



PROACTIVE RELEASE COVERSHEET

Minister	Hon Simon Watts	Portfolio	Climate Change
Name of package	Update on sufficiency assessment for ERP2	Date to be published	

List of documents that have been proactively released

Date	Title	Author
29 May 2024	Briefing: Update on sufficiency assessment for ERP2	Ministry for the Environment

Information redacted YES NO

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Summary of reasons for redaction

Some information has been withheld from *[Document title]* under Section [section] of the Official Information Act [reason].

Briefing: Update on sufficiency assessment for ERP2

Date submitted: 29 May 2024

Tracking number: BRF-4753

Security level: [REDACTED]

MfE priority: Urgent

Actions sought from Ministers		
Name and position	Action sought	Response by
To Hon Simon WATTS Minister of Climate Change	Discuss the recommendations with officials Forward to CPMG members	4 May 2024

Actions for Minister's office staff
Return the signed briefing to the Ministry for the Environment (ministerials@mfe.govt.nz).

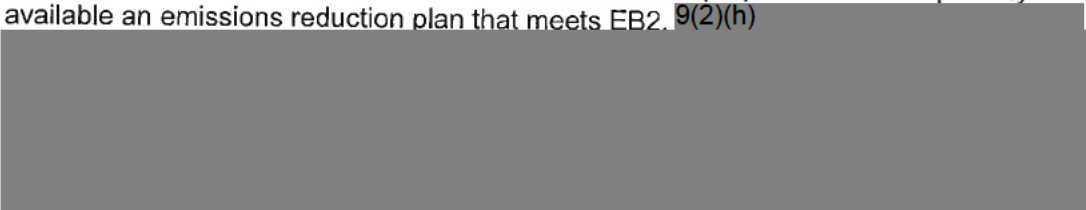
Appendices and attachments

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Minister's comments
<p><i>Paper does not clearly note that excludes ^{new} summer climate policies e emissions reductions so should do without delay.</i></p>

Update on sufficiency assessment for ERP2

Key messages

1. We previously advised you [BRF-4682 refers] on interim projections showing whether we are on track to meet emissions budgets. The purpose of this briefing is to outline the implications of these projections on your legal duty to develop a sufficient second Emissions Reduction Plan (ERP2) and seek your instruction on how to manage legal risk, including during forthcoming public consultation.
2. Interim projections show our ability to meet emissions budgets has become more challenging. On the central estimate from these updated projections, New Zealand will exceed EB2 by 4M but is still within the range of uncertainty (+/-18Mt). This is a change compared to the 2023 official projections which estimated New Zealand will overachieve EB2 by 24Mt.
3. Our understanding of sufficiency will continue to change over time. This is because our understanding of sufficiency is a snapshot in time which is impacted by updates to our emissions profile which is itself influenced by both global and national economic and social trends, updates in the understanding of the science of climate change (especially the science of emission measurements) and the adoption of new, and discontinuation of existing, policy interventions.
4. The difference in our understanding of sufficiency from the previous set of projections is due to changes in many of these factors. Key differences included changes to policy settings, such as the ending of GIDI, and different assumptions around carbon price and the closure of Tiwai Point aluminium smelter. There was also a significant difference caused by a different modelling approach being used for these interim projections.
5. The results of the interim projections highlight a key risk that needs to be actively managed. It is a legal requirement that the Minister must prepare and make publicly available an emissions reduction plan that meets EB2. 9(2)(h)

6. This challenge is compounded by the difficulty in providing precision about our assessment of sufficiency. This is because our understanding of sufficiency changes over time as emitting behaviours change, our modelling approach improves to reflect a better understanding of emission measurement science, and the Government takes decisions on key policies such as the ETS settings. In addition, external factors and unpredictable headwinds outside of the government's control create inherent uncertainty. Finally, the particular policy mix being pursued by this Government – a market-led approach with complementary measures – provides less certainty about the *timing* of emissions reductions compared to alternative approaches.
7. Officials are working to reduce this uncertainty and improve our modelling to support decisions on the final ERP.

8. 9(2)(f)(iv) [Redacted]

9. Management of this risk can be supported by how sufficiency is referred to in the discussion document for ERP 2. There is a judgement needed about how to articulate the sufficiency of the Government's *current* plan in the ERP2 discussion document.

10. You should note that the Climate Change Response Act requires you, as the Minister of Climate Change, to be satisfied both that the final plan is 'sufficient' to meet Emissions Budget 2 and that the consultation on the plan has been 'adequate'.

11. **Our overall judgement is that the Discussion Document provides a sufficient basis for consulting on, and confirming, a final ERP2 which will meet the legal requirements of the Act in December.** This is based on our best judgement, considering a range of factors, including (a) our understanding of the central estimate being 4Mt above the limit of EB2 but within the range of uncertainty 9(2)(f)(iv) [Redacted] (c) key policy decisions that are forthcoming but have yet to be included in the policy mix, including crucial decisions to be made this year on ETS settings, and (d) 9(2)(f)(iv) [Redacted]

12. There remains significant risks to sufficiency which will need to be managed and we cannot currently provide evidence, to the likely required legal standard, that the plan will certainly be sufficient. In view of this, we think you should highlight in the discussion document that the proposed policy mix *may* be sufficient to achieve the Emissions Budget, note that several decisions (such as ETS unit settings) have yet to be taken, and accompany it by language that signals the development of a contingency management approach. We judge that doing so best meets the requirement for adequate consultation.

13. 9(2)(h) [Redacted]

14. [Redacted]

Recommendations

We recommend that the Minister of Climate Change:



- a. **note** officials have developed interim projections that show our ability to meet emissions budgets has become more challenging but, on the central estimate from these updated projections, New Zealand will exceed EB2 by 4M (ie. 309Mt of emissions in EB2, compared to a budget of 305Mt).
- b. **note** these interim projections are planned to be published as part of consultation materials for the ERP2 discussion document.
- c. **note** there is a legal requirement that the Minister must prepare and publish an ERP2 that that meet EB2.
- d. **note** there are challenges in quantifying the sufficiency of the Government's plan, including because of the nature of the ETS and the interaction with enabling policies inside of the ETS as well as the inherent uncertainty of external factors beyond the government's control.
- e. **note** officials are working to reduce this uncertainty and improve our projections before preparing the final ERP.
- f. **note** the Government plans to take decisions on ETS settings, LUC restrictions, and afforestation on Crown land later in the year which will materially impact the sufficiency of the final plan.

g. 9(2)(f)(iv) 

h. **note** that the Minister of Climate Change has a legal duty to conduct 'adequate' consultation which needs to include an interim judgement on the sufficiency of ERP2 to achieve the second emission budget.

a. **note** that officials' judgement is that the Discussion Document provides a sufficient basis for consulting on, and confirming, a final ERP2 which will meet the legal requirements of the Act in December.

b. 9(2)(h) 

c. 9(2)(f)(iv) 



d. forward this briefing to members of the Climate Ministerial Priorities Group for their information.

NOTE: Forecast excludes Government

Principles incl 'double renewables' and

Should be reflected without delay.

Yes/No

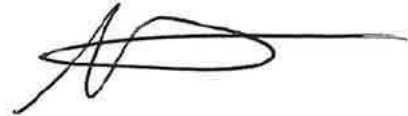
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Hon Simon WATTS
Minister of Climate Change

Date: 1/6/24

Advice

Interim projections show our ability to meet emissions budgets has become more challenging

1. In May 2024, officials developed interim projections using the Emissions in New Zealand (ENZ) Model to inform the development of ERP2 and to be published at a sector level in the forthcoming ERP2 discussion document. These results have been refined and updated following quality assurance processes and have minor differences to those reported to you previously [BRF- 4682].
2. The most significant finding of this analysis is that, compared to the previous projections, it has become more challenging to achieve future emissions budgets, including Emissions Budget 2 (EB2). On the central estimate from these projections, New Zealand will marginally exceed EB2 by 4Mt, compared to the 2023 official projections which estimated New Zealand will achieve EB2 by 24Mt. Although the central estimate is above EB2, there is an uncertainty range of plus or minus 18Mt, meaning that, under some scenarios where you might meet or exceed EB2.
3. The interim projections highlight New Zealand will continue to have a significant gap compared to our NDC1 commitment, which will require (on the basis of these projections) between 72Mt and 111Mt of international abatement. (This gap has increased from the 61Mt to 97Mt gap reported earlier because the new interim projected emissions are higher than 2023 projections [BRF-4108 refers].)
4. Table 1 below summarises the results of the modelling, as at 28 May 2024.

Emissions Budget (EB) levels – net, all gases	Central estimate and uncertainty range	
	2023 official projections (based on July 2023 settings and assumptions)	2024 interim projections (based on April 2024 settings and assumptions)
EB1 (2022-25) = 290 Mt (or 72.5 Mt annual average)	277 Mt (±7Mt)	288 Mt (±4Mt)
EB2 (2026-30) = 305 Mt (or 61 Mt annual average)	281 Mt (±15Mt)	309 Mt (±18Mt)
EB3 (2031-35) = 240 Mt (or 48 Mt annual average)	233 Mt (±30Mt)	260 Mt (±28 Mt)

5. A breakdown of the key factors driving the differences in the two sets of results are outlined below. The most significant differences were due to:
 - i Differences in the modelling approach – 12.8 Mt
 - ii Differences due to methodological changes and using the 2024 Inventory data – 7.6 Mt

iii Different assumption about New Zealand's Aluminium Smelter: previous modelling had assumed that it would close by end of 2024. This approach assumes it will remain open – 4.8 Mt

*New
2024
Control?*

6. Our understanding of sufficiency will continue to change over time. This is because our understanding of sufficiency, measured through emissions projections, is a snapshot in time. Sufficiency and projections are impacted by external factors beyond the government's direct control, updates to our latest understanding of our emissions profile (captured in the New Zealand Greenhouse Gas Inventory) which is itself influenced by both global and national economic and social trends, updates in understanding of the science of climate change (especially the science of emission measurements) and the adoption of new and discontinuation of policy interventions.
7. The interim projections were created to inform the discussion document in order to demonstrate 'how we are tracking' based on the latest available information. Official 2024 projections are under development and will be completed by the end of this year. While the approach is different, we do not know what direction this "difference" will push the official projections in, i.e. whether they are likely to show that we are closer or further away from emissions budgets.
8. Moreover, the interim projections used a model which, in its current form (as with our other projection models), does not model the ETS market. It has used an emissions price path as an input, rather than the model estimating the price that would limit net emissions to the budget, taking account of the behaviour of holders of stockpiled units and the related waterbed effect. It is intended that additional projections later this year will accompany the official projections and will model a dynamic emissions price that reflects the cap, but some uncertainty will likely remain due to the nature of the ETS market.
9. In theory, prices in the ETS should adjust so that net emissions are limited, and we meet budgets. However, because NZUs do not expire (and we have a significant stockpile), the supply dynamics of the ETS operate over a longer time frame than emission budgets. This means we cannot say definitively that the ETS will adjust to keep us within EB2 and EB3.
10. In addition, the impact of many enabling proposed policies for ERP2 have not yet been quantified and so have not been included in the results. Some of these policies will be quantified by the time we publish the final ERP but some are likely to remain unquantified. We are working with agencies to quantify as many policies as possible for the final plan.
11. We are working to reduce the uncertainty and improve our modelling to support final decisions on ERP, including by simulating ETS market dynamics in the ENZ model and providing updated official projections based on agency models. Further information will also be available for you when setting the final plan, including the annual ETS settings which is due to be considered by Cabinet in August, and the annual projections process using the 2024 greenhouse gas inventory which has not been completed.

The interim projections highlight risk that needs to be managed

12. The Climate Change Response Act requires the Minister of Climate Change to prepare an emissions reduction plan that sets out the policies and strategies for meeting the relevant emissions budget. It is a legal requirement that the ERP2, which must be published by December 2024, must set out plans and strategies that are 'sufficient' to meet EB2, and the Government must be satisfied with this when publishing the final plan. The Minister of Climate Change also has a responsibility to ensure that consultation on the plan has been 'adequate'.

9(2)(h)




17. The final plan that the Government publishes by December 2024 will need to demonstrate that we expect to meet (or fall below) EB2, in a quantified way as far as possible or where quantitative estimates of abatement are not possible, with detailed qualitative analysis to support this conclusion. It will also need to take account of uncertainty about the effectiveness or delivery of policies and set out the Government's contingency management approach to manage delivery risk.

¹ R (*Friends of the Earth*) v Secretary of State for Energy Security and Net Zero [2024] EWHC 995 (Admin)

The legal test on sufficiency is hard to meet

18. The ERP2 sufficiency test requires a high degree of confidence in demonstrating it can sufficiently achieve EB2. Providing this confidence requires evidence as to the expected abatement from policies and the delivery of these policies.
19. This is challenging for two principal reasons:
- i In theory, prices in the ETS will adjust so that net emissions will be limited. However, because NZUs do not expire and we have a significant stockpile, the supply dynamics of the ETS operate over a longer time frame than emission budgets. This creates uncertainty about *when* a specific amount of emissions reduction will occur, including in which emissions budget, and whether and to what degree market participants might use the stockpile
 - ii Many enabling policies the Government is progressing are new and have not been demonstrated in New Zealand. It is therefore difficult to attribute and quantify exactly how much additional emissions reductions they will enable and by when.
20. This challenge is compounded by the difficulty in providing precision about our assessment of sufficiency. This is because our understanding of sufficiency changes over time as external factors impact actual emissions, our modelling approach improves to reflect a better understanding of emissions, and Government takes decisions on key policies such as the ETS settings. In addition, external factors and unpredictable headwinds outside of the government's control create inherent uncertainty.

21. 9(2)(h)




22. In light of this uncertainty, you have a key judgement about your degree of comfort in the sufficiency of the Government's plan. The most important place where you need to make a judgement on sufficiency is in the final plan, but the discussion document will need to include content on sufficiency to ensure that consultation is adequate.

Ministers have options on how to manage this uncertainty

23. Our understanding of sufficiency will change between now and the end of the year. As noted above, officials are working to reduce uncertainty and improve our modelling to support decisions on the final ERP. However, there are also options for you to consider on further steps to manage the sufficiency risk.

Upcoming Government decisions

24. 9(2)(f)(iv)





9(2)(f)(iv)



You have a choice about how to discuss sufficiency within ERP2's consultation document

The Government needs to consult on EPR2 [Legally privileged]

32. The Minister of Climate Change has a legal duty to conduct 'adequate' consultation on ERP2. As a component of conducting 'adequate' consultation, and in the event of a challenge, a Court would expect (among other matters) there to be a summary of the key policies/levers that the Government intends to rely on to deliver the EB2 and analysis to illustrate why these policies/levers are expected to meet EB2.

33. 9(2)(h)

34. Both these factors mean an interim judgement on sufficiency needs to be made prior to consultation and then articulated in the ERP2 discussion document.

There are three options to address sufficiency in ERP2's discussion document

35. Where the Government decides to position the discussion document is a question of trading off the amount of litigation risk it is prepared to accept against its other objectives in presenting and promulgating its preferred policy approach.

36. Three options are outlined below and are ordered from highest risk to lowest risk. The options are to conclude that the Government:

i Believes that its proposed policy mix will be sufficient to meet EB2. This approach would signal that, notwithstanding the interim projections that currently show EB2 is challenging to meet, the Government is confident that the forthcoming decisions and changes noted above (at para 24) will be sufficient to meet EB2. It will also signal that the Government will manage further uncertainty through a contingency management approach.

i. *This approach is not recommended:* MfE does not consider that this articulation would be able to be justified in the event of legal challenge as, at this stage in the policy process, there is insufficient evidence to be *certain* of sufficiency.

ii Believes that its proposed policy mix may be sufficient. This approach is similar to the previous one but would acknowledge the degree of uncertainty more openly and would signal a greater openness to contingency management approaches including identifying additional policies.

iii Cannot currently be confident that the policy mix is sufficient. This approach would state more openly that there is a risk that the proposed approach may remain insufficient, even with the improved policy impact assessments and new ETS settings, and, through consultation, seek to better understand risk management approaches including additional policies.

37. You should note that the Climate Change Response Act requires you, as the Minister of Climate Change, to be satisfied both that the final plan is 'sufficient' to meet Emissions Budget 2 and that the consultation on the plan has been 'adequate'. **Our overall**

[REDACTED]

judgement is that the Discussion Document provides a sufficient basis for consulting on, and confirming, a final ERP2 which will meet the legal requirements of the Act in December. This is based on the following factors, taken together:

- i the central estimate of our most recent projections being 4Mt above the limit of EB 2 but *within* the range of modelling uncertainty (18Mt),
- ii the known limitations in our modelling 9(2)(f)(iv) [REDACTED]
- iii key policy decisions that are yet to be included in the policy mix 9(2)(f)(iv) [REDACTED]
- iv 9(2)(f)(iv) [REDACTED]

38. There remains significant risks to sufficiency which will need to be managed, and we cannot currently provide evidence, to the likely required legal standard, that the plan will be certainly be sufficient. In view of this, we think you should highlight in the discussion document that the proposed policy mix may be sufficient to achieve the Emissions Budget, note that several decisions (such as ETS unit settings) have yet to be taken, and accompany it by language that signals the development of a contingency management approach. We judge that doing so best meets the requirement for adequate consultation, including the duty to provide consultees with sufficient information to enable adequate consultation on the Government's overall plan.

39. We seek your direction on including language to this effect in both the Discussion Document and accompanying Cabinet paper.

40. 9(2)(h) [REDACTED]

41. We will reassess our advice on sufficiency for the final plan when new information will be available for our understanding of sufficiency which will include an update of official projections, additional projections that model a dynamic price, and an understanding of key policy decisions for ETS settings that will inform our understanding of sufficiency.

Managing sufficiency risk during the lifecycle of ERP2

42. Any ERP2 will need to outline a plan to manage emissions throughout ERP2's lifecycle. Projections are not guaranteed to be accurate and actual emissions can be influenced by changes to the wider economy, including dry hydro years, operational decisions at large emitting industrial plants, and changes in afforestation and deforestation rates. A market-led strategy has additional uncertainty about the achievement of a specific emissions budget because of the stockpile and waterbed effect.

43. Officials regularly monitor and revise projections, which means the Government needs a clear plan on how to adjust its approaches once it becomes apparent New Zealand is not on track to meet its emission budget.

44. 9(2)(h)



45. This approach to managing delivery performance risk would be broadly consistent with the Government's general delivery-focused performance management approach, including regular progress reporting on priority targets and quarterly action plans.



46.

