McGuinness Institute title: [ENV-22-SUB-0015] Setting emissions budgets for 2022-2025, 2026-2030 and 2031-2035

In-Confidence

Office of the Minister of Climate Change

Cabinet Economic Development Co... Setting emissions budgets for 2022-2025, 2026-2030 and 2031-2035

- 1. This paper reports back to Cabinet on finalising New Zealand's first set of emissions budgets.
- 2. Under the Climate Change Response Act 2002 (CCRA), the Minister of Climate Change is the statutory decision-maker responsible for both setting and meeting the emissions budgets.
- 3. This paper seeks Cabinet's final consideration of the Minister's proposed decisions.

Relation to Government priorities

- 4. The Government declared a climate change emergency on 2 December 2020. Cabinet agreed that climate change "demands a sufficiently ambitious, urgent, and coordinated response across government to meet the scale and complexity of the challenge" [CBC-20-MIN-0097 refers].
- 5. Enabling a just transition to a low-emissions, climate resilient future is a Government priority. Cabinet declared its intention to put the climate at the centre of government decision-making" [CBC-20-MIN-0097 refers].
- 6. The proposals in this paper relate to the Cooperation Agreement between the Labour and Green parties. Achieving the purpose and goals of the Climate Change Response (Zero Carbon) Amendment Act 2019 is an agreed area of cooperation.
- 7. The final emissions reduction plan, including the polices and strategies to meet the first emissions budgets and a comprehensive response to the Climate Change Commission's recommendations is scheduled to go to Cabinet Business * 7900 P Committee on 19 April 2022. The emissions reduction plan is expected to be made public on 15 May 2022.

Executive Summary

8. Emissions budgets fix the total net amount of all greenhouse gases that New Zealand can emit over 4-5 year periods as we step down to our 2050 target. Our target requires net-zero long-lived greenhouse gases, a minimum 10 per cent

- reduction in biogenic methane from 2017 levels by 2030 and a 24-47 per cent reduction in biogenic methane from 2017 levels by 2050.
- 9. The Minister of Climate Change (the Minister) must decide and notify the first set of three emissions budgets for the periods 2022-2025, 2026-2030 and 2031-2035 by 31 May 2022. The purpose of this paper is to seek Cabinet's views on the Minister's proposed decisions.
- 10. I am advised that my proposed emissions budgets are achievable and ambitious.
 I consider this is most certain for the first emissions budget given that predicting events during the second and third budget periods is inherently less certain.
 - 11. The first emissions reduction plan will detail how we intend to meet the first emissions budget and get on track to meet the future emissions budgets. The final emissions reduction plan is scheduled to go to Cabinet Business Committee on 19 April 2022.
 - 12. In setting emissions budgets, the Minister must respond to the advice received from the Climate Change Commission (the Commission).
 - 13. The Commission issued its advice including its recommended emissions budgets in its May 2021 report: *Ināja toņu nei: a low emissions future for Aotearoa*. When preparing its advice on, and recommending emissions budgets for the Minister, the Commission considered the range of matters under section 5ZC of the CCRA.
 - 14. I brought the Commission's recommended emissions budgets to Cabinet for consideration in August 2021 [CAB-21-MIN-0320.01 refers]. We agreed inprinciple to a set of proposed emissions budgets for the purpose of including these in the October 2021 public consultation on the emissions reduction plan.
 - 15. Those proposed emissions budgets broadly accepted the Commission's recommendations, with modifications to take account of new information that had caused projected forestry emissions to change. The revised projections were based on the new forestry intentions survey commissioned by the Ministry for Primary Industries (MPI) (published in June 2021). This information was not available to the Commission when it delivered its final advice in May 2021.
 - 16. Unfortunately, there was an error in how this information was interpreted and reported to Cabinet at the time. Increased emissions in the first budget period of 2022-2025 were attributed to emissions generated in the early stages of planting forests, when in fact the increase in projected emissions was due to revised estimates of deforestation intentions.
 - 17. Overall, the revised projections over the three budget periods indicate much larger increases of emissions reductions from afforestation than deforestation. Even in the first budget period, the <u>area</u> of new afforestation is much greater than deforestation. However, it takes time for the new forests to start absorbing carbon dioxide (CO₂), so the deforestation impacts dominate in the first budget period.

- 18. Despite the error in distinguishing between afforestation and deforestation drivers for the first emissions budget period, the revised forestry emissions projections reported to Cabinet were numerically correct. In my view the underlying rationale for adjusting our emissions budgets to take account of the new forestry information from external sources is still valid.
- 19. However, in my view it is not valid to 'relax' the emissions budgets to take account of greater than anticipated deforestation. In my view, this would be equivalent to relaxing an emissions budget because an industrial emitter had informed us that they intend to pollute more than previously indicated. I propose to further modify the proposed emissions budgets from last August to not make any allowance for the additional deforestation.
- 20. My proposal would mean that the emissions budgets for the first period would now return to 290 Mt CO₂-e¹. This is the same level as what was originally recommended by the Commission, requiring a further 2 Mt CO₂-e² of abatement compared to the value agreed in-principle by Cabinet in August for the first emissions budget period.
- 21. I also propose to make further changes to the proposed emissions budgets for the second and third periods (2026-2030 and 2031-2035), to remove an allowance for 2 Mt CO₂-e of deforestation. It is important to maintain logical consistency in our approach across all emissions budget periods.
- 22. I do recognise that the second and third emissions budgets are both much lower on an annual basis in comparison to the first emissions budget, and are further out in the future. There is also lower reliability of projections for outyears based solely on the current stated forestry intentions. However, that can be taken into account when confirming future emissions budgets and subsequent emissions reduction plans.
- 23. Since the proposed emissions budgets were agreed by Cabinet in August 2021, Ministers and officials have made considerable progress in identifying additional measures and increasing the estimated impacts of policies. We are now much more confident that the policies and measures have the potential to achieve the reductions required in the first budget period. These provide the base for the transition to a low emissions economy.
- 24. However, there are still a number of critical assumptions built into this assessment and some significant risks that we will have to actively manage as we implement the emissions reduction plan.
- 25. There are also fundamental underlying uncertainties around all our estimates, forecasts and projections. There will continue to be new information and revised assessments to consider and manage throughout each emission budget period.

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¹ Carbon dioxide equivalent. This is a way to describe different greenhouse gases on a common scale that relates the warming effect of emissions of a gas to that of carbon dioxide. It is calculated by multiplying the quantity of a greenhouse gas by the gases global warming potential.

 $^{^2}$ This figure has been rounded up to the nearest Mt CO₂-e, consistent with the way the Commission presented its recommended emissions budgets and the previous communication of the agreed-in-principle emissions budgets through the emissions reduction plan discussion document. The underlying figure to one decimal place is 1.5 Mt CO₂-e.

- 26. Therefore, I do not propose to further adjust the emissions budgets to take account of any other new information or revisions in emissions projects at this time. The only adjustment I propose is to take account of the new information from the forestry intentions survey. This was the basis for the agreed-in-principle emissions budgets that were included in the public consultation in October 2021, although now I further propose to limit the adjustment to take account of afforestation only, and exclude any allowance for additional deforestation.
- 27. Final decisions on setting emissions budgets rest with the Minister of Climate Change under the CCRA. When I notify them, I am also required to issue a formal response to the Commission's recommended emissions budgets and a number of specific related recommendations. This must provide an explanation of the reasons for any departure from the Commission's advice.
 - 28. My final response to the Commission must be made public and presented to Parliament It will be a much shorter document than the emissions reduction plan. However, it will be subject to close scrutiny including by the Commission and by select committee.
 - 29. Our first focus now should be on the emissions budget numbers that the emissions reduction plan will be based on and finalising that plan.

Background

First three emissions budgets to be notified before 31 May 2022

30. On 31 May 2021, the Commission recommended the emissions budgets in Table 1. The Commission also provided advice on the direction of the policy required in the emissions reduction plan to meet the first emissions budget period.

Table 1: The Commission's recommended emissions budgets

Commission's recommended emissions budgets	Emissions	Emissions	Emissions
	budget 1	budget 2	budget 3
	2022 – 2025	2026 – 2030	2031 – 2035
All gases, net (AR5) ³	290 Mt CO ₂ -e	312 Mt CO ₂ -e ⁴	253 Mt CO ₂ -e

31. The CCRA defines emissions budgets as the quantity of greenhouse gas emissions that will be permitted in each emissions budget period. These act as interim targets that step down towards meeting our domestic 2050 target of netzero long-lived greenhouse gasses and a 24-47 per cent reduction in biogenic methane.

³ Expressed using GWP₁₀₀ values from the IPCC's Fifth Assessment Report (AR5) for consistency with international obligations relating to Inventory reporting.

⁴ Emissions budgets 2 is larger than emissions budget 1 because emissions budget 1 cover four years only, all other budgets cover five years.

- 32. The first three emissions budgets define the transition pathway for New Zealanders, households, businesses, industry, local government, and others to reduce emissions out to 2035. They will guide a partnership between Government and wider society to ensure a transition to a low-emissions Aotearoa.
- 35. 35. 33.2. 33. Under the CCRA, once finalised by the Minister, the emissions budgets must be:
 - notified in the Gazette;
 - presented to the House of Representatives by the Minister; and,
 - 33.3. made publicly available at the direction of the Minister.⁵

Prior consideration

Advice provided in August 2021

34. In August 2021, I proposed to broadly accept the Commission's recommended emissions budgets with some modifications as a basis for public consultation on the emissions reduction plan (table 2 below). I sought Cabinet's agreement in principle to this approach [CAB-21-MIN-0320.01 refers].

Table 2: Agreed in-principle emission budgets with modifications in August 2021

In-principle emissions budgets	Emissions budget 1 2022 – 2025	Emissions budget 2 2026 – 2030	Emissions budget 3 2031 – 2035
All gases, net (AR5)	292 Mt CO ₂ -e	307 Mt CO2-e ⁶	242 Mt CO ₂ -e

- 35. The modifications to the Commission's proposed emissions budgets accounted for the new information from the latest Afforestation and Deforestation Intentions Survey (published in June 2021). This information was not available to the Commission when it prepared its final report in May 2021.
- At the time, I was seeking Capital Solution on the emission in the public consultation on the emissions budgets.

 as I was not in the position to take final decisions on the emissions budgets.

 Further work was required before taking final decisions on setting the emissions including: 36. At the time, I was seeking Cabinet agreement in-principle on the above emissions

 - 36.2. assessing the risks and uncertainties in more depth; and,

⁶ Emissions budget 2 is larger than emissions budget 1 because it covers five years instead of four.

⁵ CCRA, section 5ZD(2)

36.3. completing the review of the Commission's published advice and underlying analysis and supporting documentation.

Clarifying the interpretation of the forestry projection figures

- 37. The agreed in-principle emissions budgets from August 2021 that were included in the October 2021 public consultation, took account of the new information that changed our projected forestry emissions. The revised projections were based on the latest Afforestation and Deforestation Intentions Survey commissioned by MPI and published in June 2021.
- 38. Cabinet noted this was new information from external sources that was not available to the Commission when it prepared its advice and could be distinguished from other revised projections that were more related to new assessments by officials rather than new information per se [CAB-21-MIN-0320.01 refers].
- 39. While the revised projection figures for forestry were correct, the way this information was interpreted and subsequently reported to Cabinet was not correct.
- 40. MPI's numbers themselves were correct and followed a strict quality control signout process. The error originated from an email from MPI's technical team to the Ministry for the Environment technical team explaining the updated forestry projections. Cabinet paper consultation processes were followed but the data was not checked with the technical lead. Officials have worked together on improved inter-agency quality assurance (QA) processes to ensure human errors are picked up and corrected.
- 41. Officials attributed the increased emissions in the first budget period 2022-2025 to emissions generated in the early stages of planting forests. If we were to take account of the increase in afforestation, we had to therefore take account of any increase in emissions in those early stages of that afforestation.
- 42. However, the increase in projected emissions for the first emissions budget period was in fact due to revised estimates of deforestation intentions that were unconnected to afforestation.
- 43. Despite this error, the rationale to adjust the emissions budgets was to take account of all new forestry information, and therefore remains defensible. The overall impact remains one of much larger afforestation than deforestation for the emissions budget periods.
- 44. The revised projections over the three budget periods indicate much larger emissions reductions from afforestation than deforestation. The area of new afforestation is much greater than the deforestation area, even in the first budget period. However, it takes time for the new forests to start absorbing CO₂. Cutting down a fully-grown forest has more impact initially than planting.
- 45. However, in my view there is an argument that the emissions budgets should not be set in a way that appears to endorse increased deforestation. I consider the

error in the official advice at the time was material and that a different decision on the final emissions budgets should be taken.

Feedback from public consultation

- 46. We received 10,050 submissions on the emissions reduction plan discussion document Te hau mārohi ki anamata - Transitioning to a low-emissions and climate-resilient future during the consultation held between October and November 2021.
- 47. It was made clear in the consultation material that existing policies and measures would not put New Zealand on track to meet the in-principle emissions budgets. Public views were sought on further proposed policies and measures to include in the emissions reduction plan.
- 48. Through submissions analysis, several key themes were identified to consider further when setting emissions budgets.
- 49. A key theme from the public submissions was the request for the Government to take more urgent and more ambitious climate action. Although there were high levels of support for the proposals outlined in the discussion document, many wanted targets to go further. There was also strong support for an equitable lens across the entire emissions reduction plan.
- 50. A number of submitters were concerned about the cost impacts of meeting the proposed emissions budgets, but this did not translate into opposition to the budgets themselves.

Analysis

Final decision on the first three emissions budgets

- 51. Final decisions on setting emissions budgets rest with the Minister under the CCRA. The CCRA allows the Minister to set emissions budgets that depart from the Commission's advice, provided the Minister first considers whether further consultation is required, and the reasons are explained to Parliament and published.
- 52. This is the first time emissions budgets will be set and there are detailed legal requirements for the Minister to follow in considering the Commission's advice and making decisions on emissions budgets.
- 53. Emissions budgets must be set:
- 10×7000 with a view to meeting the 2050 target and contributing to global efforts 53.1. under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels, and
 - 53.2. in a way that allows them to be met domestically and provides greater predictability for those affected.⁷

⁷ CCRA, section 5W

54. The Minister is also required to consider a range of matters under sections 5ZB and 5ZC of the CCRA when setting the final emissions budgets.

Revision of the second and third emissions budgets

- 55. Under the CCRA, the Commission may recommend the second and third emissions budgets be revised if there has been a significant change to one or more of the considerations on which the emissions budgets were originally set. These considerations include, but are not limited to, scientific, technological, and economic considerations, the results of public consultation and distributional impacts.8,9
- 56. However, after an emissions budget has commenced it can only be revised under "exceptional circumstances". 10,11 The first emissions budget period has already started tommenced on 1 January 2022.

Consideration given to the options

- 57. In finalising the emissions budgets, I have considered three broad options:
 - 57.1. Option 1: depart from the Commission's proposed budgets with further adjustments that take into account the effects of afforestation only (and not deforestation) in the amended forestry projections.
 - 57.2. Option 2: reaffirm the emissions budgets Cabinet agreed-in principle in August 2021 as a basis for public consultation on the emissions reduction plan. This was to broadly accept the Commission's proposed emissions budgets, with modifications that take into account both the afforestation and deforestation effects from the forestry intentions survey [CAB-21-MIN-0320.01 refers].
 - 57.3. Option 3: revert to the emissions budgets as proposed by the Commission.
- 58. I have received advice on the three options, and based on the analysis provided. I propose to proceed with Option 1.
- 59. Tables 3 and 4 below present the analysis and rationale behind my decision for NON ACK 7982 proposing Option 1, over Option 2 and 3.

⁸ CCRA, section 5ZC(2)

⁹ Emissions budgets can also be revised in light of methodological improvements in the way that emissions are measured and reported.

¹⁰ CCRA, section 5ZE(1)(a)

¹¹ The Commission's advice addressed the possibility that there might be changes to emissions measurement and reporting methodologies in the New Zealand Greenhouse Gas Inventory in the first emissions period. The Commission indicated these could be factored into its regular progress monitoring and its assessment report at the end of the emissions budget period. The Commission would assess the extent to which changes in emissions estimates are caused by method updates, as opposed to genuine progress or lack of progress in reducing emissions.

Table 3: Description and Analysis of options for the first emissions budget (2022-2025) (EB1)

ow calculated: This further modifies and reduces the proposed emissions budget agreed in principle in August 2021. It removes the impacts of new information on deforestation and takes account of additional afforestation intentions only.	Page 292 Mt CO₂-e How calculated: • As agreed in principle in August 2021 (for the October emissions reduction plan (ERP) consultation), this increased the Commission's recommended emissions
 This further modifies and reduces the proposed emissions budget agreed in principle in August 2021. It removes the impacts of new information on deforestation and takes account of additional afforestation intentions only. 	 As agreed in principle in August 2021 (for the October emissions reduction plan (ERP) consultation), this increased the Commission's recommended emissions
 290 Mt CO₂-e is the same number as originally recommended by the Commission in May 2021. 	budget by 2 Mt CO ₂ -e. This takes account of new information on <u>both</u> afforestation and deforestation intentions.
 Cabinet agreed in-principle to modify the Commission's recommended number to take account of new information from the latest Afforestation and Deforestation Intentions Survey (published in June 2021 after the Commission reported). The August Cabinet paper mistakenly attributed the 2 Mt CO₂-e increase in EB1 to emissions from early stages of afforestation, when in fact it was due to an increase in deforestation intentions. If Ministers had been aware the change in EB1 was driven by deforestation, they may have decided not to adjust the Commission's recommended number. Iplications for sufficiency of ERP policies: 290 MtCO₂-e is near the top end of the range of the high impact estimates of the emissions reduction policies, especially if the smelter remains open. We are, however, more confident of achieving 290 Mt CO₂-e if the smelter closes or if the emissions reduction plan can be fully funded over time, well-implemented and potentially enhanced to ensure it delivers at the high end of the impact range. 	This would confirm the proposed emissions budget as agreed in principle in August 2021 and included in public consultation on the ERP discussion document in October 2021. Cabinet agreed in principle to modify the Commission's recommended number to take account of all new information from the latest Afforestation and Deforestation Intentions Survey (published in June 2021 after the Commission reported). The breakdown between afforestation and deforestation was not the stated underlying rationale for the decision. Implications for sufficiency of ERP policies: 292 MtCO2-e falls within the range of low to high policy impact estimates of the emissions reduction plan policies even if the smelter remains open. Much less risk of the emissions reduction plan not being sufficient to deliver the first emissions budget.

Table 4: Description and Analysis of options for the second and third emissions budgets (EB2 and EB3)

EB2 and EB3 Option 1

Minster of Climate Change's

<u>Preferred Option</u>

EB2 and EB3 Option 2

EB2 and EB3 Option 3

EB2: 305 Mt CO₂-e EB3: 240 Mt CO₂-e EB2: 307 Mt CO₂-e EB3: 242 Mt CO₂-e EB2: 312 Mt CO₂-e EB3: 253 Mt CO₂-e

How calculated:

- Consistent with EB1 Option 1 this further reduces the agreed in-principle emissions budgets for EB2 and EB3 to remove the impacts of new information on deforestation intentions and take account of new information on afforestation intentions only.
- Compared to Option 2, this reduces each emissions budget by a further 2 Mt CO₂-e, rounded to the nearest Mt CO₂-e.

How calculated:

- As agreed in principle in August 2021, this modifies the Commission's recommended emissions budgets to take account of new information on both afforestation and deforestation intentions.
- Compared to Option 3 this reduces the emissions budgets by 5 Mt CO₂-e for EB2 and 11 Mt CO₂-e for EB3.

How calculated:

- Emissions budgets as recommended by the Commission in May 2021.
- Compared to the agreed-inprinciple emissions budgets (Option 2) these emissions budgets are less ambitious.
- Compared to Option 1 they are less ambitious by 7 Mt CO₂-e and 13 Mt CO₂-e respectively.

Rationale:

 Logically consistent with EB1 Option 1.

(ie, if Ministers would have decided to not include deforestation impacts in adjusting for new forestry information, then the same rationale would logically be applied to all three emissions budgets periods.)

Rationale:

Minimises change to the proposed agreed-in-principle budgets that were included in the consultation on the emissions reduction plan discussion document.

(It is important to note that longer term projections based on the new forestry intentions survey information are less reliable

- Many respondents were focussed only on logistics of afforestation in 2021 and are still developing longer term plans; some forests are on land under lease so the replanting decision will be made by the landowner rather than the current cropowner.
- Also the survey reported intentions out to 2030 only so projections for EB3 involve some extrapolation.)

Rationale:

•s 9(2)(g)(i)

The Commission's modelling and analysis was a cohesive package. The advice factored in uncertainty and allowed for flexibility. Sensitivity analysis and scenario testing were used to demonstrate the recommended budgets could still be met under a wide range of different circumstances.

Implications for sufficiency of ERP policies:

- All three options in Table 4 appear to be achievable based on current emissions projections and the emissions reduction plan policy impact assessments, as the current high to low policy impact range estimates with Tiwai Point remaining open are 254 to 318 Mt CO₂-e in EB2 and 191 to 253 Mt CO₂-e in EB3 (see Table 6 below).
- Option 1 is slightly more ambitious than Option 2.
- Option 3 is less ambitious when compared to the other options, but fully consistent with the Commission's projections and recommendations.



Consideration of the CCRA requirements

- 60. In setting the emissions budgets, I am required to consider a range of matters including under sections 5ZB and 5ZC of the CCRA, as was the Commission, when they provided their proposed emissions budgets last May.
- 61. Officials have previously provided me with their review of the Commission's emissions budgets advice and underlying analysis and supporting documentation. Officials also provided additional advice relating to the separate requirement on the Minister to also consider the matters required by the CCRA.
 - 62. Having received and considered this advice, I am now in a position to inform Cabinet of the final set of emissions budgets that I intend to notify.

Sed Albert	Emissions	Emissions	Emissions
	budget 1	budget 2	budget 3
	2022 – 2025	2026 – 2030	2031 – 2035
Minister of Climate Change's proposed budgets	290 MtCO ₂ -e	305 MtCO₂-e	240 MtCO ₂ -e

63. Through this paper, I am seeking Cabinet's views on these emissions budgets as the basis for finalising the emissions reduction plan.

We have ambitious, yet realistically achievable emissions budgets

- 64. The CCRA requires the Commission and the Minister to have particular regard to how the emissions budget and 2050 target may realistically be met. The Commission undertook extensive analysis and consultation, to recommend a set of emissions budgets that it considered struck the right balance between ambition and achievability.
- 65. The first three emissions budgets aim to strike a balance between being ambitious and economically achievable. We have stepped down the necessary level of emissions with each budget period. This sets up New Zealand to continue on a downward trajectory and eventually bring us closer to our 2050 targets.
- 66. There are, and always will be, high uncertainties and risks around meeting emissions budgets. As previously noted by Cabinet, strong monitoring and effective corrective action will be needed on an ongoing basis. Policy impact assessment revisions and progress indicator information is needed over the life of each emissions reduction plan.
- 67. The CCRA recognises this in providing a margin for up to one per cent of the next emissions budget to be borrowed to offset a shortfall, although use of the

borrowing provision is conditional on considering advice from the Commission. This amounts to a potential buffer of some 3 Mt CO₂ for the first emissions budget period.

- 68. The CCRA prioritises domestic action for meeting emissions budgets and the Commission has recommended that offshore mitigation should only be used as a last resort under force majeure conditions.
- 69. Cabinet previously noted there is potentially room for the Minister to form a different view from the Commission and consider having recourse to offshore emissions reductions as a permissible way of helping to meet emissions budgets, especially the first emissions budget in certain limited circumstances, in a way that is consistent with the CCRA.¹²
 - 70. At the time, officials were considering whether the exceptional circumstances could be widened to include some known but essentially unmanageable adverse event risks. For example, a run of very dry hydro years, so that allowing for these risks would not need to result in setting less ambitious emissions budgets.
 - 71. It now appears that, with both the one per cent inter-budget borrowing facility and the updated sufficiency analysis, we are in a better position to meet the adverse event risk management challenge without recourse to additional offshore mitigation.
 - 72. There is also the wider public perception and communication risks of meeting all the requirements of the CCRA, notably striking the right balance between ambition (ie, setting targets with sufficient stretch to drive the transition) and realistic achievability (ie, technologically possible, economically manageable and socially acceptable).
 - 73. Officials undertake communications planning and stakeholder engagement with a view to minimising misperceptions and appropriately dealing with criticisms of government policy, but there are a diverse range of interests at different points on the spectrum of what constitutes the appropriate balance of ambition and realistic achievability.

Key opportunities are enabled by initiatives in the emissions reduction plan

- 74. The CCRA further requires the Commission and the Minister to have particular regard to the key opportunities for emissions reductions and removals when considering how the emissions budgets may realistically be met.¹³
- 75. Key opportunities have been identified by officials when assessing the Commission's key recommendations. New policies and actions are reflected in the first emissions reduction plan to achieve these, including:
 - 75.1. Decarbonising the energy system: Driving a shift away from fossil fuels, and using our highly and increasingly renewable electricity system and other low emission fuels to reduce emissions in the industry, transport

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¹² CCRA, section 5Z(2)

¹³ CCRA, section 5ZC(2)(a)(i)

- and building and construction sectors. This will support decarbonisation of industrial process heat and the uptake of electric vehicles.
- 75.2. Biofuels mandate: Liquid biofuels are a renewable, low-emissions fuel Stool Chive, source that can be used immediately to reduce our transport sector emissions and are the main viable abatement option for our existing internal combustion engine (ICE) fleet.
 - Reducing reliance on cars: To support people to walk, cycle and use public transport by providing New Zealanders with better public transport choices and making it safer and easier to travel by active modes.
 - Establishing a new Agriculture Greenhouse Gas Centre of Excellence: The Centre will boost research investment, capability and capacity to accelerate the development and availability of agricultural mitigation technologies.
 - 75.5. Preventing food waste: Preventing food waste has multiple benefits. It not only avoids emissions associated with the disposal and decomposition of food waste, but also saves upstream emissions across the supply chain from the production of food through to its consumption.
 - s 9(2)(f)(iv)75.6.

We have ambitious policies and measures in the emissions reduction plan that have the potential to achieve our emissions budgets

- 76. The emissions reduction plan sets out a coherent and ambitious package of both strategic and sector-specific policies and measures to deliver the emissions reductions. Based on our analysis and with determined and successful implementation, the plan could realistically achieve our emissions budgets. The proposed package falls within the range of low to high impact estimates
- 77. Officials have quantified the abatement of most of the policies and measures that are in the emissions reduction plan against emissions budgets, as shown in Table 5 below. This is presented as a range of low to high policy impact for each budget period to reflect elements of uncertainty and risks. However, the uncertainties are greater than the range of low and high policy impact.
- 78. The high and low policy impact scenarios for each set of policies are highly unlikely to occur simultaneously. Therefore, it is unlikely that the policy impacts of all policies will fall at the lowest or highest ends of the ranges.
- 79. In particular, the uncertainty range around policy impact estimates for the forestry sector (6.5Mt) is very high relative to the other sectors. This is primarily

- due to the uncertainties around deforestation, which can have high emissions impacts.
- 80. Statistical modelling is not available to provide a sense of a likely confidence interval within the high and low policy estimates. To show a more realistic range, Table 5 and 6 include the low and high policy impact ranges of emissions for all policies except for forestry, where the central estimate has been used.
- 81. The modelling in Table 5 indicates that the package of policies and measures in the first emissions reduction plan has the potential to achieve our first emissions budget, provided that they are implemented effectively and enable local government, New Zealand businesses, households and communities to act to reduce emissions in the ways they say they want to. This highlights the risk that achieving the emissions budgets largely depends on the actions of these critical stakeholders. If a low policy impact were assumed, the first emissions budget may not be achievable with the package of policies and measures.
 - 82. The modelling indicates that the emissions reduction plan policies and measures have the potential to enable us to meet our second and third emissions budgets, and even potentially over-achieve under a low policy impact assumption. Noting that the uncertainty and risks increase the further into the future that our estimates are for.
 - 83. The emissions estimates and the likelihood of the emissions reduction plan achieving emissions budgets will change as we learn more and refine our emissions estimates over the life of the first emissions reduction plan.

Table 5: Estimated emissions abatement impact from quantified policies and measures against emissions budgets

Comparison of estimated emissions levels against emissions budgets (AR5 Mt CO₂-e)	Emissions budget 1 2022-2025	Emissions budget 2 2026-2030	Emissions budget 3 2031-2035
Emissions at 2019 level	311.2	389.1	389.1
Emissions without ERP abatement measures	299.1	339.2	310.7
Emissions with ERP abatement measures - Low impact	293.6	308.3	250.3
Emissions with ERP abatement measures - High impact	287.1	244.6	187.6
Emissions budgets	290.0	305.0	240.0

What has changed from our initial advice provided in August 2021?

More policies in the emissions reduction plan have been quantified

84. In the advice provided last August, the quantified policy impact estimates were small, relative to the required emissions necessary to achieve emissions budgets.

- 85. Since this time additional policies have been quantified, this new information has been used to assess the sufficiency of emission reduction plan policies to meet budgets and subsequently indicate the achievability of budgets based on the estimates of the quantified policies and measures.
- 86. The additional quantified policies informing Tables 5 and 6 include updates to quantified Budget 2022 Climate Emergency Response Fund (CERF) initiatives based on the recently communicated decisions on these bids, with the exception of transport estimates.



Our emissions projections have been adjusted due to recent developments of two large industrial emitters

- 89. Since the initial advice in August 2021, officials have adjusted emissions projections used in the emissions reduction plan to reflect recent developments of two large industrial emitters that have material implications for New Zealand's emissions trajectory the Marsden Point oil refinery and the Tiwai Point aluminium smelter.
- 90. The Marsden Point oil refinery confirmed that it is transitioning to an import only terminal. While the refinery is now almost certain to close in April 2022, both the Commission's and Government's projections assumed that the refinery would continue to operate indefinitely. Our latest projections in the emissions reduction plan have now been adjusted downwards to account for the closure of the refinery.
- 91. The Tiwai Point aluminium smelter was assumed to close at the end of 2024 in both the Commission's and Government's projections. However, the aluminium price expectations have since firmed and the economic outlook for the smelter has become more positive.
- 92. While there is still a significant chance that it will close in 2024, the likelihood that it will continue to operate has substantially increased. The closure or not of the smelter remains uncertain.

93. Table 6 shows the emissions impact if the aluminium smelter remains open beyond 2024. The implication of this is that even if the smelter were to remain open, the first emissions budget is still potentially achievable with the proposed policies and measures in the emissions reduction plan. If the smelter were to close, achieving the first emission budget would require a moderate level of policy effectiveness, whereas if the smelter remained open a high level of policy effectiveness would be required to achieve the first emissions budget.

Table 6: Estimated emissions abatement impact from quantified policies and measures against emissions budgets (assuming Tiwai Point aluminium smelter remains open beyond 2024)

Comparison of estimated emissions levels against emissions budgets (AR5 Mt CO ₂ -e)	Emissions budget 1 2022-2025	Emissions budget 2 2026-2030	Emissions budget 3 2031-2035
If the Tiwai Point aluminium smelter was assumed to remain open beyond 2024:			
Emissions at 2019 level	311.2	389.1	389.1
Emissions without ERP abatement measures	301.5	348.5	313.7
Emissions with ERP abatement measures - Low impact	296.0	317.6	253.3
Emissions with ERP abatement measures - High impact	289.5	253.9	190.6
Emissions budgets	290.0	305.0	240.0

Consideration of risks and uncertainties

- 94. The CCRA also requires the Commission and the Minister to have particular regard to the principal risks and uncertainties for emissions reductions and removals when considering how the emissions budgets may realistically be met.¹⁴
- 95. There are a number of risks and uncertainties that can impact our ability to meet proposed emissions budgets. The implication is that the sufficiency of the policies and measures in the emissions reduction plan to achieve emissions budget cannot be fully determined in advance.
- 96. Our estimates of current and future emissions are based on our best understanding of our future emissions levels. Our estimates include the future impact of quantified policies and measures that make up the first emissions reduction plan. They are, however, subject to a high level of uncertainty relative to the emissions reductions to meet emissions budgets.
- 97. There is also policy uncertainty as a number of these policies have not yet been agreed by Cabinet. For example, restricting exotics from the permanent ETS

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¹⁴ CCRA, section 5ZC(2)(a)(ii)

forestry category is currently out for consultation and this could affect emissions estimates, this uncertainty has not been modelled.

98. This uncertainty can have implications for achieving emissions budgets, particularly if the estimates are significantly different. This is not a flaw of the analysis, some uncertainty. As we learn more, we make regularly updated emissions estimates.

Uncertainty around projections is larger than the estimates of additional emissions required

Tables 5 and 6 above, are subject to uncertainty. As we learn more, we will incorporate this new information into our

- varying degrees of uncertainty. 15 Low levels of uncertainty suggest that we can be confident that the emission estimates are less likely to change significantly. High levels of uncertainty suggest that emissions estimates are more likely to change significantly. If our projections or estimates of policy impacts change significantly then this will have implications for achieving emissions budgets.
- An example of the potential impact uncertainties can have on our GHG projections is presented in Table 7 below:
 - 100.1. This table compares the magnitude of the revision to GHG projections published in March 2022 from the projections published in January 2021 with the estimated abatement required from additional policies and measures to achieve the first three emissions budgets.
 - 100.2. The table shows the abatement required from additional policies and measures to achieve the first emissions budget of 11.5Mt CO₂-e is less than the latest revision to the GHG projections of 15.5Mt CO₂-e.
 - 100.3. This table illustrates the degree to which uncertainty can influence our quantified estimates and have material implications for the level of abatement above our projections required to meet our emissions budgets.

Table 7: Comparison of potential uncertainty of projections against required emissions reductions (AR5 MT CO2-e)

	Emissions budget 1	Emissions budget 2	Emissions budget 3	
Revision to projections between January 2021 and March 2022	15.5Mt	9.4Mt	11.7Mt	
Required emissions reductions to meet emissions budgets ¹⁶	11.5Mt	43.5Mt	73.7Mt	7
An adaptative management approach is i	now enabled			

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¹⁵ All figures and analysis use AR5 (Intergovernmental Panel on Climate Change's Fifth Assessment Report) global warming potentials, consistent with emissions budgets.

¹⁶ This is the gap between the projections used in the emissions reduction plan and the emissions budgets

- 101. Under the CCRA, the Minister may, at any time, amend the emissions reduction plan and supporting policies and strategies to keep it current. The CCRA allows for minor or technical changes without needing to repeat the process used for preparing a plan.¹⁷
- 102. Strong governance and accountability mechanisms are also needed to keep the emissions reduction plan on track to ensure that any corrective action can be taken with high priority and urgency [CAB-21-MIN-0320.01 refers].
- Cabinet agreed that sector sub-targets be used to measure the progress of each sector towards meeting the emissions reduction plan and has set the sub-targets for the first emissions budget period [CAB-22-MIN-0055.01refers].
 - 104. Cabinet has agreed to formalise the Climate Change Chief Executives Board as an Interdepartmental Executive Board under the Public Service Act 2020 [CAB-22-MIN-0055.01 refers].
 - 105. This Board would be collectively accountable for coordinating, monitoring, and reporting on the implementation status and outcomes of the plan, including against sector sub-targets.

Matters for consideration under the CCRA

- 106. In my decision-making on the final emissions budgets, I am required to consider a range of matters including under sections 5ZB and 5ZC of the CCRA. The content of this paper includes analysis and advice that outlines my consideration regarding several of these matters.
 - 107. For instance, the consideration of:
 - 107.1. key opportunities for emissions reductions and removals in New Zealand is outlined in paragraph 7474 to 75;75¹⁸
 - 107.2. principal risks and uncertainties associated with emissions reductions and removals in paragraph 9492 to 98;¹⁹
 - 107.3. projected emissions and removals for the emissions budget period in paragraph 76 to 91;²⁰ and,
 - 107.4. the need for emissions budgets that are ambitious but likely to be technically and economically achievable in paragraph64 64 to 73.⁷⁰²¹
- 108. I have also considered how the emission budgets proposed in this paper set New Zealand on a path to meet the 2050 target and contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5°C above pre-industrial level, as required by section 5W(a) of the CCRA.

¹⁷ CCRA, section 5ZI(3)

¹⁸ CCRA, section 5ZC(2)(a)(i)

¹⁹ CCRA, section 5ZC(2)(a)(ii)

²⁰ CCRA, section 5ZC(2)(b)(i)

²¹ CCRA, section 5ZC(2)(b)(iv)

- 109. These first three emissions budgets determine the course for stepping down the necessary level of greenhouse gas emissions permitted and required for each emissions budget, with the view to eventually bring us closer to our 2050 target. Our 2050 targets are set on the basis of contributing to the global efforts to limit temperature rise to 1.5°C.
- 110. IPCC advice is that reducing greenhouse gas emissions by 2030 will have a higher chance of limiting peak warming to 1.5°C. The Commission concluded that the percentage changes in GHGs under its demonstration pathway were within the IPCC global ranges for 2010 to 2030 that are compatible with the 1.5°C global temperature goal (although the Commission uses a gross-net approach, its pathway is not directly comparable). As the first two emissions budgets cover the period from 2022 to 2030, the IPCC advice about the need for action to 2030 is important.
- 111. The first set of emissions budgets clearly defines the transition pathway out to 2035 the halfway point towards meeting our 2050 targets. Meeting these emissions budgets represents a reduction in emissions of around 130 Mt CO₂-e from 2022 to 2035. This sets us up to continue with our trajectory to step down our emissions after 2035. In doing so, we are also contributing to global efforts to limit temperature rise to 1.5°C.
- 112. As our modelling suggests, if we continue with this course, noting emissions budgets have not been set for after 2035, this will put New Zealand in a better position to reach our 2050 targets and continue to contribute to the global efforts to limit temperature rise to 1.5°C. With projections, comes uncertainty and risks that increases the further into the future our estimates are for.
- 113. The Commission also specifically considered the pace of change when coming to its recommendations on the emissions budgets. Acting too slowly pushes the burden of addressing climate change on to young people and future generations. Acting too quickly increases the transition cost, for infrastructure and asset replacement, and can have unintended consequences for people, society and the economy. In light of the Commission's advice on these considerations, the proposed budgets balance these concerns.

114. Out of Scope

115. There are further matters that I am required to consider under the CCRA and have received advice on. My consideration of this advice has contributed to my decision to propose the emissions budgets in this paper. I believe that this decision in proposing the final emissions budgets is in accordance with the requirements of the CCRA.

Next Steps

<u>Cross-party consultation and Parliamentary debate</u>

- 116. The CCRA requires the Minister to consult the appropriate representative of each of the political parties represented in the House before notifying emissions budgets.²²
- 117. The consultation must meet the legal standards for proper consultation but does
- not require agreement to the emissions.

 All parties in Parliament were consulted on the proposed emissions budgets, as by section 5ZD of the CCRA. The Green Party provided a formal for lower hudgets in the 2022 – 2035 period, noting that many submitters to the Climate Commission's consultation urged more ambitious action. In its response, the Green Party recognised that as a developed country, Aotearoa New Zealand bears a global responsibility to act as fast as possible in reducing emissions. The Green Party preferred budgets that give greater certainty of limiting global average temperature increase to no more than 1.5°C above pre-industrial levels.
 - 119. Te Pāti Māori did not provide a formal response but indicated the desire for a more ambitious set of emissions budgets. The Labour Party did not provide a formal response but indicated its support for the proposed emissions budgets. The National Party did not provide a formal response and did not express opposition to the proposed set of emissions budgets during consultation discussions. The Act Party did not provide a formal response and indicated that it did not support the proposed emissions budgets.
 - 120. The Commission also recommended that the Government commit to seeking cross-party support on emissions budgets and debating emissions budgets in Parliament before they are notified, so that the positions of all political parties are on the record.
 - 121. I briefed Cabinet on my plans for the cross-party consultation and holding a parliamentary debate by way of oral item on 14 March 2021 have taken the necessary steps to enable a special debate to be held on 12 May 2021.
 - 122. The intent of the Commission's recommendation is that we strive for cross-party support, but it does not require that we get it. The debate is intended to ensure that the support (or otherwise) of political parties is on the Parliamentary record.
 - 123. The draft parliamentary motion asks the House to express its support for the first set of emissions budgets - not to formally adopt them as if it were a decision for Parliament.
 - 124. I have now sent letters to the leaders and/or climate change spokespeople of all the Parties represented in Parliament to seek their views on both the proposed emissions budgets and the proposal for a Parliamentary debate seeking crossparty support.

²² CCRA, section 5ZD(1)

- 125. The letters present the proposed emissions budgets that were agreed in principle in August 2021 and consulted on through the discussion document issued in October 2021. They also acknowledge the recently discovered error in the advice we received at the time. Clarification of this error is detailed in paragraph 3740 to 454545.
- 126. The consultation letters and the proposed draft motion for the debate both stress that cross-party support would give a strong and enduring signal for the future.
- Cross-party support would give people, including businesses and investors, the greater certainty and confidence they need to make low-emissions investments and changes in behaviour.

Notification and Gazettal

128. As stipulated by the CCRA, the finalised the emissions budgets must be notified in the Gazette, presented to the House of Representatives by the Minister, and be made publicly available at the direction of the Minister.²³

Sharing information with Commission to enable ETS regulation-making

- 129. The Commission is required to provide advice on the New Zealand Emissions Trading Scheme unit limit and auction price control settings after the first emissions budget is set.
- 130. I must consider this advice as part of recommending amendment regulations for these settings for 2023-2027. These amendment regulations must be gazetted no later than 31 December 2022. To facilitate this, I anticipate sharing information on emissions budgets with the Commission ahead of public release.



²³ CCRA, section 5ZD(2)



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Financial Implications

- 145. Final decisions to set emissions budgets and the first emissions reduction plan will have financial implications, including wider fiscal and economic implications.
- 146. The economic and fiscal implications of meeting the budgets cannot be readily determined in advance as they will critically depend on the detail of how we meet these budgets this will be a function of our first emissions reduction plan and subsequent plans, market trends, global events and a number of other things both within and outside of the Government's control.
- 147. Meeting emissions budgets will require significant, sustained investment from the Government and throughout the private sector. The low emissions transition will have far-reaching impacts across many fundamental aspects of our economic lives, including the way people and goods move from place to place, how we design and build our homes and cities, what we consume, how those goods are produced, and how we power the economy.
- 148. These investment requirements have an economic cost, including the opportunity cost of alternative uses of investment capital. However, in general investment in low-emissions technology tends to reduce waste and increase efficiency, and the resulting lower operating costs offset the capital investment to reduce lifetime costs, often providing a rapid payback. § 9(2)(f)(iv)
- 149. An important focus of the emissions reduction plan is to support the flow of private investment towards climate-positive outcomes and the growth of the green finance market. The plan also addresses distributional economic impacts and seeks to ensure an equitable transition.
- 150. Climate change also creates significant opportunities for new jobs and higher wages. Opportunities include shifting our export base to meet the growing world demand for low emissions food and new niches for our hi-tech ICT industries in rolling out clean technology solutions. There will be general employment opportunities to meet the skills and workforce needs to enable all the key sectors to make the transition energy, agriculture, transport, building and construction, and waste. New sustainable investment brings with it other benefits: enhancing

- innovation and productivity with new technology, and further generating new economic activity.
- 151. The economy will continue to grow as we make the transition. The Commission's economic modelling estimated that under the prevailing policy settings, GDP would grow from \$270 billion in 2017 to \$388 billion by 2035 and \$487 billion by 2050. In comparison, the Commission's modelling estimated that meeting its recommended emissions budgets through its demonstration path would see GDP grow to about \$386 billion by 2035 (0.5 per cent lower than the base case) and \$481 billion by 2050 (1.2 per cent lower than the base case).
- 152. The Commission also modelled a scenario where key actions were delayed, for example, the move to electric vehicles and more efficient farm practices. Delaying key actions like the move to electric vehicles and embedding more efficient farm practices would lead to higher cost actions being required and make it harder to maintain agricultural production. The overall impact to GDP would be higher - potentially reducing GDP by up to 1.0 per cent in 2035 and 2.3 per cent in 2050 Affithese key measures for New Zealand's low emissions transition are not successfully rolled out.
- 153. The fiscal implications of the emissions budget remain uncertain and will continue to depend on the Government's policy choices over time. The CERF has been established with \$4.5bn of cash proceeds from the NZ ETS, based on the Treasury's forecasts of proceeds over the period from 2022/23 to 2025/26. This was articulated as a "down-payment" for our climate spending, beginning with a focus on mitigation through the first emissions reduction plan. The CERF is expected to be reviewed and the available funding increased as necessary to invest in high-value initiatives that will help achieve the emissions budgets.

Legislative Implications

- 154. Setting emissions budgets has no direct legislative implications.
- 155. The legislative implications of any decisions on policy proposals required to meet the emissions budgets through the emissions reduction plan will be considered when final policy decisions are made. Drafting approval for legislative amendment would be sought at the time of policy decisions, if the policy is 7 ACX 7002 indicated in the plan but is scheduled for development on a longer timeline.

Impact Analysis

Regulatory Impact Statement

- 156. Setting the targets for the emissions budgets is not a regulatory proposal and therefore Cabinet's impact analysis requirements do not apply.
- 157. There is a Regulatory Impact Statement for the Cabinet paper Emissions Reduction Plan: launch of the first Plan, which is scheduled to go to Cabinet Business Committee on 19 April 2022.

Climate Implications of Policy Assessment

- 158. The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements apply to this proposal as a key objective in setting emissions budgets is to reduce emissions. However, the impact of setting the emissions budgets is difficult to disaggregate and accurately quantify.
- 159. Setting emissions budgets will have direct implications on the NZ ETS cap and unit supply volumes. The Climate Change Commission will make recommendations on the NZ ETS cap, auction volumes and auction price control settings following the publication of these budgets and the emissions reduction plan. The Minister is required to consult before seeking policy decisions on relevant regulation amendments.
- 160. Any change in available units is unlikely to directly result in a substantial emissions impact itself as ups or downs in the auction volume will be absorbed by the existing stockpile of units. The management and reduction of the stockpile over time is a key risk to achieving any given emissions budget.
- 161. Setting the emissions budgets will have a significant indirect impact on emissions as the intended level of impact of policies and measures within New Zealand's first emissions reduction plan will be directly reflective of the emissions budget levels, particularly for the first budget period.
- 162. Achieving emissions budgets of 290,305 and 240 Mt CO2-e for emissions budget periods one, two and three represents emissions reductions of 11.5, 43.5 and 73.7 Mt CO₂-e respectively against current baseline projected emissions over these periods.²⁴
- 163. Policies and measures within the emissions reduction plan are being assessed for their emissions impact where appropriate and possible, and will be disclosed to Cabinet as final decisions are sought.

Population Implications

- 164. When determining an emissions budget, the CCRA requires the Commission and the Minister to have regard to the distribution of those impacts across the regions and communities of New Zealand, and from generation to generation.
- The population implications of policies
 the first emissions reduction plan were detailed in the relevant printing final policy decisions from Cabinet. Or will be at the time future policy decisions are brought to Cabinet, if the policy is indicated in the plan but is scheduled for development on a longer timeline. 165. The population implications of policies and strategies developed for inclusion in
- 166. Where specific policy proposals have been decided by Cabinet, the final advice were addressed through Regulatory Impact Statements.

²⁴ Assuming closure of the refinery and that the Tiwai Point aluminium smelter remains open in the baseline.



167. The first emissions reduction plan includes further information on the distributional impacts of polices and measures. It will also include a response to the Commission's recommendation to develop a comprehensive Equitable Transitions Strategy.

Te Tiriti o Waitangi

- 168. Te Tiriti/Treaty principles require that the Crown be properly informed of Māori interests and act reasonably and with the utmost good faith towards Māori. In addition, when determining an emissions budget, the CCRA requires the Commission and the Minister to have regard to the to the likely impact of actions taken to achieve an emissions budget and the distribution of those impacts across the regions and communities of New Zealand, and from generation to generation.
- 169. The final emissions reduction plan includes actions for an Equitable Transitions Strategy, to recognise and mitigate the impacts of the transition on employees, employers, regions, iwi and Māori and affected communities.
- 170. The plan also contains actions for building a platform for Māori climate action, that will enable Te Tiriti/Treaty-led relationships and recognition of Māori rights and interests in the climate response [MCR-22-MIN-0007 refers].
- 171. Māori engagement during the development of the draft plan was impacted by the large reform agenda, COVID-19 and confusion around the relative roles of the Commission and the Government. However, the platform for Māori climate action proposals is designed to provide flexibility for Māori to further develop and shape implementation. Feedback from Māori on the emissions reduction plan consultation was summarised in the Cabinet paper emission reduction plan: Te Tiriti o Waitangi and the role of Māori in the transition [MCR-22-MIN-0007].
- 172. I recognise the Commission's advice (based on feedback from Māori) that Māori, iwi and hapū are likely to be disproportionately vulnerable to the impacts from the transition to a low-emission and climate-resilient economy.
- 173. It is important that while support for strong climate mitigation is high amongst Māori – action does not come at the expense of Māori rights and interests. Upholding Te Tiriti principles throughout the implementation of emissions reduction policies and strategies will help to ensure this does not happen.
- A large Māori asset pase contreated in the large Māori asset pase contreated in the large material resources, and arrangements over forests (native and plantation) and water. Consideration or settlement legislation and the impacts of policies on this asset base will be critical implementing the emissions reduction plan. 174. A large Māori asset base currently sits in the primary industries, as well as

Human Rights

175. There are no inconsistencies between these proposals and the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Consultation

- 176. The following agencies were consulted in the development of this paper: Ministry of Business, Innovation and Employment; the Treasury; Ministry of Foreign Affairs and Trade; Ministry for Primary Industries; Energy, Efficiency and Conservation Authority; Ministry of Social Development; Ministry of Transport; Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development; Department of Conservation; and Department of Internal Affairs.
- 177 Department of Prime Minister and Cabinet were informed.
- 178. As required by section 5ZD(1) of the CCRA the Minister of Climate Change has consulted the appropriate representative of each of the political parties represented in the House of Representatives.

Communications

179. The Ministry for the Environment is working to develop a communications plan for announcements relating to the emissions reduction plan in 2022, dependent on Cabinet decisions and alignment with announcements on Budget 2022.

Proactive Release

180. I propose that this paper is proactively released on the Ministry for the Environment's website after the emissions reduction plan and emissions budgets have been agreed and published in 2022, subject to redactions in keeping with the principles of the Official Information Act 1982.

Recommendations

The Minister of Climate Change recommends that the Committee:

- Note that the Minister of Climate Change (the Minister) must decide and notify the first set of three emissions budgets for the periods 2022-2025, 2026-2030 and 2031-2035 by 31 May 2022.
- 2 **Note** that the Minister is the statutory decision-maker under the Climate Change Response Act (CCRA) for setting emissions budgets, and it is the Minister who is responsible for meeting the emissions budgets.
- Note that I have considered the purpose of the CCRA and a range of matters including under sections 5W, 5ZB and 5ZC of the CCRA as required to inform my decision-making in setting the final emissions budgets.
- 4 **Note** the purpose of this paper is to seek Cabinet's final consideration of the Minister's proposed decisions.
- Note that in August 2021 Cabinet agreed to take a decision in principle on emissions budgets to help clarify the government's intentions for its forthcoming consultation over the contents of the emissions reduction plan [CAB-21-MIN-0320.01 refers].

6 **Note** that Cabinet agreed in-principle to broadly accept the Climate Change Commission's (the Commission) recommended emissions budgets to take account of revised forestry projections resulting from new information from a survey commissioned by Ministry for Primary Industries, as follows (rounded up to the nearest megatonne of carbon dioxide equivalent) [CAB-21-MIN-PORCHIVE 0320.01 refers]:

In-principle emissions budgets	Emissions	Emissions	Emissions
	budget 1	budget 2	budget 3
	2022 – 2025	2026 – 2030	2031 – 2035
All gases, net (AR5)	292 Mt CO ₂ -e	307 Mt CO ₂ -e	242 Mt CO ₂ -e

- 7 Note that there was an error in how this information was interpreted and reported to Cabinet at the time, and increased emissions in the first budget period 2022-2025 were attributed to emissions generated in the early stages of planting forests, when in fact the increase in projected emissions was due to revised estimates of deforestation intentions.
- 8 **Note** that the underlying rationale for adjusting the Commission's recommended emissions budgets was to take account of all the new forestry information, but as a result of the error Ministers were not aware the change in the first emissions budget period was driven by deforestation.
- 9 **Note** in my view it is not valid to 'relax' the emissions budgets to take account of greater than anticipated deforestation.
- 10 **Note** I propose to make further changes to the proposed emissions budgets for the second and third periods (2026-2030 and 2031-2035) to remove an allowance for 2 Mt CO₂-e of deforestation in those future periods.
- 11 **Note** I now propose to set the following emissions budgets:

	Emissions	Emissions	Emissions
	budget 1	budget 2	budget 3
	2022 – 2025	2026 – 2030	2031 – 2035
All gases, net (AR5)	290 MtCO ₂ -e	<i>305</i> MtCO₂-e	240 MtCO ₂ -e

12 Note that achieving my proposed emissions budget of 290 Mt CO₂-e for the first emissions budget period would require a further 2 Mt CO₂-e of abatement.

- Note that since August 2021, Ministers and officials have made considerable 13 progress in identifying additional measures and increasing the estimated impacts of policies for inclusion in the emissions reduction plan.
- **Note** that analysis indicates that the proposed policies and measures have sufficient potential to achieve the reductions required in the first budget period and beyond.
- **Note** that Cabinet consideration of the final draft of the emissions reduction plan, including all policy decisions taken through to March and a comprehensive response to the Commission's advice and detailed recommendations, is being sought alongside this paper to publicly launch on 45 May 2022.
- **Note that** under the CCRA, once finalised by the Minister, the emissions 16 budgets must be notified in the Gazette, presented to the House of Representatives by the Minister, and be made publicly available at the direction of the Minister.
- Note that under the CCRA, the Minister must also provide a response to the 17 Commission's recommendations and specified related advice on emissions budgets, and this response must also be presented to the House of Representatives by the Minister and be made publicly available.
- 18 **Note** that my final response to the Commission will be subject to close scrutiny, including by the Commission and by select committee.
- 19 **Note** that I anticipate sharing information on emissions budgets with the Commission ahead of public release for the purpose of allowing them to pc Zeala. Act 7002 provide the next stage of their advice on New Zealand Emissions Trading Scheme settings.

Authorised for lodgement

Hon James Shaw

Minister of Climate Change