Date of document 11/7/2024

FINAL TARGET 9 REPORT JULY 2024

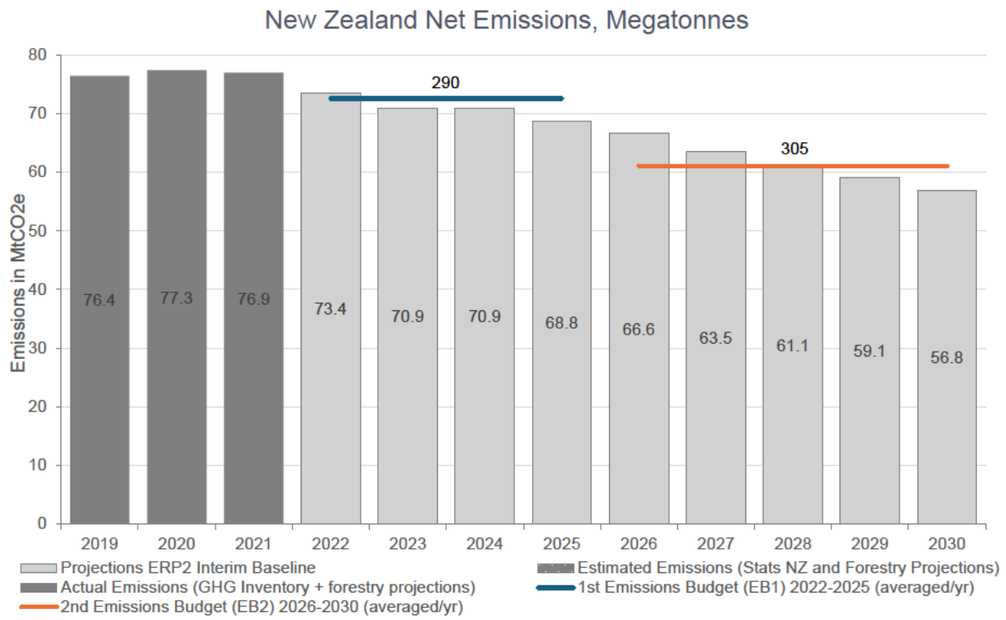
Target 9 Quarterly Report

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 of carbon dioxide equivalents from 2022 to 2025 and 305 megatonnes of carbon dioxide equivalents from 2026 to 2030

Current Target Performance

Status EB1 & EB2	Target	Performance at	Change in emissions (year to date) vs last quarter's emissions (year to date)
	EB1 (2022 to 2025) net emissions ≤ 290 Mt CO_2-e EB2 (2026 to 2030) net emissions ≤ 305 Mt CO_2-e	JULY 2024	First Report (change will be calculated in next report)

Trajectory towards target



What are the key issues and risks?

- 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.
- 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, though the ETS is experiencing considerable market instability. The large existing stockpile (144m New Zealand Units (NZUs) as at June 2024, or 4 x annual ETS

Actions and insights

What is driving changes in performance vs last quarter?

First Report (will be included in the next target quarterly report)

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 is centred 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 deliver 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.

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 charge points by 2030, Clean Car Standards, and supporting public transport in our main cities.
  - **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).
- 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 out concrete 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.
- 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.

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surrenders) of banked NZUs, which can be used at any time, creates uncertainty around achieving timebound emissions targets like Target 9.

Commented [MR1]: @David Mead Hi David, are you able to please review this ETS text today for release under the OIA. The draft versions of the first T9 report are in scope so will apply your recommended approach across the drafts.

Commented [DM2R1]: I don't see any grounds to withhold this, so suggest releasing.

Commented [MR3R1]: Thanks David - appreciate it!

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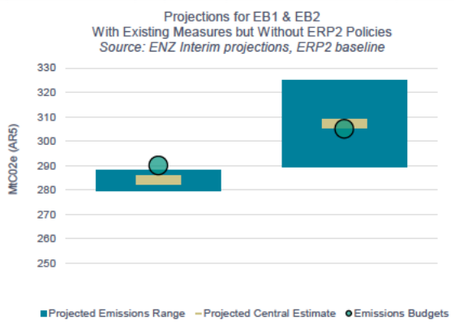
FINAL TARGET 9 REPORT JULY 2024

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 achievable, 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. Slow economic growth could limit short term emissions (as has been experienced historically).

Emissions margins and sectoral breakdown

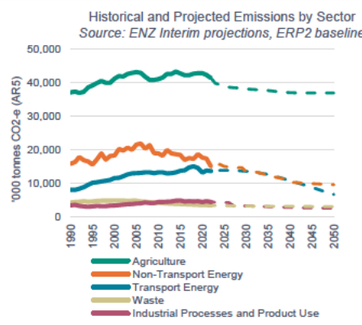
Emissions are 6Mt under EB1 & 2Mt over EB2 (before ERP2 proposed policies factored in)



Interim projections based on existing settings show emissions (central scenarios) to be:

- Below budget for EB1 (even at the high end of the uncertainty range); and
- In the central scenario, we are under budget by 2Mt CO_2-e for EB2 *if proposed ERP2 policies are included*, with wide uncertainty.

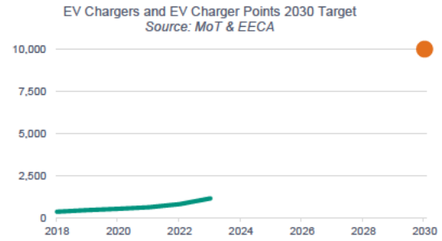
Emissions appear to have peaked



- Since total emissions peaked in 2006, 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.

Leading indicators (long term)

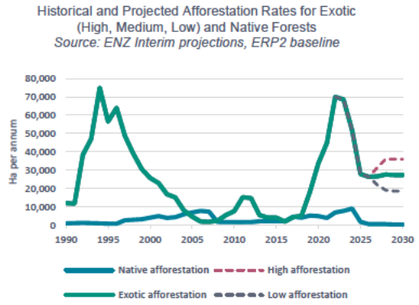
More EV charger points



Further data and indicators from Transport may be included in the future: e.g., against Clean Car Standard Targets

- Growth in EV chargers continued, increasing by 40% in 2023 compared to the previous year.
- As of 19 April 2024, there are approximately 1,314 EV charge points (defined as individual charging sockets where EVs can be plugged in and charged simultaneously).

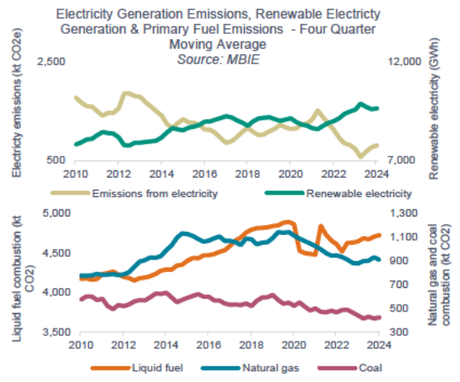
Older forests contribute significantly to EB1 and 2



- Depending on a range of factors, actual levels of afforestation will likely range between the low and high scenarios (rates will unlikely be a 'flat' line).
- Older forests contribute significantly to EB1 and EB2, while projected afforestation will contribute more to subsequent EBs as the forests grow.

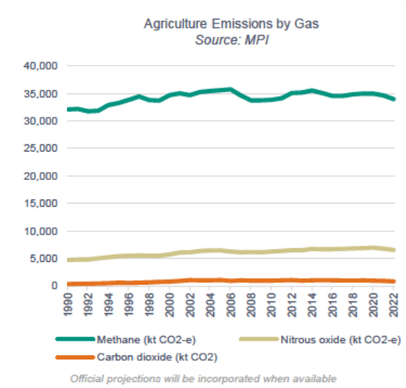
Leading Indicators (next quarter)

Electricity generation emissions rose last quarter



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

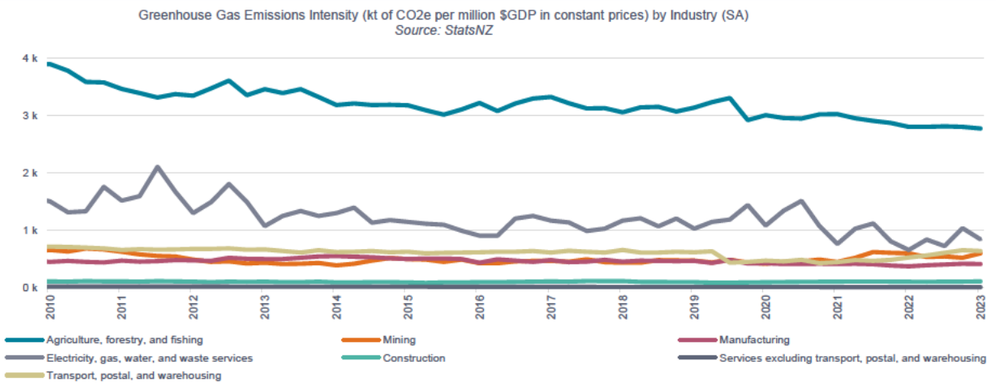
Agricultural emissions are declining overall



- Agricultural emissions have decreased since 2014. Decreases across the sector are mainly due to long-term decreases in beef cattle and sheep populations.
- The Situation and Outlook for Primary Industries June 2024 projects a gradual decline in all livestock numbers over the outlook period.

System Indicators (long term)

The economy is decarbonising (with emissions intensities decreasing across key sectors)



- The economy is slowly decarbonising production, including in the key sectors of agriculture, forestry and fishing; as well as "electricity, gas, water and waste services".
- With declining emissions intensity, there is greater economic efficiency, and GDP relative to emissions.

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