


Target Quarterly Report

Target 9 – Reduced net greenhouse gas emissions

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 and 305 megatonnes from 2026 to 2030.

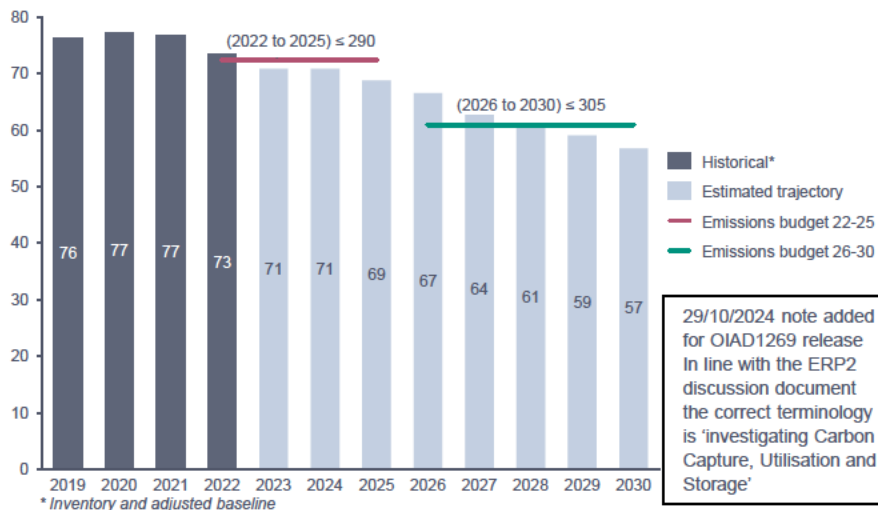
Quarter ending
30 June 2024

Current Target Performance

Status EB1 & EB2	Target EB1	Target EB2	Current Performance
	Net emissions ≤ 290 Mt CO ₂ -e	Net emissions ≤ 305 Mt CO ₂ -e	Will be included in next target quarterly report

Trajectory towards target

New Zealand Net Emissions, megatonnes (with existing measures but without proposed ERP2 policies)



What are the key issues and risks?

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.

The ETS is intended to play the key role in achieving Target 9, and future decisions will be made by the Government. The large existing stockpile (144m New Zealand Units (NZUs) as at June 2024, or 4 x annual ETS surrenders) of banked NZUs, which can be used at any time, creates uncertainty around achieving timebound emissions targets like Target 9.

Action and Insights

What is driving changes in performance vs. last period ?

Current interim projections give confidence that Target 9 can be achieved. We are on track to achieve EB1 with our existing measures. Our central projection shows that EB2 is achievable, assuming the strategies proposed in the ERP2 Discussion Document are implemented as planned. Delivery of the actions within ERP2 and the Government's Climate Change Strategy will be key to meeting EB2.

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

The Government has published its Climate Change Strategy. This sets out the Government's approach to achieving its mitigation and adaptation goals.

The **Strategy-Government's overall approach** is centered on taking a price-led, net-based, and least cost approach that involves restoring confidence in the NZ Emissions Trading Scheme (ETS)

The Government will finalise the second emissions reduction plan (ERP2) by the end of the year. This is the Government's plan for meeting Emissions Budget 2 (EB2) and hence the second half of the Target 9 period (2026-30).

Government will consult on the ERP2 from July, before taking final decisions on ERP2 by December 2024. ERP2 policies and/or proposals include:

- **The overall strategy of taking a price-led, net based, and least cost market approach to ERP2.**
- **Energy policies** - Electrify NZ and incentivising Carbon Capture, Utilisation and Storage.
- **Transport policies** - 10,000 public EV charge points by 2030, Clean Car Standards, and supporting public transport in our main cities.
- **Agriculture and forestry policies** - agricultural emissions pricing and mitigation technologies, limits to land use change to forestry on high value land uses; and Crown Land afforestation.
- **Waste policies** - the Waste Minimisation Fund, organic waste and landfill gas capture

The modelling of new ERP2 policies is preliminary, and estimates are expected to change as the modelling is improved and policies are further specified, with additional modelling occurring before ERP2 is finalised.

Annual NZ ETS unit supply/price control settings is a key vehicle for the Government to set direction for the NZ ETS.

What decisions and actions are required from Ministers?

Cabinet must determine ETS unit supply/price control settings for 2025-2029, with decisions required in time to publish amended regulations before 30 September 2024. Cabinet must determine NZ ETS unit supply/price control settings for 2025-2029, with decisions required in early August 2024

The Minister of Climate Change must respond to the Climate Change Commission's first emissions monitoring report by 17 October 2024.

Final decisions on direction and content for ERP2 by December 2024, including complementary or enabling policies that may arise following ERP2 consultation.

Setting of New Zealand's second Nationally Determined Contribution (NDC) – February 2025

Target 9 - Supporting Indicators

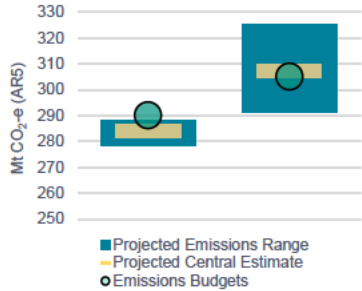
Based on current interim projections, we are on track to achieve EB1 with our existing measures. Our central projections shows that EB2 is probable, assuming the strategies proposed in the ERP2 Discussion Document are implemented as planned. Sectoral emissions numbers can fluctuate but are projected to drop over time. System indicators show that the economy is decarbonising. Looking ahead to the next quarter, leading indicators suggest there may be more coal consumption emissions in the short term, but lower emissions from decreasing livestock numbers. Slower than usual economic growth could limit short term emissions (as has been experienced historically).

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Emissions margins and sectoral breakdown

Emissions are 6Mt under EB1

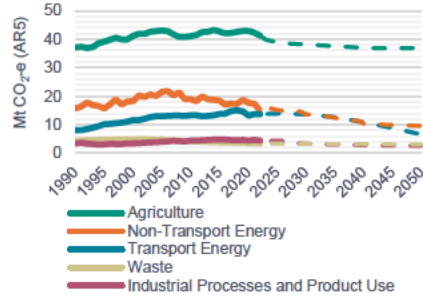
Interim projections for EB1 & EB2 with existing measures but without proposed ERP2 policies



- Projected emissions are below budget for EB1, even at the high end; and
- Projected 2Mt CO₂-e under EB2 if proposed ERP2 policies are included, with wide uncertainty.

Gross emissions have peaked

Historical and Projected Gross Emissions by Sector Source: ENZ Interim projections, ERP2 baseline

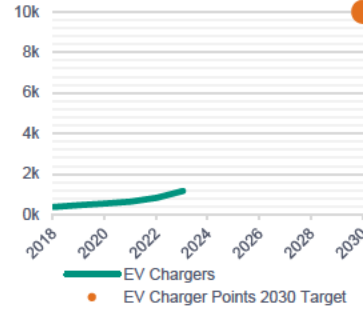


- Since total emissions peaked in 2006, emissions have fallen for non-transport energy, agriculture, and waste.
- Emissions from transport and IPPU are trending downwards

Leading indicators (long term)

More EV charger points

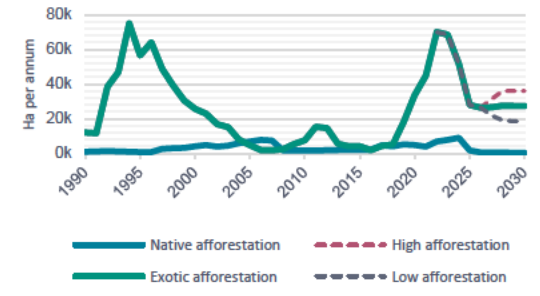
EV Chargers and EV Charge Points 2030 Target Source: MoT & EECA



- Growth in EV chargers is up 40% from 2022.
- There are 1,314 EV charge points as of April '24.

Forests will sequester more carbon

Historical and Projected Afforestation Rates for Exotic and Native Forests. Source: ENZ Interim projections, ERP2 baseline

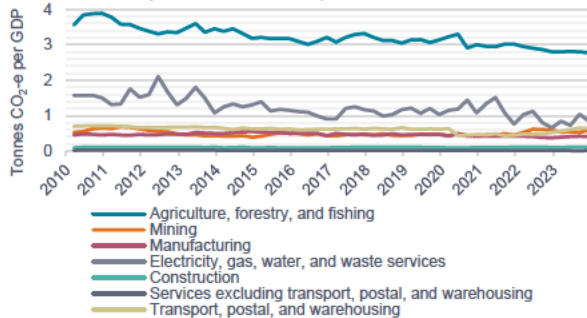


- Actual levels of afforestation will likely range between the low and high scenarios.
- Older forests contribute significantly to EB1 and EB2, while projected afforestation will contribute more to subsequent EBs.

System Indicators (long term)

Emissions intensity decreasing across key sectors

Greenhouse Gas Emissions Intensity by Industry (tonnes CO₂-e per dollar value addition) Source: Stats NZ

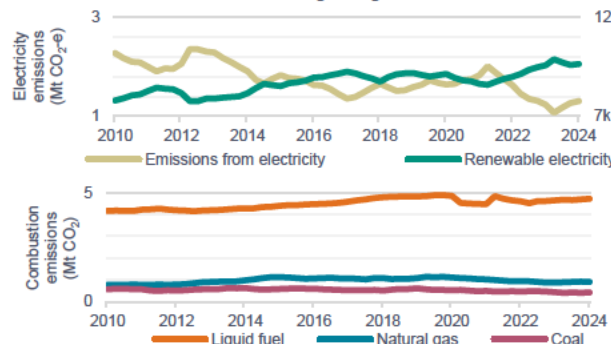


- The economy is slowly decarbonising, including in key sectors
- With declining emissions intensity, there is greater economic efficiency, and GDP relative to emissions.

Leading Indicators (next quarter)

Electricity emissions declined overall but rose last quarter

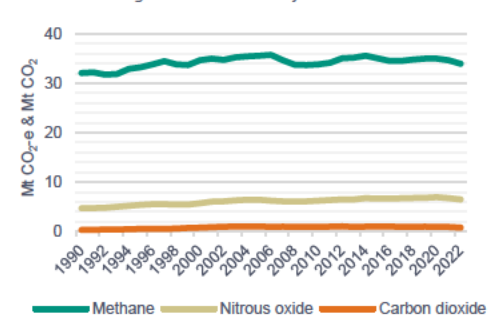
Four Quarter Moving Average Source: MBIE



- Electricity generation emissions declined since 2020 but recently increased due to coal combustion.
- Long term renewable generation has risen.
- Natural gas emissions declined since 2019 and liquid fuels increased post COVID.

Agricultural emissions declined slightly

Agriculture Emissions by Gas Source: MPI



- From 2014 - 2022, agricultural emissions decreased 4%, mainly due to reductions in cattle and sheep populations.
- SOPI 2024 projects a decline in all livestock.