and adaptation goals.
- Supporting the strategy are:
  - **ETS policy:** a market-led approach that involves restoring confidence in the ETS
  - **Delivery of ERP2** by the end of the year. This is the Government's plan for meeting Emissions Budget 2 (EB2) and Target 9.
- Ministers will consult on ERP2 from July, before taking final decisions by December 2024. This includes consultation on:
  - **Energy policies:** Electrify NZ and incentivising Carbon Capture and Storage (CCS).

29/10/2024 note added for OIAD1269 release  
In line with the ERP2 discussion document the correct terminology is 'investigating Carbon Capture, Utilisation and Storage'

- **Transport policies:** 10,000 public EV chargers, Clean Car Standards, and better public transport.
- **Agriculture and forestry policies:** Agricultural emissions pricing & mitigation technologies, limits to land use change to forestry on high value land uses; and Crown Land afforestation.
- **Waste policies:** the Waste Minimisation Fund (waste), organic waste and landfill gas capture (waste).
- Modelling suggests new policies proposed for ERP2, while not significant, could contribute 4.11 Mt of reductions towards EB2.
- The modelling of new ERP2 policies is preliminary, and estimates are expected to change as the modelling is improved, with further modelling before ERP2 is finalised.

What decisions and actions are required from Ministers?

- Cabinet to approve release of the ERP2 discussion document for consultation – early July
- Cabinet must determine NZ ETS unit supply/price control settings for 2025-2029, with decisions required in early August 2024
- The Minister for Climate Change must respond to the Climate Change Commission's first emission monitoring report by October 2024.
- Final decisions on direction and content for ERP2 – by December 2024, including complementary or enabling policies that may come out of ERP2 consultation.
- Setting of the second Nationally Determined Contribution – early 2025.

**What are the key issues and risks?**

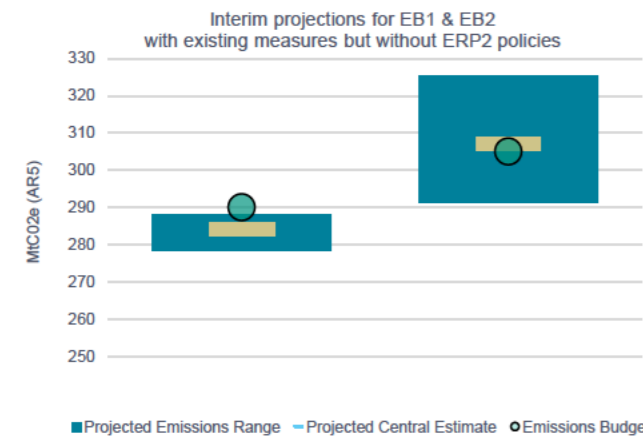
- Current interim projections show we are on track to meet emission budgets 1 and 2 (Target 9) [insert statements on final contingency/buffer when figures known – EB1 below by at least the uncertainty band]. Government needs to ensure ERP2 (to be published at the end of this year), is sufficient to meet EB2. [Managing a tight margin where changes occur frequently requires risk management.]
- Projections are inherently uncertain and can change based on external factors (e.g. dry/wet years and hydro inflows, significant climate events, decisions by major industries, commodity prices, economic conditions - such as inflation, unanticipated global developments); improvements in measuring emissions (methodology); and successful implementation of policies.
- It is challenging to quantify some new policies due to limited available data, however a number of the Government's new policies on EV charging, Electrify NZ have been quantified as part of the ERP2 discussion document preparation.

Target 9 – Supporting Indicators

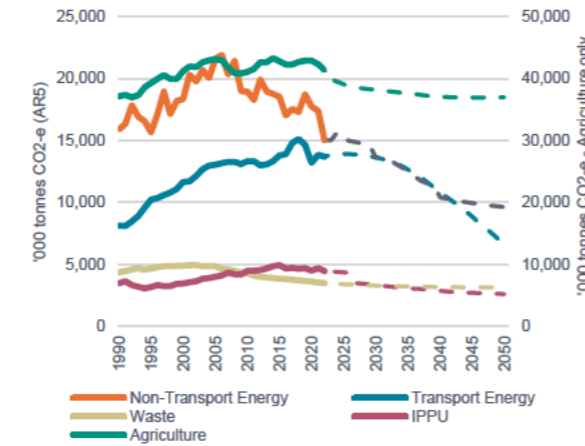
We are on track for EB1 but EB2 is currently less certain. ERP2 policies will help. Sectoral emissions numbers can be volatile but are projected to drop over time. Likewise, system indicators show the economy is decarbonising. ETS prices have risen over the long term. Afforestation rates are high especially for exotic trees, meaning there will be more carbon captured by trees in the future. Looking ahead to the next quarter, leading indicators suggest there may be more coal consumption emissions in the short term, but lower emissions due to livestock. Slow economic growth could also limit short term emissions (as has been experienced historically).

Emissions margins and sectoral breakdown

Buffers are 6Mt for EB1 and -2 Mt for EB2

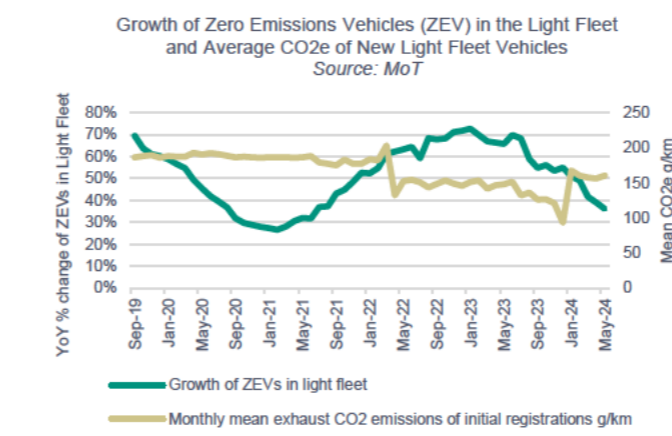


Sectoral emissions appear to have peaked

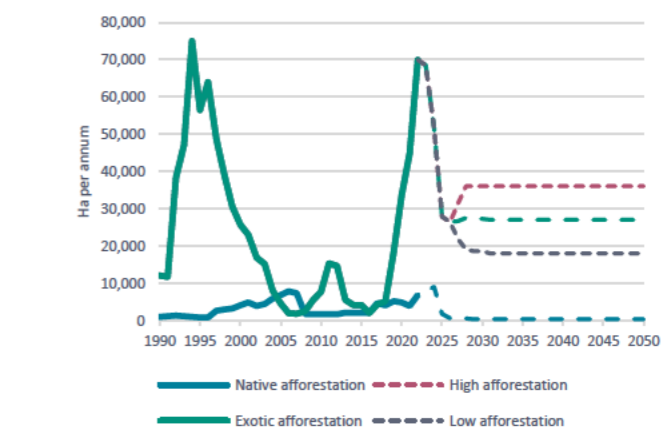


Leading indicators (long term)

EVs have grown rapidly, public chargers will help



Forests will sequester more carbon



Interim projections based on existing settings show emissions to be:

- below budget for EB1, even at the high end of the uncertainty range; and
- on budget for EB2 if proposed ERP2 policies included, but with a wide range of uncertainty

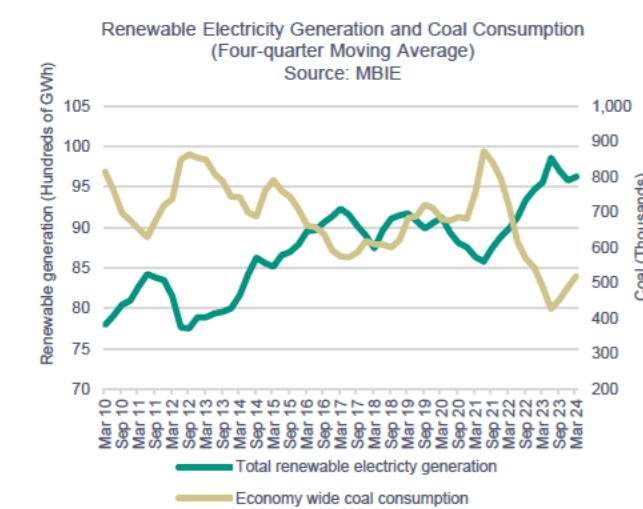
- Since total emissions peaked in 2005 emissions have fallen for non-transport energy, agriculture and waste.
- Emissions from transport, industrial processes and product use took longer to peak but are trending downwards

- The decline in ZEV growth may lead to higher overall emissions as fewer low-emission vehicles replace internal combustion engines.
- The spike in average CO2e indicates new registrations are increasingly higher-emission vehicles.

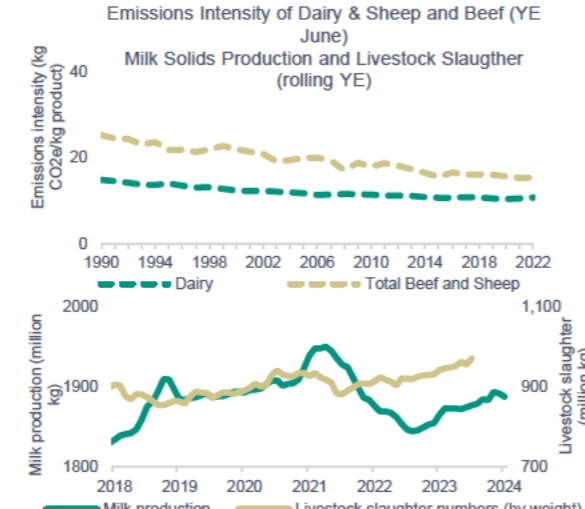
- Afforestation rates for exotic and native species combined have reached all-time highs
- Deforestation rates are low
- As trees grow, there will be increased carbon uptake, contributing to lower net emissions in the future.

Leading Indicators (next quarter)

Coal use increased in the last quarter

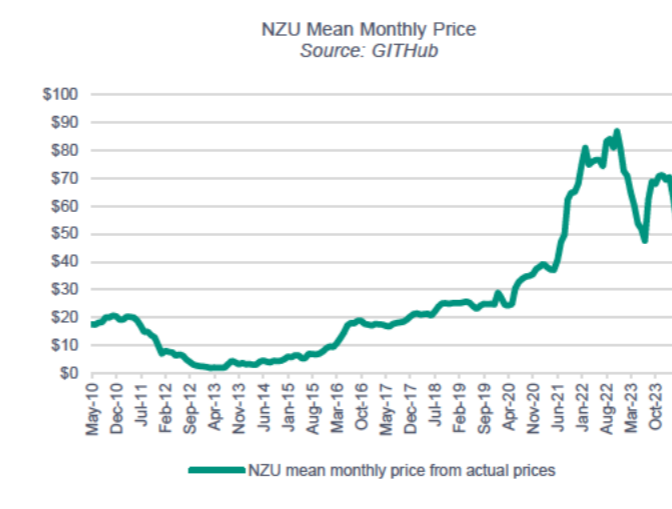


Agricultural production up, intensity down

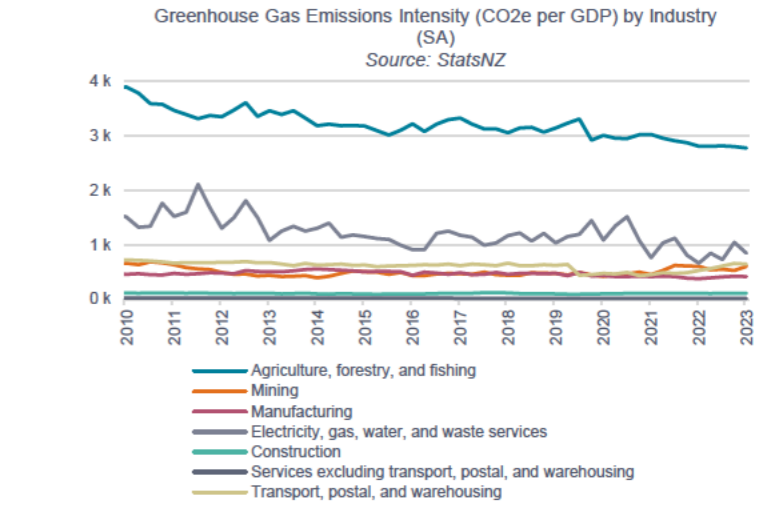


System Indicators (long term)

ETS prices are expected to rise then fall



The economy is decarbonising (albeit slowly)



29/10/2024 note added for OIAD1269 release  
The bullet points associated with this draft indicator are incorrect. In subsequent drafts the indicator, and associated commentary, were updated.

**DRAFT AS AT 1 JULY 2024 FOR TESTING AND DISCUSSION ONLY – NOTE: THE DATA ARE PROVISIONAL IN SOME CASES – DO NOT QUOTE OR SHARE**

- Renewable electricity generation dipped after a period of growth, then slightly increased
- There has been a recent uptake in coal use, which if continued, will increase emissions in the next quarter
- Renewable generation has increased over the long term

- Milk prod. has dropped indicating dairy emissions will be lower next quarter
- Livestock to slaughter is a proxy for livestock numbers, with slightly higher values indicating livestock emissions might move up next quarter
- Long term reductions in agricultural emissions intensities has slowed

- The Government's policy is to have an increasing emission unit price
- ETS prices have risen from a low of \$2 in March 2013, to a high of \$87 in November 2022.
- ETS units currently cost \$53 per tonne of CO<sub>2</sub>e, \$34 per tonne CO<sub>2</sub> down from the high
- Futures prices (not shown on the graph) increase as we approach 2030

- The economy is slowly decarbonising production, including agriculture, forestry and fishing as well as electricity, gas, water and waste services.
- Economic growth and decarbonisation can be achieved through rapid growth of low emissions industries and further decarbonisation of high emission intensity industries