Aligning domestic targets and international commitments

Date Submitted:	11 March 2021	Tracking #: 2021-B-07646		
Security Level	Restricted	MfE Priority:	Non-Urgent	

	Action sought:	Response by:
To Hon James Shaw, Minister of Climate Change	read before meeting	15 March 2021

Actions for Minister's Office Staff	Return the signed report to MfE Forward to the Ministers of Agriculture, Foreign Affairs, and Trade and Export Growth
Number of appendices and attachments 2	Titles of appendices and attachments (ie separate attached documents): Appendix 1: Relevant provisions in the Climate Change Response Act 2002 for review of the targets
	Appendix 2: Potential implications for the first set of emissions budgets from changing the 2050 target

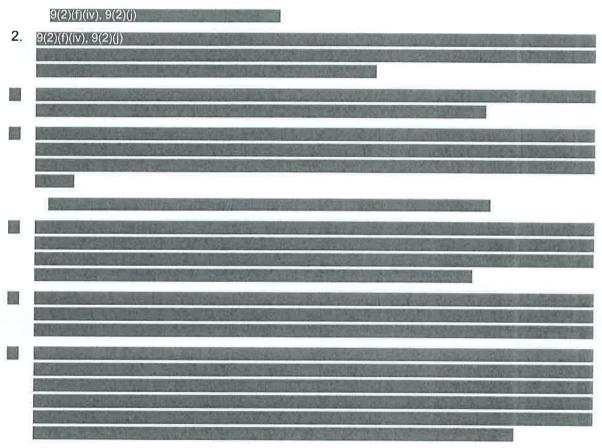
Ministry for the Environment contacts

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Aligning domestic targets and international commitments

Key Messages

1. You requested information on options for changing the 2050 targets in the Climate Change Response Act 2002 (the Act). We interpreted this request as relating to immediate changes to the Act. This briefing responds to your request and also provides information on the impacts and potential risks of these changes.



8. We note that the Commission's draft advice was clear that relying on forestry removals before 2050 is likely to make maintaining net-zero long-lived greenhouse gases emissions difficult after 2050. A net-zero-all-gases target would require substantial additional carbon dioxide removals in order to go net-negative for long-lived gases. This could require up to an additional 3.2 million hectares of native forests to be established between now and 2050, or, 0.8 million hectares of *Pinus radiata*, with on-going planting required to maintain net-zero beyond 2050.1

Considerations for amending the targets in the Act in the short term

Broadly, the Government is able to introduce legislation at any point and could do so to amend the targets in the Act. Amending the targets would be a complex undertaking and would require wider, flow on changes to the Act. For example, amendments would also need

¹ For comparison, the Commission's headwinds scenario (which takes New Zealand to roughly net zero emissions of long-lived gases in 2050), has 670,000 hectares of new exotic forestry and 440,000 hectares of new native forestry by 2050.

- to clarify the process for review of the emissions budgets and ERP developed on the basis of the current targets to reflect the new targets, to reduce the risk of legal challenge.
- 10. Moving to a net-zero-all-gases target would increase the ambition of the targets and facilitate alignment with New Zealand's Nationally Determined Contributions (NDCs) in the future, as NDCs are required to be all-gases and economy-wide commitments.
- 11. A net-zero-all-gases target would be simpler to communicate both in New Zealand and internationally and would be consistent with the approach taken by other countries to aim for net-zero targets. Amending the target would help address concerns raised by some Governments (regardless of scientific merit) that New Zealand's approach may set a precedent which provides cover for others to omit, or require less effort from their economically significant sectors.
- 12. In addition, the majority (91 per cent) of submitters on the Zero Carbon consultation preferred a net-zero-all-gases target, and many in the agriculture sector preferred a point target for methane (however for the lower ambition side of the current range in the Act).
- 13. More analysis is needed to understand the detailed implications of any target change on key policy decisions for the emissions budgets and the ERP. Further Te Tiriti analysis is also needed to consider how the principles of active protection of Māori interests and partnership apply, given the duty on the Ministry to ensure Māori are not disadvantaged by ambitious targets whilst balancing the common benefits of a net-zero-all-gases target.
- 14. Potential risks include:
 - a. Likely delays to wider policy work on emissions reduction policy and substantive emissions reductions because of the focus on progressing new targets.
 - b. Potential impacts on the legitimacy of the Commission if the Government changed the targets without seeking their advice.
 - c. Risks to the durability and political consensus reached on the legislative framework and targets put in place by the Act.
 - d. Reopening the debate on the appropriate level for biogenic methane targets risks shifting focus from developing capacity to reduce emissions on farm, to relitigating targets.
 - e. The need for the ERP and the Long Term Low Emissions Development Strategy (LT-LEDS) to be reviewed in light of the new targets, and likely re-calibrated.

Future opportunities and avenues to adjust targets

- 15. There is a range of future opportunities and alternative avenues through which the 2050 targets could be considered, on slower timelines, either through signalling new policy direction, and via existing provisions of the Act. These options could include:
 - a. 9(2)(f)(iv), 9(2)(j)
 - b. Using the range of existing provisions in the Act for scheduled review of the targets. More specifically, the Commission's review of the progress of He Waka Eke Noa in 2022 and the Commission's scheduled review of the 2050 target in 2024.

Aligning New Zealand's Nationally Determined Contributions (NDCs) and domestic pathways

16. New Zealand's first NDC covers the period 2021-2030 (NDC1). NDC1 was set in the knowledge that it was likely the emission reductions required would be greater than what would be achievable solely through domestic action. This results in a 'gap' between the draft

- emissions budgets and NDC1, which we recommend be met through offshore mitigation.
- 17. Future NDCs may align with the domestic pathway set by emissions budgets under the Act rather than requiring the use of offshore mitigation (however, we have only seen a widening gap to date). Whether or not offshore mitigation is required depends on the ambition of each NDC, the progress made to reduce emissions in New Zealand, and the relevant emissions budgets.
- 18. It would be possible to amend the Act to incorporate NDCs. In our view, the best option for doing so would be to include in the Act the process by which NDCs must be determined rather than the exact targets themselves. The process could include the considerations needed by Ministers, consultation requirements, the role of the Commission and how to meet the Government's obligations under Te Tīriti. It would be important that including NDCs in the Act did not reduce the Government's flexibility when setting NDCs to respond to the latest science and international developments.
- 19. You have indicated you will seek Cabinet decisions on updating New Zealand's first NDC in the coming months and we note that New Zealand's second NDC (NDC2) is due to be submitted to the UNFCCC in 2025. NDC1 and the LT-LEDS will both be considerations in setting NDC2.

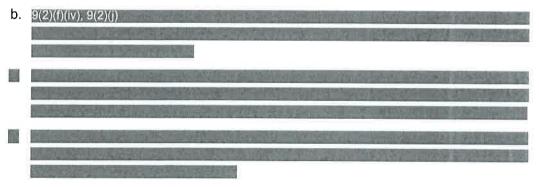
Next steps

- 20. We recommend that you engage early with your colleagues on any potential changes to the Act.
- 21. We also recommend that you forward this briefing to the Ministers of Foreign Affairs, Trade and Export Growth and Agriculture as these decisions would impact on their portfolios and cross-government work programmes.
- 22. We propose discussing the contents of this briefing note with you at the officials meeting on 15 March.

Recommendations

23. We recommend that you:

a. **Note** that changing the targets in the Climate Change Response Act 2002 (the Act) targets, would have significant impacts on climate change work programmes across ministerial portfolios;



- e. **Note** officials advise that meeting New Zealand's Nationally Determined Contribution under the Paris Agreement for 2021-2030 (NDC1) will require offshore mitigation, and that this must have environmental integrity;
- f. Note that future NDCs must also represent New Zealand's highest possible

ambition, and be a progression beyond previous efforts;

- g. Note that the Act could be amended to include the process for determining NDCs;
- h. **Agree** to forward this briefing to the Ministers of Agriculture; Foreign Affairs, and Trade and Export Growth;

Yes/No

i. Discuss this during the weekly officials meeting on 15 March;

Yes/No

j. **Agree** that this briefing and appendices will not be released proactively on the Ministry for the Environment's website until the Government has responded to the Commission's final advice.

Yes/No

Signature

Lisa Daniell Director

Climate Change

Hon James Shaw
Minister of Climate Change

Date

Date: 11/03/2021

Aligning domestic targets and international commitments

Supporting material

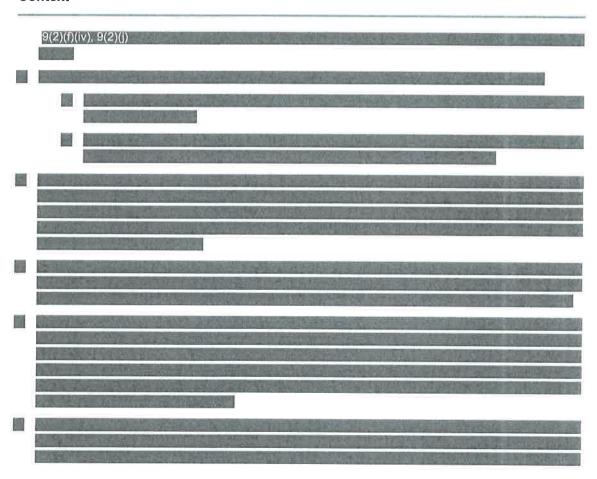
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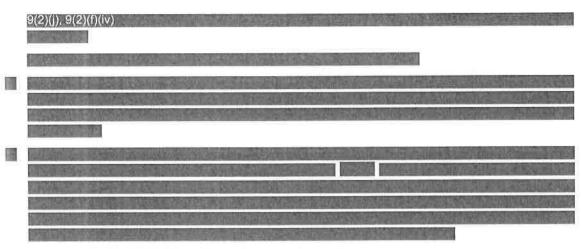
1. This briefing responds to your request for information on changing the Climate Change Response Act 2002 (the Act) to:



- c. align New Zealand's Nationally Determined Contributions (NDC) under the Paris Agreement with emissions budgets and the 2050 target under the Act
- 2. We interpreted this request as relating to immediate changes to the Act. This briefing responds to your request and also provides information on the impacts and potential risks of these changes.

Context





Net-zero targets for 2050

- 10. An increasing number of countries have set net-zero-all-gases targets, including an increasing number of major economies including the EU, Japan, Republic of Korea. We note that the Biden administration has also stated its intention for a net-zero-all-gases 2050 target.
- 11. The majority of submitters (91 per cent) on the consultation on the Zero Carbon Act preferred a net-zero-all-gases target. This group included NGOs, individuals, schools, universities, research institutes and community groups. The business/industry, local government and central government advisory body submitter groups were more divided about what target Actearoa New Zealand should set.

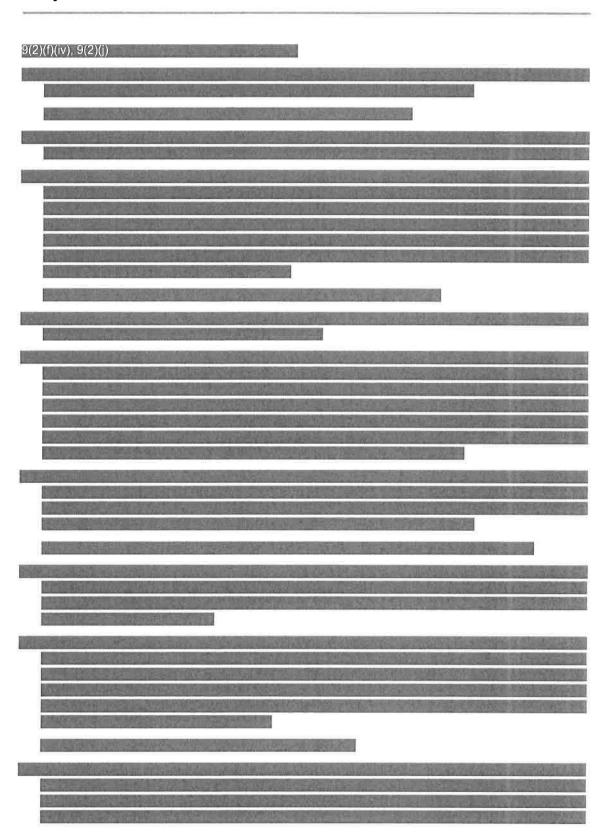
New Zealand's Nationally Determined Contribution under the Paris Agreement

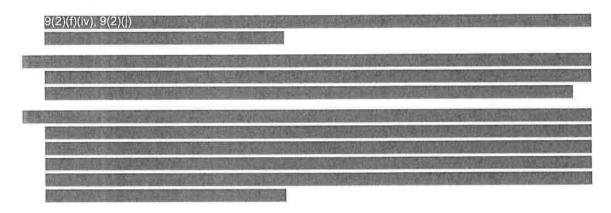
- 12. Under the Paris Agreement, Parties are required to prepare, communicate and maintain nationally determined communications (NDCs). NDCs should be a progression beyond previous efforts, reflect a Party's highest possible ambition in light of their national circumstances, and developed countries are expected to continue to take absolute, economy-wide emissions reduction targets.
- 13. NDCs should be considered alongside New Zealand's wider contributions including climate finance, adaptation commitments, and support for developing countries through capacity building and technology transfer.
- 14. New Zealand's current NDC (NDC1) is an economy-wide target to reduce greenhouse gas emissions by 30 per cent below 2005 levels by 2030.3 NDC1 was designed to be a 'fair and ambitious' contribution and was set in the knowledge that it was likely more stringent than what was likely achievable through domestic action alone. This means that there is a 'gap' between the draft emissions budgets (which represent the level of domestic emissions reductions) which we recommend be met through offshore mitigation.
- 15. The Commission has provided you with draft advice on NDC1 and its compatibility with 1.5°C. We have provided you with advice on the next steps for responding to the Commission's advice on NDC1 (2021-B-07550 refers). We note both you and the Prime Minister have signalled that NDC1 will change in light of the Commission's advice.

²9(2)(f)(iv), 9(2)(j)

³ NDC1 is managed as an emissions budget over the 2021-30 period using the GWP-100 metric.

Analysis and Advice





Setting a domestic net-zero target for all greenhouse gases in 2050

27. You have asked for advice on amending the 2050 target in the Act to a net-zero target for all greenhouse gases ("net-zero-all-gases target").

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The metric used is an important consideration when setting a net-zero-all-gases target

- 32. The balance of long-lived gases versus short-lived gases necessary to achieve the net-zero-all-gases target changes depends on the metric chosen. We have used Global Warming Potential with a time horizon of 100 years (GWP 100), as this is the metric used for reporting under the Paris Agreement. A net-zero target based on GWP 100 implies that New Zealand's overall contribution to global warming would decline over time.
- 33. Some agricultural stakeholders strongly advocate the use of the alternative metric GWP* to compare emissions of short-lived and long-lived gases. GWP* weighs biogenic methane emissions based on the additional warming they would cause over and above the warming caused by the current rate of emissions.

34.	9(2)(j), 9(2)(f)(iv)

Alignment of NDCs and domestic pathways to 2050

- 35. Although there is a 'gap' between NDC1 and the proposed domestic budgets, this is not necessarily the case for future NDCs and future budgets. It is important to note that whatever NDC1 may be, subsequent NDCs will have to show progression beyond this. The ambition of NDC1 may alter the calculus of what mitigation and policy options to pursue in subsequent NDCs including the mix between offshore mitigation and domestic abatement.
- 36. It is possible that NDCs and domestic budgets may align over time, as it is not clear how international carbon markets will develop from now until 2050. A number of countries have taken neutrality goals by 2050 which also reflects the Paris Agreement Article 4 which states that Parties' collective efforts should aim to "achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century".

Including NDCs in the Act

- 37. The purpose of the Act is defined as to enable New Zealand to meet its international obligations under the Paris Agreement. 9(2)(f)(iv)
- 38. The best option for including NDCs in the Act would be to incorporate the process by which an NDC is determined. This would avoid the need to amend the Act every five years when NDCs are updated in synch with the Paris Agreement ambition cycle.

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Setting future NDCs

40. The Commission's draft advice noted that determining the appropriate level for an NDC is a political decision that cannot be arrived at 'scientifically' and needs to balance a range of factors.

41. New Zealand is due to submit its second NDC in early 2025 (NDC2), which will start from 2031. Prior to submission, decisions will be needed on the target and period of NDC2, noting that it must represent New Zealand's highest possible ambition and a progression beyond NDC1. In addition, decisions on NDC2 will need to consider a range of factors including principles for global effort sharing, tolerance for climate and reputational risks and economic impact; updated science (e.g. the IPCC's sixth assessment report), and the Paris Agreement's global stocktake. Work on NDC2 will need to begin well in advance of the submission due date, and is likely to include public consultation.

Amending the Act in the short term

- 42. The Government can introduce legislation at any time, although this is subject to the constraints of having sufficient Parliamentary support, the Crown's obligations under Te Tiriti o Waitangi, often the need to engage with affected stakeholders and the public first, and the practical considerations of the time and resource required to do so.
- 43. It is not clear how the costs associated with additional removals (or additional purchase of offshore mitigation) which could be required under these proposals would be distributed, and this question is likely to be of high interest for many New Zealanders. Given the previous consultation and engagement, and the strong and likely diverse views on changing the 2050 target 9(2)(i)(iv), 9(2)(j) , we recommend consulting on these proposals.

Impacts on the Emissions Reduction Plan and emissions budgets

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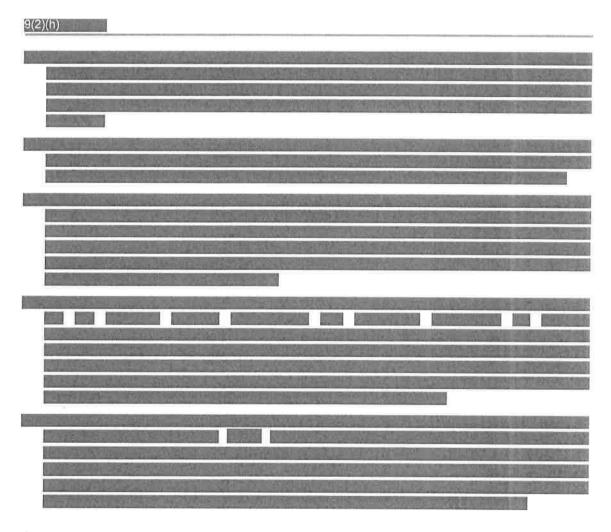
Alternative opportunities and avenues to adjust targets and set the direction of NDCs

47. We note that the Act includes provision for review of its targets, and sets a clear role for the Commission in advising on any changes (see Appendix 1).

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49. This could then be supported by an amendment to the Act following the Commission's

- scheduled review of the progress of He Waka Eke Noa in 2022 and the Commission's scheduled review of the 2050 target in 2024. (Appendix 1 outlines the Act's provisions for review of its targets).
- 50. You have indicated you seek Cabinet decisions on NDC1's ambition in the coming months and we note that NDC2 is due to be submitted to the UNFCCC early in 2025. The LT-LEDS and NDC1 will both be factors in determining NDC2.

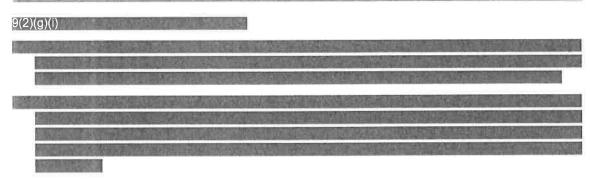


Consultation and Collaboration

56. The Treasury and the Ministries of Business, Innovation and Employment, Primary Industries and Foreign Affairs and Trade were consulted.

⁵ Sections 61(2)(d) and (e), and sections 66(2)(f) and (g) of the Act. These provisions are not yet in force, but will commence on 31 December 2021.

Risks and mitigations



Resourcing priorities

59. Amending the Act to change the target would require significant resource from the Ministry and other agencies. Changing the 2050 target would require reviewing and likely recalibrating the Commission's proposed budgets and the ERP for compatibility with the new target. This would mean reprioritisation of resource that is currently focused on climate change policy and legislation.

Te Tiriti o Waitangi

- 60. The Crown has obligations to Māori as Tiriti partners to act reasonably and in good faith. This includes the requirement that policy decisions affecting Māori are well informed of their impact on Māori. Te Tiriti principles of active protection of Māori interests and partnership place a greater duty on the Ministry to ensure Māori are not disadvantaged by ambitious targets whilst balancing the common benefits of a net-zero-all-gases target.
- 61. It is important that any changes to the Act adequately consider impacts, positive and negative, on Māori. Māori are likely to be disproportionately affected by some climate change policies. For example, low-income whānau will be negatively affected by rising fuel prices, and the least likely to have access to affordable alternatives. The Māori economy is reliant on climate sensitive primary industries, including forestry, agriculture, fisheries and tourism and will be impacted both by climate change effects and climate change policies.
- 62. An amended target has significant implications for land and water use. We would need to consult with Te Arawhiti on the impacts this may have on current settlement negotiations and the durability of existing settlements. The Ministry would also need to consider individual iwi specific obligations under existing settlements to engage with them on climate policy.
- 63. As the Commission's consultation with Māori is already underway there is a risk that amending the legislation before this feedback has been integrated into the Emissions Reduction Plan and emissions budgets will undermine future consultation efforts by the Commission.

Stakeholder views

64.	9(2)(j)

65. Stakeholders have invested considerable time into the 2050 target, including through the Zero Carbon consultation in 2019 and the Select Committee process for the Bill. In addition, many are participating in the Commission's consultation on their draft advice. There is a

risk that revisiting the targets could result in 'engagement fatigue' and reduced participation and input from diverse views.

Financial, regulatory and legislative implications

- 66. Making the changes outlined above, would require amendments to the Act, which would have systemic and legislative implications.
- 67. Although the precise implications would depend on the changes made, it is likely that the implications would include:
 - a. Changes to the Act, primarily to section 5Q which sets the 2050 target
 - b. Provision requiring the review of the first emissions reduction plan and set of budgets
 - c. Possible consequential changes to the first emissions reduction plan and set of budgets in light of the new targets, following review
- 68. Change to the 2050 target may also require consequential changes to work underway that derives from the target; for example, changes to ETS settings regulations which are currently being developed based on the Commission's draft budgets, themselves derived from the target.
- 69. There are likely to be significant financial implications from a net-zero-all-gases target, as this would require additional removals to balance the remaining biogenic methane emissions in 2050. This has not been costed at this stage as the fiscal and economic implications would depend on policy decisions regarding how this should be funded. For example, how costs for additional planting or carbon capture and storage would be distributed.

Next Steps

- 70. We recommend that you engage early with your colleagues on any potential changes to the Act.
- 71. We also recommend that you forward this briefing to the Ministers of Foreign Affairs, Trade and Export Growth and Agriculture as these decisions would impact on their portfolios and cross-government work programmes.
- 72. We propose discussing the contents of this briefing note with you at the officials meeting on 15 March.

Appendix 1 Relevant provisions in the Climate Change Response Act for review of the targets

- 1. The Act has provisions and review of the targets built into its framework (Section 5T). These enable the Commission to review the level and the timeframe for achieving any or all aspects of the 2050 target, including the interim requirement to reduce gross emissions of biogenic methane to 10 per cent below 2017 levels by 2030.
- 2. The Commission will review the 2050 target (including the interim requirement) and provide its advice in conjunction with its recommendations on the fourth, fifth, sixth and any subsequent emissions budgets (i.e. in 2024, 2029, 2034). The Commission can also review at any other time at the request of the Government.
- 3. The Commission may recommend that the Government revise or amend the target if there have been or are likely to be significant changes in one or more of the following areas:
 - a. global action
 - b. scientific understanding of climate change
 - c. New Zealand's economic or fiscal circumstances
 - d. New Zealand's obligations under relevant international agreements
 - e. technological developments
 - f. distributional impacts
 - g. equity implications (including generational equity)
 - h. the principal risks and uncertainties associated with emissions reductions and removals
 - i. social, cultural, environmental, and ecological circumstances; and
 - j. if the Commission is satisfied that the significant change justifies the change to the target.

Appendix 2 Potential Implications for the first set of emissions budgets from changing the 2050 target

- 1. Changing the 2050 target in the Act to a net-zero-all-gases target, 9(2)(j), 9(2)(f)(iv) would require review and likely recalibration of the ERP and emissions budgets currently being developed.
- 2. Below we have outlined preliminary and initial analysis of these implications.
- 3. The Commission explored a range for 2050 pathways bounded by a "headwinds" (more barriers to adopting technology and behaviour changes in the future) and a "tailwinds" (fewer barriers) scenario. The Commission's draft report identifies pathways and proposed emissions budgets within that range as far as 2035.
- 4. For net emissions of long lived gases, the Commission's draft pathway through to 2035 is toward the lower (more ambitious) side of the scenario range. The "tailwinds" scenario reaches a substantially negative (close to -10 Mt CO₂-e) level of emissions in 2050.
- 5. To achieve an all-gases net-zero target in 2050, the pathway for gases other than biogenic methane would need to be much more negative in 2050. This level of abatement would take the pathway outside the scenario range considered by the Commission. Emissions would not necessarily have to diverge before 2035 (the end period of the first three budgets), but this would need review and decisions from government.
- 6. There would also be choices to make about when the emissions pathway should diverge from the Commission's proposed pathway. The emissions pathway to 2035 could still be appropriate but this would need to be assessed. However the policy measures put in place during the first ERP would likely need a stronger focus on long-term negative-emissions measures (including a greater planting rate of forests). Depending on the point target, the first ERP may need a stronger focus on mid-to-long-term options for technology/alternative farming systems and stronger measures for reducing emissions from waste.