

Key takeaways from New Zealand's second Emissions Reduction Plan

New Zealand's recently released second "Emissions Reduction Plan" outlines how the Government intends to achieve New Zealand's emissions reduction targets for the 2026 – 2030 period.

Following a period of consultation in mid-2024, the Government has released its final plan for the second emissions budget period of 2026 – 2030.

While the second Emissions Reduction Plan (**ERP2**) ultimately seeks to progress New Zealand towards achieving the same domestic emissions reduction targets as the first Emissions Reduction Plan (**ERP1**), ERP2 represents a significant change in approach in how the Government intends to do so. In this article, we summarise the proposals raised by ERP2 and the implications of these proposals on New Zealand's key sectors.

Background

Emissions reduction targets and emissions budgets

The Climate Change Response Act 2002 (**CCRA**) enshrines the following domestic emissions reduction target in legislation:

- Net zero greenhouse gas emissions (other than biogenic methane) annually by 2050;
- 10% less biogenic methane emissions than 2017 emissions levels by 1 January 2030; and
- 24% to 47% less biogenic methane emissions than 2017 levels by 1 January 2050.

As stepping stones towards achieving the net zero 2050 target, the CCRA establishes an "emissions budget" system. Each budget represents the net emissions that New Zealand may emit during the period covered by that budget. With the exception of the first budget for 2022 – 2025, each budget covers a five-year period.

The first three emissions budgets are as set out below:

	First emissions budget (2022 – 2025)	Second emissions budget (2026 – 2030)	Third emissions budget (2031 – 2035)
All gases, net	290	305	240
Annual average	72.5	61	48

All figures represent metric tonnes of carbon dioxide equivalent (MtCO₂e).

ERP1 and the first emissions budget

ERP1 was released by the former Government in May 2022. It related to the first emission budget period of 2022 – 2025. It detailed its intended policies and proposals for reducing the emissions of several key sectors, including transport, energy, forestry, waste, construction and agriculture.

ERP1 placed an emphasis on emissions reductions in the transport and energy sectors, with the Government at the time seeing these as sectors in which quick but meaningful reductions could be achieved with already-available technologies and processes. It sought to realise these quick gains via the adjustment of regulatory settings and by incentivising low-emissions behaviour by making available targeted Government funding (such as via the Clean Car Discount and the Government Investment in Decarbonising Industry Fund) alongside disincentives for high emissions activities, such as

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the "Ute Tax". Alongside this, the Government continued to recognise and encourage the sequestration of carbon via forestry and the emissions trading scheme (ETS).

Agriculture took somewhat of a back in ERP1 in regard to gross emissions reductions, with the Government instead seeking to establish a separate emissions pricing scheme for that sector in consultation with various industry groups under the *He Waka Eke Noa*.

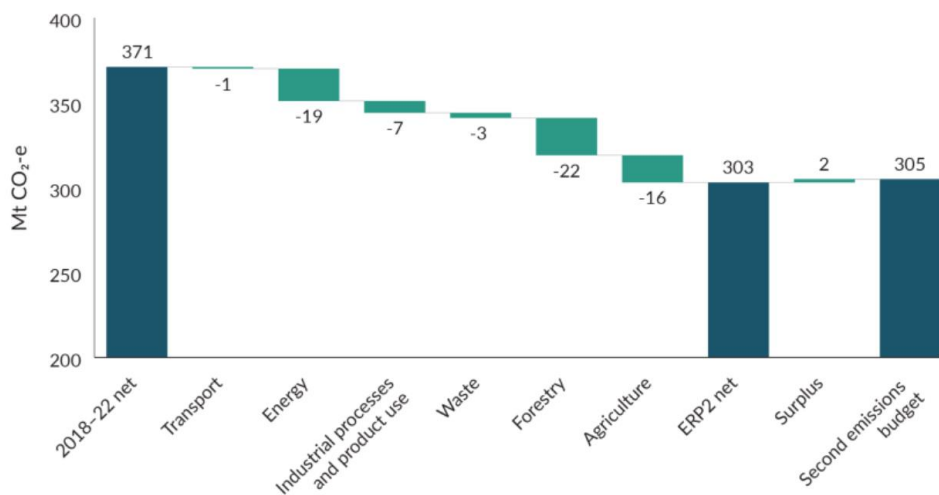
ERP1 and the first emissions budget period have proved a success, with New Zealand on track to emit 284.1MtCO₂e for the years of 2022 – 2025, coming in 5.9MtCO₂e beyond the target. He Waka Eke Noa however did not result in an agricultural emissions pricing scheme being put in place, and the current Government has now delayed the pricing of agricultural emissions until "no later than 2030".

Emissions reductions by sector

A snapshot of the proposed emissions reductions by sector

While ERP1 heavily emphasised emissions reductions in the transport sector, ERP2 is relying on anticipated emissions reductions in the agriculture sector. Both ERP1 and ERP2 also rely on emissions reductions in the energy sector, as well as on the continued sequestering of carbon by the forestry sector, as key to meeting their respective emissions budgets.

The Government has stated that the policies and targets in ERP2 have been set based on the guiding principles of achieving a "least cost" transition to net zero, with a focus on policies which the Government hopes will maximise the emissions reduction achieved for each dollar spent. The below diagram sets out the proposed reductions on a sector by sector basis for the second emissions budget period based on the proposed policies for ERP2.



Source: ERP2 page 16. Projections have been rounded to the nearest whole number.

While the reductions as projected are sufficient to allow New Zealand to achieve the second emissions budget, projections based on ERP2's policies suggest that New Zealand will fail to meet the 2031 – 2035 emissions budget under the proposals by an estimated 9.2MtCO₂e.

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Agriculture's role in ERP2

Agriculture accounts for over 50% of New Zealand's gross emissions. Despite this fact, New Zealand's agriculture sector is among the most climate-efficient in the world, and the Government aims to reduce emissions in a manner that does not lead to "emissions leakage" - where efforts to reduce emissions domestically lead to production simply shifting overseas to countries that do not have comparable regulations and therefore face less production costs.

The Government therefore seeks to take a "technology-led" approach to managing agricultural emissions, and intends to rely on technological breakthroughs and innovation to decrease emissions in the sector.

The proposed policies for this sector in ERP2 include:

Objectives	Proposed actions
<p>Accelerate the development and commercialisation of emissions reduction technologies and solutions</p>	<p>Investing over \$400m to accelerate the development and commercialisation of tools and technologies to reduce emissions, including via investment into the Global Research Alliance on Agricultural Greenhouse Gases, New Zealand Agricultural Greenhouse Gas Research Centre and AgriZero^{NZ} public-private joint venture.</p> <p>This research is intended to provide insights into areas such as ruminant methane inhibitors (including methane inhibiting vaccines) and farm systems which may reduce on-farm emissions.</p> <p>Continuing to explore options for targeted investment in the industry, reducing cost barriers to getting emissions reduction tools into the hands of farmers, and assisting in the scale-up of new technologies that come to market.</p> <p>Streamlining the regulatory pathways for new agricultural and horticultural products to come to market, including by undertaking reviews of the Agricultural Compounds and Veterinary Medicines Act 1997 and Hazardous Substances and New Organisms Act 1996.</p>
<p>Standardising the estimation of on-farm emissions</p>	<p>Putting in place a standardised calculation method for farmers to calculate on-farm emissions, with such method being up to date, scientifically robust, and providing recognition for on-farm mitigation.</p>
<p>Pricing of agricultural emissions by 2030</p>	<p>As with the last Government, the current Government is committed to keeping agriculture outside of the existing ETS in favour of instead developing an emissions pricing system specifically for the sector. The Government says it will introduce a "fair and sustainable pricing system for on-farm emissions" no later than 2030.</p>

Given that agriculture is one of the main sectors that ERP2 relies upon in order to achieve the second emissions budget, it is crucial that the Government's investment in research and development produces effective results which are capable of being implemented on-farm at a rapid pace.

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Energy's role in ERP2

Emissions from energy usage (including from transport) make up approximately 37% of New Zealand's gross emissions. Due to our high level of renewable generation already in New Zealand, the country is well placed to further decrease emissions in the sector.

The proposed policies for this sector in ERP2 include the following:

Objectives	Proposed actions
Improvements to renewable energy capacity	Progressing various renewable energy projects under the "Fast-track Approvals" process, which contains 22 renewable energy projects.
	Amending the Resource Management Act 1991 to reduce the consenting and re-consenting time for most renewable energy projects to within 1 year.
	Advance amendments to the National Policy Statements for Renewable Electricity Generation and Electricity Transmission, to further enable private investment in renewable energy projects.
Promoting affordable electricity supply	Bringing together regulatory experts from the Commerce Commission, Electricity Authority and Ministry of Business, Innovation and Employment to assess means of enabling new generators and independent retailers to enter and increase competition in the electricity market.
Enabling new options for supplying energy	Taking steps to create an enabling environment for the uptake of renewable gases.
	Facilitating the uptake of bioenergy (including through increased utilisation of woody biomass).
	Exploring deeper geothermal energy by drilling beyond the current standard maximum depth of approximately 3.5km.
	Support investment in hydrogen as a low-emissions alternative energy source, including by acting upon the Government's Hydrogen Action Plan and streamlining the regulatory environment of the hydrogen energy industry.
Implementation of carbon capture, utilisation and storage framework	Introduce legislation to create a carbon capture, utilisation, and storage framework, which is intended to enable businesses to capture their CO ₂ emissions, and then either utilise them in domestic production processes or store them permanently. This framework also intends to incentivise and reward businesses that capture and store or use their CO ₂ emissions via the ETS.
Research into sustainable aviation fuels	Funding of feasibility studies with Air New Zealand to explore domestic supply chains of alternative jet fuel (including through the use of woody biomass and municipal waste).

Alongside agriculture, energy is a sector in which the Government expects to make a large amount of its emissions reductions through the second emissions budget. ERP2 recognises that the shift towards an electrified economy will come with substantial work in order to maintain the reliability of the grid, with an estimated \$100 billion of investment needed by 2050 to build and maintain this infrastructure.

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Forestry's role in ERP2

As with ERP1, ERP2 recognises that the forestry sector has a key role to play in our climate response. This is in part due to the fact that forests act as "carbon sinks", sequestering carbon from the atmosphere. These removals can be incentivised and rewarded within the ETS, in order to drive further afforestation, and therefore further sequestration, helping to reduce net emissions in the short term.

The proposed policies for this sector in ERP2 include the following:

Objectives	Proposed actions
Supporting further afforestation in appropriate places	Incentivise increased forestry planting in order to both sequester carbon dioxide from the atmosphere and increase other forestry objectives (such as through increased fibre supply).
	Ensure that an appropriate balance is struck between forest land and productive farmland by limiting whole-farm conversions of productive farmland.
	Partnering with the private sector to plant trees on crown-owned land.
Increasing the supply of long-lived wood products	Increasing the supply of long-lived wood products in New Zealand by boosting wood processing.
	Encourage the use of wood as a construction material, as compared with more emissions intensive materials such as steel and concrete.
	Streamlining the consenting framework to reduce barriers to entry for new wood processing facilities.
Increasing the supply of woody biomass	Increasing the supply of woody biomass while simultaneously researching how it can play an increased role in generating more sustainable industrial process heat.
Strengthening market confidence in the ETS	Restore price stability and confidence in the ETS following the price crash and subsequent decrease in confidence in the system that occurred in 2023.
	Implement price and control settings which seek to reduce the number of surplus units held by NZU account holders, so as to not jeopardise New Zealand's ability to meet its emissions targets in the medium to long term, and to improve the credibility of the ETS.

As with ERP1, ERP2 relies heavily on the forestry sector to bring the largest emissions reductions throughout the second emissions budget period via sequestration. While this brings clear benefits in the short term, these benefits will eventually plateau as the gains will start to be offset by the carbon losses caused by the eventual harvesting and natural decay of the forests. ERP2 looks to address this by leveraging fully grown forests for the supply of long-lived wood products, which can then act as long term carbon storage.

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Waste's role in ERP2

The waste sector is responsible for approximately 4.5% of New Zealand's gross greenhouse gas emissions. This is largely comprised of methane, which accounts for 93.3% of the sector's emissions. Accordingly, ERP2's proposed policies in this sector largely target methane emissions.

The proposed policies for this sector in ERP2 include the following:

Objectives	Proposed actions
Investment into waste management infrastructure	Providing continued investment into the Waste Minimisation Fund, which supports infrastructure projects that divert organic materials from landfill, process organic waste or otherwise make waste disposal and resource recovery produce less emissions.
	Targeted investment into diverting and process organic waste, including from construction and demolition.
	Targeted investment into schemes for business, manufactures and consumers to take greater responsibility for the products they produce and buy.
	Targeted investment into development of infrastructure and regulations that facilitate renewable energy recovery from hard-to-recycle materials, such as treated wood waste.
Improvements to landfill gas capture systems	Investigating further opportunities to reduce emissions at landfills, including via improved gas capture systems, widening the scope of landfill that require gas capture systems, and extending the ETS to a wider range of landfills.
Implement a product stewardship scheme for refrigerants	<p>While fluorinated gases only account for 2% of New Zealand's greenhouse gas emissions, these gases have a significantly higher warming potential than carbon dioxide. For this reason, the Government aims to tighten accountability of users of fluorinated gases by introducing a product stewardship regime in 2025.</p> <p>This scheme aims to reduce emissions through improved industry training standards, and ensuring that refrigerants are disposed of in accordance with the requirements of the scheme.</p>

As with the previous Government's proposals under ERP1, the current Government is again taking a multi-pronged approach to its waste strategy by seeking to:

- reduce the amount of waste generated overall;
- reduce the amount of waste that is generated going to landfill, by diverting it to other uses; and
- capture the gas emitted by waste at landfills, minimising the emissions that enter the atmosphere.

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Transport's role in ERP2

Transport is responsible for approximately 17.5% of New Zealand's greenhouse gas emissions, with the vast majority (approximately 90%) being from road transport.

The proposed policies for this sector in ERP2 include the following:

Objectives	Proposed actions
Establish a network of 10,000 EV chargers around New Zealand by 2030.	As at the end of 2024, New Zealand had approximately 1,250 public EV charging points. The Government has set a target of increasing this to 10,000 chargers by 2030. In doing so, it aims to increase the uptake of electric vehicles by eliminating "range anxiety", is an often cited concern for potential EV buyers.
	Amending the Resource Management Act 1991 to make the installation of public EV chargers a permitted activity in order to facilitate further private investment in the EV charger rollout.
	Investing public-private co-investment opportunities to assist in meeting the target.
Pricing for more efficient use of transport infrastructure	Restoring regular fuel excise duty and road user charges increases in order to support further investment in transport infrastructure.
	Introducing congestion pricing in major cities in order to encourage users to change their travel habits (and therefore reduce emissions).
Decarbonisation of heavy vehicles	The Government views the heavy vehicle sector as highly competitive and therefore states that the private sector itself is best placed to lead decarbonisation. However, the Government aims to support this by removing regulatory barriers to decarbonisation.
Decarbonisation of busses	Investing \$44.721m speeding up the deployment of zero-emission busses in the period of 2024 – 2028.
Improved public transport in Auckland, Wellington and the lower North Island	Investing in various public transport initiatives across the North Island, including investment in Auckland City Rail Link and various rail lines in Wellington and the lower North Island.

While ERP1 sought to rapidly decrease transport emissions via direct financial incentives and disincentives (such as the Clean Car Discount and the "Ute Tax"), ERP2 has opted to take a more passive approach in the short term. The Government is only expecting a minor decrease in net emissions this sector over the second emissions budget period.

Conclusion

As has been the plan since the release of the emissions budgets in 2022, the second emissions budget period is when New Zealand's emissions are expected to peak, followed by substantial decreases in emissions beginning in the third emissions budget period of 2031 – 2035. The Government has a significant task ahead of it in maintaining the momentum gained in the first emissions budget period, with that budget expected to be met at the end of this year. With many of the emissions reduction methods proposed in ERP2 relying on research, development and commercialisation that is yet to occur, it is essential that the Government commits to supporting this research and development to sufficient levels so as to achieve the second emissions budget, continuing New Zealand's journey to net zero 2050.

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Want to know more?

If you have any questions about ERP2, please contact our specialist [ESG Team](#). Credit to Tom Mohammed for this article.