



Climate Change Chief Executives Board meeting

Wednesday 18 September 2024 1:45-2:45pm

Noting papers

[IN CONFIDENCE]



COVERSHEET: Noting item (i)					
То	Climate Ch	Climate Change Chief Executives Board			
Meeting date	18 September 2024				
Agenda item name	Noting pap Report	Noting paper: Response to Climate Change Commission's Emissions Monitoring Report			
Lead agency	CCIEB Unit				
Reason for Board's consideration	The papers are provided to the Board for visibility and comment. The Climate Change Commission's (The Commission) monitoring report assesses progress towards emissions budgets and implementation of ERP1, so relevant to multiple portfolios and to the Boards collective role in monitoring and reporting progress on ERP1. This is the inaugural annual emissions reduction monitoring report, and corresponding government response.				
		duty to respond to the Com ange, the response is neces			
Recommendations	emissi	he attached draft Cabinet p ons reduction monitoring re e any feedback or comment	port, currently o	out for Ministerial consultation	
Has the Board	Yes	No 🛛	Date		
previously considered this item, if so, when?	The Board will be aware the Commission provided its emissions reduction monitoring report to the Minister in July, and that the Minister is required to provide a response to that report within three months.				
Has this item been	Yes⊠	No 🗆	Date	22 August 2024	
considered/endorsed by Climate DCEs?	Climate DCE's were provided the draft Government response for comment in August.				
Will this item be going	Yes⊠	No□	Date		
to CPMG or Cabinet? The Minister of Climate Change will seek Cabinet approval or response and to table this in the House of Representatives Ministerial consultation is currently underway on the Cabinet			tives by 16 October.		
Relevant Cabinet decisions and dates	CBC – 30 September Cabinet – 14 October (delay due to recess period) Tabled in HoR – by 16 October				

Policy and Privacy

In-Confidence

Office of the Minister of Climate Change

CBC - Cabinet Business Committee

Response to the Climate Change Commission's Emissions Reduction Monitoring Report

Proposal

1 I seek approval to present to the House of Representatives and make public, the response to the Climate Change Commission's (the Commission) inaugural emissions reduction monitoring report (ERM Report), as required under the Climate Change Response Act 2002 (the Act).

Relation to government priorities

2 The response to the Commission's ERM Report is required to meet statutory obligations under the Act. The response is consistent with the Government's new Climate Strategy and climate commitments. This includes the Prime Minister's ninth public service target 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.

Executive Summary

- 3 The Act requires the Commission to independently monitor and report annually on the Government's progress towards meeting the 2050 target and emissions budgets, along with progress towards implementing emissions reduction plans (sections 5ZJ and 5ZK(1) and (2) of the Act).
- 4 On 16 July 2024, I received the inaugural ERM Report from the Commission. I must present to the House of Representatives a response to this report that also describes the progress made in implementing the first emissions reduction plan (ERP1) and notes any amendments to ERP1. This must be done by 16 October no later than three months after I received the ERM Report (s5ZK(4)). The Commission's findings are also being considered as part of developing policies for the second emissions reduction plan (ERP2), where relevant.
- 5 The Commission has based its assessment on publicly available emissions data and information on Government policies up to April 2024. The assessment, therefore, does not include consideration of the Government's Climate Strategy and revised approach to meeting climate targets, nor the proposed policies or latest Government interim emissions projections provided in the discussion document for ERP2, both released in July this year.
- 6 While the Commission's exact numbers for emissions projections differ from Government figures, many of the findings are broadly aligned with Government findings. This includes that gross emissions have declined each year since 2019 as a

IN CONFIDENCE

result of policy efforts and factors external to Government,¹ and that available emissions data and projections are consistent with the first emissions budget (EB1) being met (for the period 2022-2025). As with any use of projections, both the Commission and the Government findings note that there are inherent levels of uncertainty and that current projections can be highly influenced by factors external to Government policy and action.

- 7 Some findings in the ERM Report, however, do differ from Government reporting. Key points of deviation mainly relate to the certainty and risks of meeting the second and third emissions budgets (2026-2030 and 2031-2035 respectively), and include:
 - 7.1The Commission states there are significant risks to meeting EB2 and EB3 and indicate a need to strengthen policies in response. The central estimate of the Government's July 2024 interim projections shows that EB2 is achievable with proposed ERP2 policies, and that achieving EB3 is within the range of uncertainty.
 - 7.2The Commission states there are significant risks to meeting the 2030 biogenic methane target. The central estimate of the Government's July 2024 interim projections suggest that we may meet the 2030 target, but exceeding the target is within the range of uncertainty.
- 8 I am now seeking approval of my response to the Commission's ERM Report (see Appendix 1), and agreement to present it to the House of Representatives by 16 October 2024 as required by the Act.

Background

- 9 The Act legislates New Zealand's domestic emissions reduction targets. These are:
 - 9.1 Net zero emissions of all greenhouse gas (GHG) emissions other than biogenic methane by 2050; and
 - 9.2 24 to 47 per cent reduction below 2017 biogenic methane emissions by 2050, including 10 per cent reduction below 2017 biogenic methane emissions by 2030.
- 10 Domestic emissions budgets act as stepping-stones, or interim targets, to reaching our 2050 emissions reduction targets. An emissions budget is a total quantity of net emissions that is allowed to be released during an emissions budget period. For each emissions budget period, there must be an emissions reduction plan in place that sets out the policies and strategies for meeting the emissions budget.
- 11 The Commission is required to independently monitor and report on the Government's progress towards reducing emissions. The Commission's annual report must include:
 - 11.1 measured emissions and measured removals for the most recent year of the emissions budget period for which data is available from the New Zealand GHG Inventory; and
 - 11.2 the latest projections for current and future emissions and removals; and

¹ External factors include, but are not limited to, macro-economic and demographic conditions, consumer behaviour, dry/wet years; and also methodological improvements to how emissions in different sectors are measured. These factors can be variable year-on-year.

- 11.3 an assessment of the adequacy of the emissions reduction plan and progress in its implementation, including any new opportunities to reduce emissions (s5ZK(1) and (2)).
- 12 On 16 July 2024, I received the inaugural ERM Report from the Commission. Under the Act I am required to provide a report in response within three months of receiving the report (by 16 October 2024), that:
 - 12.1 sets out my response to the report and recommendations;
 - 12.2 describes the progress made in implementing the current emissions reduction plan (ERP1); and
 - 12.3 notes any amendments to that plan (s5ZK(4)).
- 13 The Climate Change Chief Executives Board (the Board)² also provides regular reporting to Ministers on progress towards emissions budgets and Government's Target 9, and six-monthly reports on progress made across agencies implementing ERP1. These reports, and the Government's strategy and proposals for ERP2, have been used to inform my response to the ERM Report. The Commission's findings are also being considered as part of developing policies for ERP2, which will be published later this year.

Responding to the Climate Change Commission report and recommendations

The key findings of the ERM Report

- As required under the Act, the Commission's ERM Report presents its assessment of the progress being made towards achievement of EB1 (2022–2025), EB2 (2026– 2030) and EB3 (2031–2035), and progress towards the 2050 target, and to assess the adequacy of ERP1 and progress in its implementation.
- 15 The Commission published the ERM Report using publicly available data and information on Government policies until the end of April 2024, including available monitoring reports from the Board. The ERM Report contains four key findings:
 - 15.1 <u>Key finding 1:</u> Gross emissions have declined each year since 2019, in response to policy efforts combined with external factors.
 - 15.2 <u>Key finding 2:</u> Available emissions data and projections are consistent with the first emissions budget being met. This is, however, highly uncertain. Risk factors such as deforestation, dry years, and rising transport emissions could result in net emissions exceeding the budget. Further action to reduce emissions would decrease the risk of missing the budget.
 - 15.3 <u>Key finding 3:</u> There are significant risks to meeting the second and third emissions budgets and the 2030 biogenic methane target under current policies.

² The Board was established in 2022, under the Public Service Act 2020, as an interdepartmental executive board. It provides oversight of the Government's response to climate change. The Board is chaired by the Secretary for the Environment, and comprises eight members, supported by the Deputy Solicitor-General. The Board advises the Minister of Climate Change and the cross-Ministerial governance group, the Climate Priorities Ministerial Group (CPMG).

- 15.4 <u>Key finding 4:</u> Our assessment shows an urgent need to strengthen policies and strategies to put Aotearoa New Zealand on track to meet future emissions budgets and the 2050 target, including the 2030 biogenic methane target. We identify a range of opportunities to work towards these climate goals.
- 16 The key findings are underpinned by a wider set of detailed findings, which identify the risks to Government at the sector level. Note that the biogenic methane target only applies to the agricultural and waste sectors. The proposed response to these findings and the requirements in the Act is provided in Appendix 1.

High-level assessment

- 17 Government's July 2024 interim emissions projections³ broadly align with the first two key findings of the Commission's ERM Report that:
 - 17.1 gross emissions overall have been declining since 2019 due to policy changes and external factors, and
 - 17.2 we are currently on track to meet EB1 albeit with some uncertainty, which is inherent in the use of projections and due to factors outside of Government control, such as dry year impacts on hydro flows or the rate of deforestation.
- 18 Key points of deviation mainly relate to the certainty and risks of meeting EB2 and EB3, and include:
 - 18.1 The Commission states there are significant risks to meeting EB2 and EB3 and indicate a need to strengthen policies in response. As Minister of Climate Change, I have a legal duty to ensure emissions budgets are met. The central estimate of the Government's July 2024 interim projections shows that EB2 is achievable with proposed ERP2 policies, and that achieving EB3 is within the range of uncertainty. ERP2 will be the vehicle to further ensure there is a plan to meet EB2.
 - 18.2 The Commission states there are significant risks to meeting the 2030 biogenic methane target. Again, ERP2 will be the vehicle to further ensure there is a plan to meet the 2030 methane target.
- 19 For its assessment, the Commission compared data against benchmarks from the Commission's 2022 demonstration path to gauge the pace of progress in different areas.⁴ This is sensible as the demonstration path was used to inform the previous Government's approach to ERP1. This Government's Climate Strategy with its revised approach to meeting emissions budgets and targets, and the Government's interim projections of July 2024 were not available to the Commission at the time of its report.
- 20 The Government response uses the July 2024 interim emissions projections to inform its assessment. Updated projections and modelling is being prepared to support the publication of ERP2 later this year, which will take into account the impact of the final ERP2 policy package. As much of the abatement that can be achieved in EB1 (to end

³ The July interim projections were published in the discussion document for ERP2: <u>New Zealand's second</u> <u>emissions reduction plan (2026–30)</u>: <u>Discussion document | Ministry for the Environment</u>

⁴ The demonstration path reflects judgements by the Commission about a durable path to the 2050 target consistent with the areas required to be considered under the Act.

of 2025) is largely 'locked in', draft updated data indicates we remain on track to meet EB1 and officials do not anticipate this is likely to change in the updated projections.

21 We are taking a net-based approach to meeting emissions budgets, with the New Zealand Emissions Trading Scheme (NZ ETS) as the main tool to reduce emissions and increase removals. Together with emissions pricing, there is a clear role for policies that allow the NZ ETS to work better and support the early adoption of emerging technologies. The NZ ETS is agnostic about where reductions and removals occur across the sectors the NZ ETS covers. Therefore, the response gauges progress made, and the future potential reductions, in a particular sector in the context of economy-wide emissions reductions, when assessing the sector findings made in the ERM Report. More details on the assessment of the Commission's findings are provided in Appendix 2.

Implementation progress and amendments proposed to the first emissions reduction plan

- 22 The Government's response is required to outline implementation progress of the current ERP, and note any amendments made to that plan. The ERP1 was published in 2022 and sets out climate change policies and strategies for meeting EB1. Many of the ERP1 actions are exploratory in nature or related to developing strategies and plans. Not all are expected to contribute directly to emissions abatement.
- 23 Overall, implementation progress for ERP1 is mixed. The Board's most recent implementation monitoring data for the period ending 30 June 2024, shows that of the 305 actions, more than half are either complete or actively being implemented, though a small number of actions (4 percent, or 11 actions) have not yet started to be implemented.
- 24 However, 13 percent of actions (41 actions) have been discontinued.⁵ Six actions were discontinued by the previous Government and 35 actions have been discontinued by the current Government as they do not align with the Government's approach to meeting emissions budgets or climate change priorities, or had no impact on emissions abatement.
- 25 The Government's July 2024 interim projections reflected the impact of ERP1 policy changes that can be modelled. They show that these changes to actions are not expected to materially impact our ability to meet EB1. Progress to date to reduce emissions and the remaining ERP1 actions are projected to be sufficient for New Zealand to stay on track for EB1, and officials do not anticipate this is likely to change in updated projections.
- With the change in approach to meeting emissions budgets, and the volume of actions that have been discontinued from ERP1, I undertook to consult with the public (in July 2024 through the discussion document on ERP2) on formally amending ERP1 as provided for in the Act (section 5ZI(3)). 9(2)(f)(iv)

Implementation

27 No direct implementation requirements associated with the publication of this report.

⁵ As have been made available in discussion document on ERP2.

Cost-of-living Implications

28 No direct cost of living implications are expected as a result of the publication of this report.

Financial Implications

29 No direct financial implications are expected as a result of the publication of this report.

Legislative Implications

30 No direct legislative implications are expected as a result of the publication of this report.

Impact Analysis

Regulatory Impact Statement

31 The report in response to the Commission's ERM Report does not require a RIS.

Climate Implications of Policy Assessment

32 There will be no direct emissions impacts from the publication of the report. Decisions on changes to individual climate change policies will include a CIPA where required.

Population Implications

33 There will be no direct population implications from the publication of this report.

Human Rights

34 There are no inconsistencies between this report and the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Consultation

- 35 The following agencies were consulted on this Cabinet paper and the Government response to the Commission's report: Ministry for the Environment, Ministry for Primary Industries, Ministry of Business Innovation and Employment, Ministry of Transport, the Treasury, Department of Conservation, Ministry of Culture and Heritage, Ministry of Housing and Urban Development, National Emergency Management Agency, Te Puni Kokiri, Department of Internal Affairs, Ministry of Foreign Affairs and Trade.
- 36 The Department of the Prime Minister and Cabinet has been informed.

Communications

37 The attached report will be presented to the House of Representatives by 16 October, at which point it will be made publicly available through the Ministry for the Environment's website. I do not intend to issue a press release.

Proactive Release

38 I intend to proactively release this paper and associated Cabinet committee papers and minutes within 30 business days of final decisions being confirmed by Cabinet, subject to redaction as appropriate under the Official Information Act 1982.

Recommendations

The Minister of Climate Change recommends that the Committee:

- 1 **Note** on 16 July 2024 I received the Climate Change Commission's inaugural Emissions Reduction Monitoring Report (ERM report) and must respond to this report within 3 months (by 16 October 2024) as required under the Climate Change Response Act (ss5ZJ, 5ZK).
- 2 **Note** the four key findings of the ERM Report outlined in this paper, and the assessment and response to the key findings outlined in Appendix 2.
- 3 **Approve** the report and response to the ERM Report, attached as Appendix 1.
- 4 **Agree** that I present the response to the ERM Report to the House of Representatives by 16 October, at which point it will be made publicly available on the Ministry for the Environment's website.

Authorised for lodgement

Hon Simon Watts

Minister of Climate Change

Appendix 1: Government response to the Climate Change Commission report: Monitoring Report: Emissions Reduction, 2024

(see attached report)

Please note, the final version is publicly available on the Ministry for the Environment's website at the following link:

https://environment.govt.nz/publications/government-response-to-the-climate-change-commission-monitoring-report-emissions-reduction-2024/

Appendix 2: Further detail on the assessment of the ERM Report findings

Assessment of the ERM Report key findings

- 1 Government projections to date broadly align with the first two key findings of the Commission's ERM Report that:
 - 1.1 gross emissions overall have been declining since 2019 as a response to policy changes and external factors, and
 - 1.2 we are currently on track to meet the first emissions budget (EB1) although with some uncertainty, which is inherent in the use of emissions projections and can in large part be influenced by factors outside of government control, such as dry years affecting hydro inflows or macro-economic and demographic conditions.
- 2 When assessing the ability to meet future emissions budgets and targets, the uncertainty in projections increases as is expected when modelling projections further into the future. However, based July 2024 interim emissions projections, the central estimate shows that EB2 is achievable, assuming polices in the ERP2 discussion document are implemented as proposed. The interim projections also show achieving EB3, with the proposed ERP2 policies, is within the range of uncertainty (while acknowledging this is highly uncertain).
- 3 The central estimates of the projections suggest that biogenic methane emissions will just meet the 2030 target, but exceeding the target is within its uncertainty range. The ERP2 discussion document proposes similar technology-based approaches to reducing biogenic methane emissions, which somewhat aligns with the Commission proposed additional policies to target these emissions.
- 4 The ERM Report identified five opportunities for further emissions reductions to meet emissions budgets and targets. For a number of these areas, the Government already has work underway, such as looking at options to bring online more renewable electricity generation, making better use of gas capture systems (in particular the Commission identify landfills and geothermal power stations), and improving the charging network to incentivise the uptake of low and zero emissions vehicles.

Assessment of the key sector and sub-sector findings

- 5 Officials from across the relevant agencies have reviewed the sector and sub-sector findings of the Commission's report and supporting analysis against government information and data.
- 6 The Commission has stated that the ETS is an essential part of an effective policy package for reducing emissions, but it cannot itself ensure the emissions budgets are met. The Government's climate strategy, released in July this year, relies on a credible ETS, complemented by policies that reduce barriers to investment in emissions reductions and removals. In line with this, Cabinet has recently taken decisions to reduce the number of units available in the ETS between 2025-2029 to ensure the ETS market operates as intended and that settings align with New Zealand's climate targets. This will give participants confidence that investments to reduce emissions will be rewarded.

- 7 The Commission's report reiterates advice from their earlier advice on ETS settings, particularly around the size of the surplus stockpile, uncertainty over post-1989 foresters' behaviour, and the inability of the ETS to guarantee an emissions outcome.
- Agencies agree that the NZ ETS cannot guarantee an emissions outcome during a given period such as an emissions budget, due to the Government's inability to control the timing of surrender of stockpiled NZUs. However, recent changes to ETS settings will ensure New Zealand has a more credible market. The Government has committed to aligning the ETS with New Zealand's climate targets and to giving participants confidence that their investments to reduce emissions will be rewarded. The Government agreed to reduce the number of units available between 2025 and 2029, from 45 million to 21 million. This will provide a very high probability that NZ ETS emissions will be within the estimated NZ ETS cap for both the second and third emissions budgets.
- 9 The NZ ETS is limited in its ability to drive achievement of the third emissions budget on its own. Other policies and measures expected through the finalisation of ERP2 and development of ERP3 will be required to ensure the achievement of the third emissions budget.
- 10 The Government is taking a net-based approach to meeting emissions budgets so progress in a particular sector should be read in the context of achieving emissions reductions across the economy at least cost.
- 11 The Commission assessment shows the agriculture and transport sectors having the largest risks for not delivering emissions reductions, and insufficient action to reduce emissions in these sectors will put the second and third emissions budgets at risk. Both sectors are central to the Government's climate strategy.
- 12 The Commission views agriculture as a high-risk sector for meeting EB2, EB3 and the 2030 methane target. Overall, the agriculture sector has been given a 'significant risks' rating in the Commission's scorecard system. The Government is taking a technology-based approach and has made a long term substantial financial commitment to accelerating the development of new agricultural greenhouse gas mitigation tools and technologies. Budget 2024 committed \$419m over the next four years, with \$105m per annum from 2028/2029. This includes building on and enhancing the core R&D through the long-term commitment to the New Zealand Agricultural Greenhouse Gas Research Centre research programme, and a minimum 10-year commitment to invest in AgriZero.
- 13 The Commission also views transport as a high-risk sector for EB2 and EB3. This is based on the assessment that current policy tools on their own are unlikely to drive a shift to lower-carbon modes of transport and to decarbonise freight and aviation. Alongside this is a risk that uptake of low and zero emissions light vehicles will fall behind benchmark levels due to reduced policy support. This is consistent with the ERP2 discussion document modelling, which projected less transport sector abatement than in the Commission's path. This follows from the Government's approach to climate change of using the ETS as the primary lever to reduce netemissions, including being agonistic about where abatement comes from.
- 14 The Commission saw value in sending a clear signal on applying road user charges (RUC) to petrol vehicles. This would reduce a risk that new RUC for EVs and plug-in hybrids would disincentivise uptake of these vehicles. As part of the Revenue Action Plan, the Minister of Transport has indicated the light vehicle fleet will transition to RUC, and away from fuel tax, by as early as 2027.

15 Regarding the Commission's findings on aviation, these are consistent with the ERP2 Discussion document, which noted that under an ETS-first approach to reduce emissions, it is assumed that hard-to-abate sectors like aviation and shipping will decarbonise later than other sectors where decarbonisation technologies are more mature.

Differences in Data and modelling approach

- 16 There are some differences in the data used by the Commission and their modelling approach to what has been used in government reporting. The Commission used publicly available emissions data and information on government policies up to April 2024, and based its assessment of progress on how projections stack up against its benchmark demonstration path (the Commission's own plausible pathway to meet the 2050 target, originally developed for ERP1).
- 17 Due to its timing, the Commission's report could not consider the government's revised approach to meeting emissions budgets and targets (the Climate Strategy), or the proposed policies and July 2024 government interim emissions projections provided in the discussion document on the second emissions reduction plan (ERP2). As such, using its demonstration path was a sensible approach to guide the Commission's assessment in the absence of this information.
- 18 Government data used in the ERP2 Discussion Document, the first report on Target 9 reporting and ERP1 progress is informed by more recent data and government policies up until July 2024. Government interim projections are presented in the Table below.

Emissions budget limits	Target 9 projections -with existing measures, without proposed ERP2 policies (central estimate*)	Interim projections - with proposed ERP2 policies (central estimate*)	Uncertainty for interim projections	
First emissions budget 290 Mt CO2-e	284.0 Mt CO2-e	284.0 Mt CO2-e	±4 Mt CO2-e	
Second emissions budget 305 Mt CO2-e	307.1 Mt CO2-e	303.3 Mt CO2-e	±18 Mt CO2-e	
Third emissions budget 240 Mt CO2-e	N/A	257.4 Mt CO2-e	±29 Mt CO2-e	

*'Central estimate' refers to the value believed to be most likely based on current understanding of relevant assumptions.



	COV	ERSHEET: Noting	item (ii)	
То	Climate Change Chief Executives Board				
Meeting date	18 Septem	18 September 2024			
Agenda item name		per: Improving cross-agency cli pl, and governance	mate emissio	ons data, quality assurance	
Lead agency	CCIEB Unit				
Reason for Board's consideration	emissions the three v governance 1. Ensurin 2. Better	 This noting paper provides a progress update on improving cross-agency climate emissions data, quality assurance and control, and governance. The paper highlights the three workstreams in track to improve emissions data, QA and QC, and governance: 1. Ensuring credibility and robustness of modelling for the final ERP2 2. Better understanding the factors that can impact emissions projections 3. Strengthening existing data and modelling work 			
Key focus areas	• The tw the EN	o-track process for assessing su Z model. or strengthening existing data a	Ifficiency of t		
a 1.4					
Recommendations	• Note t	he attached update			
Has the Board previously considered this item, if so, when?	Yes⊠ No Date May 2024; 14 June 2024; 24 July 2024 The Board: agreed that quality assurance of modelling 9(2)(f)(iv) should be undertaken to show credibility of the approach used • noted the new modelling conducted using ENZ and discussed its implications for the Government's mitigation response • agreed the Chief Executives Board's role in helping Ministers to make efficient decisions on ERP2 so as to achieve statutory deadlines in 2024 • agreed that Climate DCEs should prepare and consider a governance and assurance process for modelling, 9(2)(f)(iv) , to ensure modelling is as robust as possible • noted that the Climate IEB Unit is working with MfE and other agencies to ensure robust quality assurance processes are in place to support the ongoing data and modelling work required for the Target 9 reports and will report back to the Board on this in August.				
Has this item been considered by Climate DCEs?	Yes⊠		Date	24 April 2024; 3 July 2024; 18 August 2024	
		s being led by Climate DCEs.			
Will this item be going to CPMG or Cabinet?	Yes□ -	No⊠	Date		





Progress update on improving cross-agency emissions data, quality assurance and control

Purpose

- 1. This progress update details the work to enhance climate emissions quality assurance and quality control, being led by the Interagency Climate Deputy Chief Executives (DCEs).
- We will continue to update the Board on progress, including when significant work is completed, e.g. completion of the modelling of the policies for the second emissions reduction plan (ERP2) shortly; 9(2)(f)(iv); updated interagency modelling governance arrangements in early 2025.

Background

- 3. The Climate Change Chief Executives Board (the Board) has requested¹ officials make improvements to the cross-agency data and modelling system, particularly to:
 - ensure the credibility and robustness of modelling for the final ERP2, 9(2)(f)(iv) if necessary;
 - better understand key trends and dynamics that can impact emissions projections including those external factors outside of government policy, and assess whether these can be incorporated into modelling and scenarios; and
 - strengthen existing data and modelling, including Target 9.
- 4. DCEs are governing this work, providing feedback, and making decisions on improvement options across the three focus areas outlined below.

Part 1: Ensuring credibility and robustness of modelling for the final ERP2

- 5. As ERP2 modelling is overseen by the Interagency Climate Directors Modelling Policy Impacts Group ('Policy Modelling Directors'), the Ministry for the Environment (MfE) recently led a 'lessons learned' exercise with this group. This was particularly focused on the modelling used for ERP2 consultation, to identify improvements to support final policy decisions.
- 6. Based on this, MfE is implementing improvements identified by technical experts to improve the critical components of the QA/QC process. These include an improved process for reconciling differences between the cross sectoral Emissions in New Zealand (ENZ) model and sector specific agency models. This will give assurance that we understand where any differences lie, while also highlighting opportunities for improvement. This is an important source of insights to be included in QA/QC documentation.
- The key takeaway from the lessons learned exercise was that for effective QA/QC there needed to be a structured process agreed well in advance, and sufficient time to be allocated for the modelling.

¹ Discussed 10 May 2024; 14 June 2024; 24 July 2024.

The ENZ model has

8. 9(2)(f)(iv)

9.

10. 9(2)(f)(iv)

been externally peer reviewed in the past, to confirm it is fit for purpose, ie, by the Climate Change Commission².

11. A more targeted assurance review of the ENZ model to check assumptions and model changes have been implemented correctly and are in line with best practice, will be undertaken for ERP2. A wider review of emissions models will be undertaken in 2025, to make recommendations on what a best practice approach to projections modelling and assurance practices across sectors would be.

Part 2. Better understanding the factors that can impact emissions projections

- 12. Interagency Climate DCEs discussed the fundamental limits to our confidence and certainty of emissions projections, starting with the three main factors driving whether we achieve emissions budgets. These are:
 - a. external factors affecting activity levels of emitting sectors (e.g., weather affecting renewable electricity supply, economic conditions/business confidence, decisions by large emitters, energy and commodity prices);
 - b. how we collect and measure actual emissions (data sources, timeframes for data collection, methodology, error corrections, etc.); and
 - c. policy decisions to reduce emissions (ERP1, ERP2) (and then their effectiveness).

² The ENZ model has been externally reviewed including reviews by Infometrics in 2020, Matthias Weitzel and Toon Vandyck, European Commission, Joint Research Centre 2020, Dr. Adam Daigneault, University of Maine, 2020 and Dr. Marc Hafstead Fellow and Director, Carbon Pricing Initiative, Resources for the Future, Washington, DC.

³ The ENZ model has been externally reviewed including reviews by Infometrics in 2020, Matthias Weitzel and Toon Vandyck, European Commission, Joint Research Centre 2020, Dr. Adam Daigneault, University of Maine, 2020 and Dr. Marc Hafstead Fellow and Director, Carbon Pricing Initiative, Resources for the Future, Washington, DC.

- 13. Notably, only c. *(policy decisions)* is under the Government's direct control. This means that there are risks to achieving our climate goals from external factors, which can influence the baseline and policy impacts, and these can be potentially significant as we have seen over the past year.
- 14. New Zealand's gross and net greenhouse gas emissions have been tracking downwards from 2019 onwards, with a big dip in 2020 due to COVID-19 lockdowns. This is due to a combination of:
 - high renewable electricity generation from favourable weather conditions;
 - shift to EVs;
 - continual improvement in energy efficiency in industry, commerce and households;
 - closure of some industrial plants, particularly the Marsden Point oil refinery and lower methanol production; and
 - ETS prices and other economic factors incentivising land use change from sheep/beef farming to plantation forestry.
- 15. Macro-economic and broader factors we need to have on our radar for the second emissions budget (2026-2030) outside of government's direct control are:
 - the rate of economic recovery (although emissions intensity of GDP has been dropping, increased economic activity increases emissions);
 - impact of gas availability and weather on the mix of renewables and coal;
 - strong population growth will also lift emissions in absolute terms if it continues;
 - land use decisions, in particular increased agricultural production / decreased forestry; and
 - decisions by large individual emitters, notably for Tiwai Point aluminium smelter to remain open and levels of production by Methanex.

16. 9(2)(f)(iv)

17. Updated information on these trends, potential scale, and volatility of some of the factors affecting activity, is being collated. DCEs have agree that future reporting on how New Zealand is tracking towards its emissions budgets should continue to include information on these potential risk areas. These factors will also be reflected to the extent feasible in ERP2 modelling and via sensitivity analysis. However, as modelling provides 'point in time' estimates, these will need to be monitored, and information updated on a regular basis to understand the impact of these on achieving emission budgets and Target 9.

⁴ Note the decrease in emissions from reduced natural gas use for heat is partially offset by an increase in emissions from electricity generation due to increased use of coal.

Part 3. Strengthening existing data and modelling work

- 18. DCEs have requested the Climate IEB Unit works with agencies to provide options for improved climate mitigation data governance arrangements to enable data improvements across the interagency climate mitigation data system.
- 19. This would provide clearer oversight, coordination and delivery of data system improvements, including consistent modelling assumptions and use; better data infrastructure and quality management; implementation of a data stewardship and a quality control framework; developing a long-term data strategy and maturity assessment; and better-defined roles, responsibilities, and activities.
- 20. DCEs have agreed this work and options be progressed in January 2025, following the conclusion of ERP2 to minimise disruption to current priority work.
- 21. MfE has been making operational improvements to the climate mitigation data and modelling system. This includes clarifying accountabilities, roles, and responsibilities for data products, enhancing data quality, and ensuring timelier and less resource-intensive data delivery.
- 22. These improvements will make the system more flexible and responsive to ad-hoc requests arising from the changing political context of climate change policy and legal requirements (e.g., understanding the impact on emissions budgets from policy implementation or macro-economic changes).
- 23. Priority improvement opportunities around the development, use, and QA/QC of emissions data and models stewarded by MfE have been identified, in Table 1 in Appendix 1.
- 24. These improvements reflect aspects of the mitigation data and modelling system that MfE currently oversees. However, there are additional improvements that can be made to the wider mitigation data and modelling system overseen by other agencies.
- 25. Other improvements include auditing agency emissions projections models, the 'mapping' and flows of emissions data, training agencies to use and improve the ENZ model, building an interagency data and modelling management and modelling platform, and supporting agencies in migrating Excel-based models into code. Further details are provided in Table 2 in Appendix 1.

Next steps

- 28 MfE to undertake a targeted assurance review of the ENZ model for ERP2, and a wider review of emissions models will be undertaken in 2025, to make recommendations on what a best practice approach to projections modelling and assurance practices across sectors would be.
- 29. The Climate IEB Unit and MfE to develop proposals for amended interagency governance arrangements for climate data in 2025.

Appendix 1: Priority and potential improvements that have been identified, with estimated timeframes

Improvement	Indicative timeframe (to be fully scoped)	Benefits
Migrating waste emissions models to R code	2-3 months	Reduce resourcing to deliver waste emissions projections. Better QA/QC control. More flexible and timely modelling insights.
Adding emissions activity data to emissions dashboard	3-6 months	Provide Ministers and public more granular insights on the efficacy and distributional impacts of emissions reduction policies
Building a Target 9- specific emissions reporting dashboard	3-6 months	Provide Ministers and the public with open access data insights on Target 9 reporting.
Migrating ENZ model to code	12-15 months	Reduce resourcing to operate ENZ model. Better QA/QC control. More flexible and timely modelling insights.
Aligning ENZ and CGE models	1-2 years	Reduce resourcing to operate ENZ and CGE models. Better QA/QC control. More flexible and timely whole- of-economy and distributional impact analysis. Build in external reviews of ENZ.
Automating Greenhouse Gas Inventory delivery	1.5-2 years	Reduces resources to deliver Greenhouse Gas Inventory. Improved QA/QC through automation. Continue stringent QA/QC processes already established and required as part of our international reporting obligations.

Table 1: Priority improvements identified by MfE, that are in development

Table 2: Potential future improvements around the development, use, and QA/QC of interagency emissions data and models.

Improvement	Indicative timeframe (to be fully scoped)	Benefits
Auditing agency emissions projections models	3-6 months	Provide confidence in agency emissions projections models and identify opportunities to integrate approaches for more flexible and timely modelling
Training agencies to use and improve ENZ	6-9 months initially	Reduce resourcing to operate ENZ model with better QA/QC control. More consistency and shared understanding of agency and ENZ model outputs and methodologies. Improved modelling coordination (potentially once ENZ converted to code)
Building an interagency emissions data submission portal	1-1.5 years	Provide agency data specialists easy to use tools to submit and manage interagency emissions data.
Support agencies to migrate emissions projections model into code	<1 year up to 3 years	Reduce resourcing to operate agency emissions models. Better QA/QC control. More flexible, timely, and integrated modelling.
Building interagency emissions modelling platform	2-4 years	Provide agency data specialists a 'one-stop-shop' for all emissions models in production across government, to build capability and take a collective approach to QA/QC & future whole-of-economy model development.



COVERSHEET: Noting item (iii)					
То	Climate Ch	Climate Change Chief Executives Board			
Meeting date	18 Septem	ber 2024			
Agenda item name	Noting pap	oer: Update on New Zealand's i	nternationa	l climate mitigation position	
Lead agency	MfE				
Reason for Board's consideration	New Zeala reporting i	This item provides an update on advice across a cluster of related work areas on New Zealand's international climate mitigation position. This includes action and reporting in the context of the UNFCCC process, and recent direction from the Minister of Climate Change.			
Recommendations	Recommendations Note the attached update				
Has the Board	Yes⊠	No 🗆	Date	24 July 2024	
previously considered this item, if so, when?	progress u Executives	date was provided to the Board pdate and provided feedback o Board can take to support the DC1 and setting NDC2.	n the role th	ne Climate Change Chief	
Has this item been	Yes⊠	No 🗆	Date	17 July 2024	
considered/endorsed by Climate DCEs? DCEs received an update on NDC progress on 17 July, noting work is meet international deadlines, including the Biennial Transparency Re end of 2024, and NDC2 which needs to be set by the end of 2024/ea			ansparency Report due at the		
Will this item be going	Yes⊠	No	Date	ТВС	
to CPMG or Cabinet?					
Relevant Cabinet decisions and dates	9(2)(f)(iv)				

Comments	9(2)(f)(iv)

9(2)(f)(iv)

9(2)(f)(iv)

9(2)(f)(iv)





COVERSHEET: Noting item (iv)				
То	Climate Ch	Climate Change Chief Executives Board		
Meeting date	18 Septem	ber 2024		
Agenda item name		per: Ministry for the E e Change Interdepart		al Report 2023-24, including bard
Lead agency	CCIEB Unit			
Reason for Board's consideration		ate Change Chief Exec CCCEB Annual Report		 are required to approve and
		t report was reviewed bmitted to MfE's Aud		e CCCEB Chair in August before (ARC) on 20 August.
Recommendations	Appro	ve the final draft Annu	ial Report by reply er	nail
Has the Board	Yes⊠	No 🗆	Date	15 August 2024
previously considered this item, if so, when?	• The draft report was reviewed and approved by the Chair in August and was circulated to CE EAs for noting			
Has this item been	Yes□	No 🛛	Date	
considered/endorsed by Climate DCEs?	-			
Will this item be going	Yes	No⊠	Date	
to CPMG or Cabinet?	-			
Comments	Ministers' feedback on the draft report is expected by 16 September. The final report, and a summary of any substantial changes, will be circulated to your EAs prior to the Board hui. A signature page will be included for formal approval and return to the CCIEB Unit.			



Ministry for the Environment Annual Report 2023-24, including Climate Change Interdepartmental Executive Board

[Late paper to be circulated prior to 18 September]

The 2023-24 Annual Report is being finalised and Ministers' feedback is expected by 16 September.

The final report, and a summary of any substantial changes, will be circulated to your EAs prior to the Board hui.

A signature page will be included for formal approval and return to the CCIEB Unit.

Please note, the final version is publicly available on the Ministry for the Environment's website (Page 185 of the Annual Report 2023) at the following link: https://environment.govt.nz/assets/publications/annual-report-2023-24.pdf





COVERSHEET: Noting item (v)				
То	Climate Change Chief Executives Board			
Meeting date	18 September 2024			
Agenda item name	Meeting administration			
Item lead	Chair / Lisa Daniell			
Key focus areas	Minutes of the previous meeting, held on 24 July 2024			
Register of open actions, as at 26 July 2024				
Recommendations • Approve the minutes of the previous meeting				
	• Note the actions register			



Climate Change Chief Executives Board MEETING MINUTES

	Wednesday 24 July 2024, 2:30–4:30pm Room 2.04 at MfE Offices, 8 Willis Street, Wellington / Online via MS Teams					
Atter	Attendees James Palmer (Chair, MfE), Audrey Sonerson (MoT), Carolyn Tremain (MBIE), Dave Gawn (NEMA), Penny Nelson (DoC), Paul James (DIA), Ray Smith (MPI), Aaron Martin (CL), Victoria Hallum (MFAT), Vicki Plater (Tsy delegate)					
Invite	vited Martin Kessick (Public Service Commission); Item 2 - Jo Hendy, Stephen Walter, Karen Lavin, Sally Garden (Climate Change Commission)					
In su	pport	Nadeine Dommisse, Katherine Wilson, Bryan Smith, Sam Buckle Jane White, Lydia Marston, Rachael Church (CCIEB Unit)	e, Hemi Smiler (MfE), Lisa Daniell,			
Apol	ogies	Caralee McLiesh (TSY)				
#	ltem		Actions			
		Chair's opening comments / karakia tīmatanga				
1	Board-on	ly time / context sharing updates				
	attendanc Board in a	welcomed the meeting attendees and noted Martin Kessick's be from the Public Service Commission who came to observe the action, given the role the Board is playing in providing ce and oversight of the Government's Target 9 reporting.				
		mbers shared relevant context updates. Minutes were not for this section of the meeting.				
2	Lead: Jo	Change Commission's report on NAP1 Hendy, Stephen Walter, Karen Lavin, Sally Garden (Climate Commission)				
	The Chair welcomed members of the Climate Change Commission (the Commission) to the meeting.					
	The Commission advised the Board they were not able to share key findings of the progress report on the National Adaptation Plan (NAP) as it had not yet been provided to the Minister. However, the Commission was able to share the preliminary findings publicly provided to the Finance and Expenditure Committee (FEC). In addition, broad context on the focus of the Commission's assessment and number of recommendations (without specificity of what these were) was also noted. The FEC submission highlighted three key points regarding the Adaptation Framework:					
	 A clear legal mandate is needed, to enable critical work to be prioritised and help secure funding for processes; 					
	 There is a need to clearly outline how adaptation costs will be shared, particularly for loss or damage after extreme events; Councils need a clear mandate to use alternative funding and finance tools to pay for adaptation costs; 					
		e needs to be a clear outline showing how future adaptation costs e met, including any additional investment needed.				
	effectiven have inste	mission noted that they have not been able to assess the ess of the NAP when only two years into a six-year plan. They ead focused on the plan itself, including gaps and opportunities, national best practice.				
		t contains nine recommendations: seven are policy focused, one I on improving future NAPs, and one on improving monitoring ting.				

		DRAFT
	The Chair asked about any assessment the Commission had made regarding the Board's monitoring role, and the Commission noted the 'synergistic effect' between the Commission and the Board, having made use of the Board's monitoring data to inform the report.	
	When asked about indicators they had used to inform their assessment, they Commission noted two they are looking at developing:	
	 the extent of infrastructure and assets exposed share of people living in communities at risk of being isolated. 	
	The Board:	
	2.1 noted the update provided by the Climate Change Commission and the overview of the key findings of the Commission's report on NAP	
	2.2 noted the report will be provided to the Minister of Climate Change on 2 August.	
3	3.1 Oral update: Adaptation Framework Lead: Nadeine Dommisse / Bryan Smith (MfE)	
	The Chair noted that although MfE and Treasury are the primary lead agencies for the Adaptation Framework work programme, the distribution of roles and responsibilities, funding of infrastructure, and consequential nature for assets and services sits across all agencies. Interagency consultation will be a key part of policy decision making.	
	The next CPMG meeting will include a focus on the Adaptation Framework.	
	9(2)(f)(iv) Discussion points:	
	 Discussion with wider agencies will be important ahead of ministerial consultation, to help reconcile some of the key issues. The global insurance industry is particularly interacted in 	MfE and CCIEB Unit to work with MCC's office on a plan for
	 The global insurance industry is particularly interested in New Zealand's Adaptation Framework. The CPMG meeting will need to be well-structured to effectively 	the CPMG Adaptation discussion Lead: CCIEB Unit / MfE
	 Pre-meets with key Ministers will encourage greater ministerial 	Adaptation team
	 Focusing on the top three questions at CPMG would be a useful 	Pre-meets to be arranged with key Ministers ahead of CPMG
	approach, with agencies providing support ahead of the meeting.Outlining the costs of inaction would be helpful for Ministers and would	meeting, to discuss Adaptation Framework key questions Lead: MfE Adaptation team
	show the importance of the work programme timeframes.	(with agencies)

		DRAFT
	 The Board: 3.1 noted the oral update provided on the Adaptation Framework and provided feedback on the work programme and the proposed approach to discussing adaptation priorities with CPMG. 	
	3.2 Oral update: Adaptation priorities ahead of upcoming Climate Change Commission report and CPMG discussion Lead: Lisa Daniell (CCIEB Unit) / Nadeine Dommisse (MfE)	
	Due to time constraints, this item was not discussed.	
4	NDC update Lead: Victoria Hallum (MFAT) / Sam Buckle (MfE)	
	9(2)(f)(iv) NDC2 needs to be	9(2)(f)(iv)
	submitted by February 2025.	Lead: MtE / MPI (offline)
	The MCC has asked for an assessment of all domestic options (including those that are costly or unpalatable) to enable him to assure his ministerial colleagues that all domestic options have been considered.	Lead. MIE / MPI (offinie)
	9(2)(f)(iv)	
	The Board:	
	4.1 noted the NDC progress update and provided feedback on the role the Climate Change Chief Executives Board can take to support the Ministers making decisions on steps towards NDC1 and setting NDC2.	
5	5.1 Delivering Government Target 9 SLead: Lisa Daniell / Jane White (CCIEB Unit)	
	The Target 9 report was initially scheduled to go to STR at the end of July, however, it will now be considered at Cabinet. Ministerial consultation is underway and the consolidated report on all Government Targets is expected to be published in August.	
	A technical annex is being prepared to support proactive release of the Target 9 report; this will outline caveats and provide context for some of the charts.	
	The next Target 9 report is due in October and will potentially include data from ERP2 (noting ERP2 is the delivery mechanism for Target 9).	
	Work is underway on improvement of data and quality assurance of modelling. A report will be provided to DCEs in August.	
	Acknowledgement was given to agencies for their support in providing data for the Target 9 report.	
	The Board:	Climate IEB Unit to report back
	5.1.1 noted the final Target 9 Report has been signed off by the Minister of Climate Change and delivered to DPMC	to the Board on quality assurance processes to support ongoing data and modelling
	5.1.2 noted that the Climate IEB Unit is working with MfE and agencies to prepare a simple technical annex and communications to accompany the Target 9 Report	work required for Target 9 reporting. Lead: CCIEB Unit / MfE (with
	5.1.3 noted that the next Target 9 Report format will be incorporated into the Board's September Quarterly Report*	agencies)
	5.1.4 noted that the Climate IEB Unit is working with MfE and other agencies to ensure robust quality assurance processes are in place to support the ongoing data and modelling work required for the Target 9 reports, and will report back to the Board on this in August.	*Since the Board meeting, reporting timeframes have been amended and the Quarterly Report will now be considered by the Board in October.

		DRAFT				
	5.2 Oral update: ERP2 and ETS settings Lead: Sam Buckle / Hemi Smiler (MfE)					
	ERP2 consultation is proceeding well. Key themes emerging from consultation and media coverage include:					
	 whether the plan meets the long-lived gas target NDCs afforestation/forestry sufficiency of policies. 					
	9(2)(f)(iv)					
	The Board:					
	5.2.1 9(2)(f)(iv)					
	5.3 Oral update: ETS settings Lead: Sam Buckle / Mark Vink (MfE)					
	Due to time constraints, this item was included in the ERP2 oral update (item 5.2).					
6	6.1 Update on Climate Change Commission's Emissions Reduction monitoring report Lead: Lisa Daniell (CCIEB Unit)					
	Due to time constraints, this item was not discussed.					
	6.2 Meeting administration Lead: Chair / Lisa Daniell (CCIEB Unit)					
	The Chair noted the previous minutes will be approved, subject to any comments or amendments received.					
	The Board:					
	6.2.1 approved the minutes of the previous meeting, held on 14 June 2024					
	6.2.2 approved the minutes of the previous meeting, held on 10 May 2024.					
Chair's closing comments / karakia whakamutunga						
9(2)(h)						
The meeting closed at 4:30pm.						

Climate Change Chief Executives Board - actions register

Noting paper (v) Paper f

Action #	Meeting Date	Discussion item	Minutes	Action	Responsible	Status
08-5	17/08/2023	Draft six-monthly ERP and NAP progress report	The Board noted that a one-page diagram to show how the Board's role fits alongside other government architecture for resilience, response and recovery work would be useful	IEB Unit to coordinate an outline showing how the Board's role fits alongisde other government architecture for resilience, response, and recovery work	IEB Unit	Open
24-18	24/07/2024	Oral update: Adaptation Framework / Adaptation priorities ahead of CPMG discussion	The Board provided feedback on the adaptation work programme, noting the CPMG meeting needs to be well- structured to effectively support ministerial engagement and pre-meets with key Ministers will encourage greater ministerial ownership of the work programme	MfE and IEB Unit to work with OMCC on plan for CPMG adaptation discussion; pre-meets to be arranged with key Ministers ahead of CPMG to discuss AF key questions	CCIEB Unit / MfE (with agencies)	Open - in hand
24-20	24/07/2024	Delivering Government Target 9	The Board noted that the Climate IEB Unit is working with MfE and other agencies to ensure robust quality assurance processes are in place to support the ongoing data and modelling work required for the Target 9 reports, and will report back to the Board on this in August.	Climate IEB Unit to report back to the Board on quality assurance processes to support ongoing data and modelling work required for Target 9 reporting	CCIEB Unit / MfE (with agencies)	Open - on agenda for 18 Sept