

Sensitivity classification

**Office of the Minister of Climate Change****DEV - Cabinet Economic Development Committee****NDC Strategy****Proposal**

- 1 This paper seeks to clarify and confirm the Government's overarching strategic approach for meeting the ambitious challenge of New Zealand's first Nationally Determined Contribution under the Paris Agreement on Climate Change.
- 2 It proposes agreement to:
  - 2.1 give effect to the Government's declared priority for increased domestic action by building much greater emissions reduction ambition into the scope for the second emissions reduction plan (ERP2) covering the period 2026-2030 and required to be published by December 2024
  - 2.2 continue to make urgent progress on critical initial steps in the meantime, such as:
    - determined implementation of ERP1 to achieve and, if possible, exceed the current domestic emissions budgets
    - building a portfolio of potential offshore mitigation options with a focus on action in the Asia-Pacific region that supports sustainable development in developing countries
    - developing and communicating a public-facing articulation of the Government's NDC strategy, to be refined in parallel with developing ERP2, and for inclusion in the first international NDC progress report due by the end of 2024.

**Relation to government priorities**

- 3 The Government declared a climate change emergency on 2 December 2020. The Cabinet Business Committee (CBC) 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].

DRAFT ONLY - NOT GOVERNMENT POLICY

Sensitivity classification

- 4 New Zealand has a strong interest in an effective and ambitious global response to climate change. New Zealand is a small actor and cannot unilaterally prevent the adverse effects of climate change. It is in our interest, as well as those of our Pacific neighbours, for all countries to commit to and deliver ambitious action.
- 5 This paper proposes a new explicit formulation of the NDC commitment as an overall government priority, including setting out the strategic priorities for delivering on that commitment:
  - 5.1 In order to play our part in the global fight against climate change and be aligned with limiting global warming to 1.5 degrees Celsius, New Zealand has committed to a Nationally Determined Contribution that:
    - 5.1.1 sets a headline target of reducing net emissions by 50 percent below 2005 gross emissions levels by 2030
    - 5.1.2 commits to achieve this through a multi-year emissions budget approach over the period 2021-2030
    - 5.1.3 clearly sets out New Zealand's intention to use a mix of both domestic action and international cooperation to meet it.
  - 5.2 NDCs represent the highest possible level of international commitment short of a legal obligation
  - 5.3 The Government's order of priority for meeting the NDC is:
    - 5.3.1 maximising domestic action as its first preference

s 9(2)(i)

## Executive Summary

### *The Challenge*

- 6 New Zealand's Nationally Determined Contribution (NDC) is the centrepiece of our global contribution to the Paris Agreement to rein in climate change.
- 7 The Paris Agreement does not contain legally binding targets. Instead it relies on all Parties to set and honour their NDCs as the highest form of international political commitment short of a legal obligation.
- 8 In 2021, we strengthened our NDC commitment for the period 2021-2030 by setting a headline target of reducing net emissions by 50 percent below 2005 gross emissions levels by 2030.

- 9 We committed to achieve this strengthened NDC through a multi-year emissions budget approach over 2021-2030, starting from our 2020 base year position. At the time the NDC emissions budget was calculated to be 571 MtCO<sub>2</sub>-e.
- 10 Our NDC also includes a strong commitment to international transparency and regular progress reporting. It is not a matter of ‘balancing the books’ in 2030, and there is no ability to borrow from future periods. We committed to taking action from the outset and showing our progress as we go.
- 11 Looking out to 2030, New Zealand’s NDC commitment is substantially greater than the statutory levels of domestic action we have set under the Climate Change Response Act. Combining our current projected emissions for 2021 with the first two emissions budgets covering 2022-2025 and 2026-2030 yields a comparable domestic emission budget for the NDC period of 670 MtCO<sub>2</sub>-e.
- 12 This means there is currently an estimated 99 MtCO<sub>2</sub>-e gap to fill over and above achievement of our domestic emissions budgets. This is roughly twice again the reductions we are now making under the first emissions reduction plan to meet the emissions budgets over the 2021-2030 period. This is also the equivalent of around 15 months of net emissions at current levels.
- 13 The emissions reduction plan we have in place is capable of meeting the first two domestic emissions budgets. However, this will be an ongoing implementation challenge and current projections show that achieving the emissions budgets is finely balanced.
- 14 At this early stage of implementing the emissions reduction plan we appear to be tracking about 8 percent over our domestic emissions budgets. So our estimated NDC shortfall is likely higher still, currently projected at 107 Mt.
- 15 Increasing domestic action to meet more of our NDC commitment will require not only getting fully on track with our actions under the ERP, but also doing much more to reduce emissions beyond the first domestic emissions budgets for the period 2021-2030.

### *Meeting the challenge*

- 16 There are essentially only two ways to address this shortfall.
- 16.1 Additional domestic actions to reduce or remove emissions faster than the already challenging domestic net zero emissions pathway we have set under the CCRA
- 16.2 Acquiring emissions reductions or removals from other countries, ie Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6 of the Paris Agreement.
- 17 Cabinet has previously noted the need to access offshore mitigation to deliver the NDC cost-effectively but also expressed a strong preference to meet our NDC commitment as far as possible through domestic action. [CAB-21-MIN-0435]

- 18 However, as advised by the Climate Change Commission, even in the most technology optimistic scenarios a significant amount of offshore mitigation is needed to meet the NDC, as new technology development and adoption, and behaviour change, take time – and afforestation cannot deliver sufficient removals quickly enough.
- 19 Any options for additional domestic action to make significant inroads into the NDC shortfall would inevitably involve some potentially radical and highly disruptive departures beyond the established domestic transition pathway.
- 20 There would be significant up front costs, but also potential benefits in the longer term requiring full and careful evaluation before committing to them. Therefore I do not recommend Cabinet consider or commit to any of them at this time.
- 21 Determining the right balance between additional domestic actions and international mitigation in meeting our NDC1 goals will be an ongoing process. We will need to take a succession of decisions on additional ‘big call’ domestic options as and when these have been fully evaluated.

Using ERP 2 process s 9(2)(f)(iv)

- 22 In 2024, the government must publish its next emissions reduction plan (ERP2) as required by the Climate Change Response Act (CCRA).
- 23 This paper seeks agreement to expand the ambition and scope of work to develop ERP2. This would now be targeted not just on achieving domestic emissions budgets. It would also seek to provide feasible policy options for significant additional emissions reductions to contribute additional domestic action towards the NDC. s 9(2)(g)(i)
- 24 Development work and policy decisions to finalise ERP2 will take place over the next 18 months. This is an appropriate timeframe because serious options for additional domestic action will need time and effort to develop to the point where the full and wider costs and benefits can be clarified and realistically compared to acquiring international mitigation.
- 25 Using the second emissions reduction plan to achieve domestic emissions reductions well in excess of our current domestic emissions budgets therefore becomes the central plank of our NDC strategic approach.
- 26 This will require a focused and well-sequenced programme of work to identify, develop, and assess a range of greatly enhanced policy options and significant investment business cases.
- 27 I acknowledge that this will be a considerable step up for the whole machinery of government compared to the level of ambition and the policy development pipeline under the current settings and the first emissions reduction plan. Nevertheless, the ERP2 process is the right vehicle to carry out this work.

- 28 There is an established governance structure through the new interdepartmental executive board for climate change, ie the Climate Change Chief Executives Board (CCIEB) to drive the necessary policy development and analytical work. The CCIEB also provides a high level oversight mechanism to ensure appropriate quality standards, consistency of policy approaches across sectors, and coherence with other relevant government priorities, including seeking to ensure an equitable low-emissions climate-resilient transition.

#### *Afforestation and carbon removals*

- 29 New Zealand will not be able to meet much if any of the current shortfall on the NDC1 commitment through additional afforestation. This is due to the time taken before a new forest becomes carbon negative. However, additional afforestation, as well as other potential forms of removals, could play a crucial role in future NDCs.
- 30 For that reason, I plan to bring to Cabinet in [July] a strategy to set our long - term approach for carbon removals, including our expectations for the future volume of removals and a framework for recognising emerging forms of non-forestry removals in the future.

#### *Acting now to secure future access to international mitigation.*

- 31 In a parallel [timing tbc] paper I am bringing proposals for developing our international mitigation portfolio with a focus on the sustainable development goals of our developing country and multilateral partners in the Asia-Pacific region.

§ 9(2)(j)

- 33 We will need to commit some expenditure beginning in FY2023/24 towards acquiring international mitigation. This expenditure will enable us to show progress on the international cooperation component of our NDC and also will provide insights into the relative costs of different potential options, and how those costs might be minimised. There is early mover advantage

#### *Future NDCs*

- 34 This paper sets out my proposed approach to delivering on our current NDC commitment which covers the period through 2030. New Zealand has not yet made any NDC commitments beyond 2030, although the Paris agreement sets the requirement to do so and to demonstrate 'ever greater ambition'.
- 35 Like all other Parties to the Paris Agreement, New Zealand is expected to set its NDC2 early in 2025. We will receive further advice form the Commission on

CCRA targets and emissions budgets in 2024. I plan to come back to Cabinet early in 2024 with proposals for how New Zealand should develop its next, and future, NDCs.

## Background

- 36 New Zealand has a strong interest in an effective and ambitious global response to climate change. New Zealand is a small actor and cannot unilaterally prevent the adverse effects of climate change. It is in our interest, as well as those of our Pacific neighbours, for all countries to commit to and deliver ambitious action.
- 37 Nationally determined contributions (NDCs) are at the heart of the Paris Agreement and the critical key mechanism for constraining the long term global temperature.
- 38 All Parties are required to set and communicate successive NDCs over time, and report transparently on progress to achieve them. Each successive NDC should represent a progression compared to the previous NDC and reflect each country's highest possible ambition.
- 39 On 26 October 2021, Cabinet agreed to update Aotearoa New Zealand's Nationally Determined Contribution (NDC) to reduce emissions by 50 percent below gross 2005 levels by 2030, equating to a provisional emissions budget of 571 Mt CO<sub>2</sub>-e (CAB-21-MIN-0434).
- 40 New Zealand set this updated Nationally Determined Contribution to play our part in the global fight against climate change and be aligned with limiting global warming to 1.5 degrees Celsius. Advice from the Climate Change Commission showed that the previous NDC was not compatible with 1.5 degrees.
- 41 At the time Cabinet also:
- 41.1 Noted the Government's priority to meet the NDC as much as possible through domestic action, in support of the transition to a low-emissions climate-resilient future (CAB-21-MIN-0435)
- 41.2 agreed to complement domestic action with international cooperation to access offshore mitigation, taking a portfolio approach that focuses on sustainable development (CAB-21-MIN-0434).
- 42 In November 2022, I brought a paper to Cabinet to provide a progress update on international cooperation. I sought Cabinet agreement to authorise officials to progress discussions on carbon market cooperation with developing countries and signal New Zealand's intentions to purchase emissions reductions to meet its NDC. Cabinet decided to defer consideration of the paper [CAB-22-MIN-500 refers].
- 43 The focus of the November 2022 paper was squarely on progressing the next steps for accessing international mitigation. Therefore that paper did not emphasise the wider context of the Government's overall approach to

managing the NDC commitment. It did not elaborate on the Government's stated preference for domestic action. Nor did it explain how options for expanded domestic action would be developed and assessed to ensure that these could be progressed ahead of overseas purchases wherever that would be in New Zealand's best interest. The November 2022 paper noted that these wider matters could be addressed through developing an overall NDC strategy, without needing to delay preparatory work on international cooperation.

- 44 This paper is now addresses those wider matters relating to NDC strategy.

## Analysis

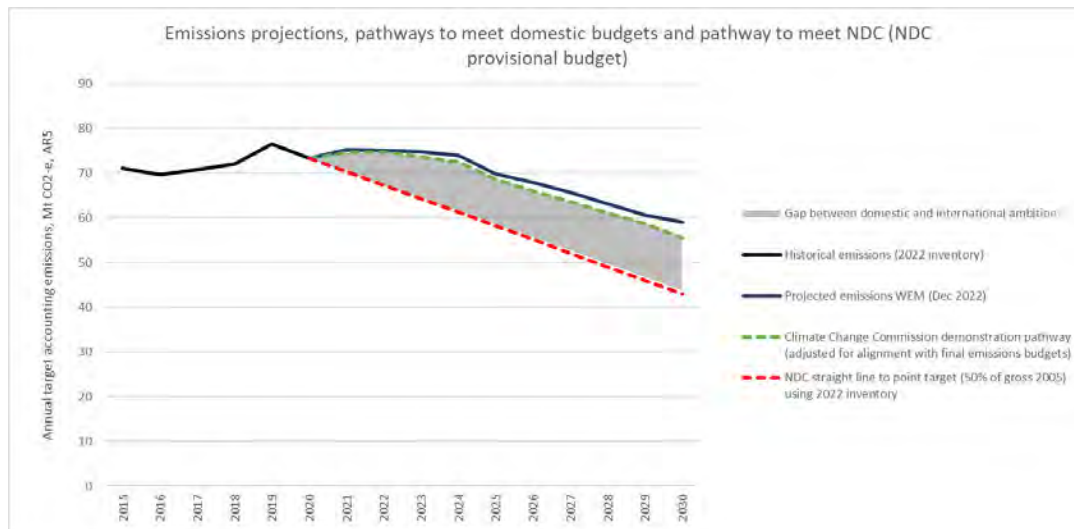
### *Strong global action on climate change is in New Zealand's best interest*

- 45 The impacts of climate change, including extreme weather events such as cyclones and flooding have already begun to severely impact people and property in New Zealand.
- 46 Although on a global scale New Zealand is a small actor, upholding the Paris Agreement and leading by example, both through ambitious emissions reduction targets and also serious and consistent efforts to meet these, is probably our strongest way to influence the global response and inspire larger actors to be ambitious and uphold their commitments under the Paris Agreement.
- 47 Our legislated domestic net zero transition framework through the CCRA is a good example of New Zealand starting to "walk the talk". The legislative framework itself was not quite world-leading as it was modelled on the UK's legislation and institutional framework. We are still at a relatively early stage of implementation – but we have established the Climate Change Commission (the Commission) and received several pieces of independent expert advice from it, set the first emissions budgets, and published the first emissions reduction and national adaptation plans.
- 48 But we haven't yet made it through a complete "cycle" ie. the regular five-yearly cycles of publishing plans, reporting results, independent reviews (by the Commission), resulting in new iterations of plans as time goes on. We will be judged on our follow-through.
- 49 New Zealand has the potential to be a global exemplar in how to manage an equitable transition to a prosperous and inclusive low-emissions, climate-resilient economy. Achieving this is also a key plank in our overall climate response strategy.
- 50 More than 190 countries around the world have committed to NDCs as part of the Paris Agreement.
- 51 Achieving these NDCs is vital to the collective goal of keeping within 1.5 degrees of global warming and avoiding the most catastrophic impacts of climate change.

## Key features of New Zealand's NDC

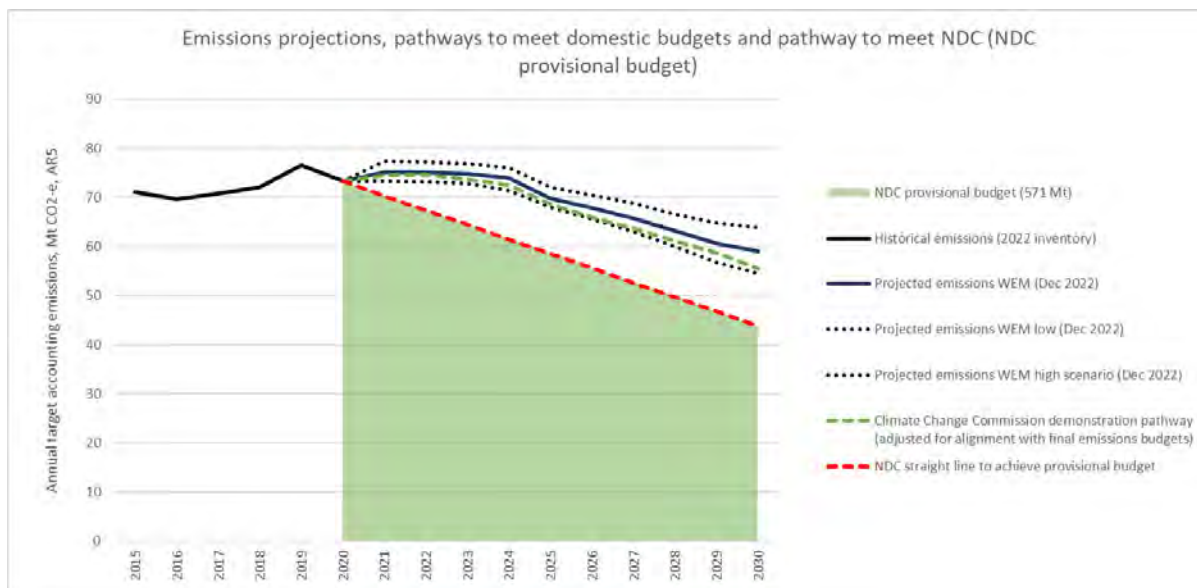
- 52 In keeping with the Paris Agreement, New Zealand's NDC is a commitment to a mix of ambitious domestic action to reduce emissions and an intention to take additional responsibility for reducing offshore emissions<sup>1</sup>.
- 53 Technically, New Zealand's has committed to a responsibility target for an absolute reduction in emissions to be managed using a carbon budget. The target is to reduce 2030 net emissions to 50 per cent below our gross 2005 levels by 2030. This corresponds to a provisional emissions budget of 571 Mt CO<sub>2</sub>-e over the period 2021 to 2030 (the NDC provisional budget).
- 54 The Paris Agreement allows each country to set its own NDC target reflecting its own national circumstances, with the expectation that countries will do what they have said they will do. However these are not legally binding targets and there are no penalties in the Agreement for countries that do not achieve their targets. International transparency is the key mechanism under the Paris Agreement for countries to hold each other to account. The international regime is a hollow shell unless countries follow through in a meaningful way with domestic action and reporting on progress.
- 55 We are already two years into the 10-year NDC period, and our first international progress report – formally the first Biennial Transparency Report (BTR) - is due by December 2024. We are currently already tracking at around 23 Mt over the straight line to the target, although projecting to bend the curve downwards later in the NDC period.

### Indicative versions of chart to illustrate NDC challenge



<sup>1</sup> The NDC explicitly declares the intention to use international market mechanisms and cooperative approaches: “In meeting its target New Zealand intends to use international market mechanisms, cooperative approaches and carbon markets that enable trading and use of a wide variety of units/emission reductions/mitigation outcomes that meet reasonable standards and guidelines to:

- ensure the environmental integrity of emissions reductions generated or purchased
- guard against double claiming/double-counting, and
- ensure transparency in accounting and governance.



### Addressing the NDC challenge

56 The solutions to the NDC challenge can be found in four main areas:

56.1 Established domestic action through ERP1

56.2 Potential for significant additional domestic action to reduce emissions

56.3 Potential for additional action on sequestration and removals

56.4 International cooperation

### Existing Domestic action

57 The Paris Agreement<sup>2</sup> emphasises that Parties shall pursue domestic mitigation measures to meet their NDCs.

58 In 2021 Cabinet confirmed a priority for domestic action [CAB-21-MIN-0435].

59 Key steps taken in 2022 included setting the domestic emissions budgets out to 2035 and putting the emissions reduction plan in place.

60 Officials from the Treasury and the Ministry for the Environment have recently completed and published a comprehensive *Climate Economic and Fiscal Assessment*.

61 Current projections for domestic net emissions over 2021-2030 range from xx to xx, so there is currently a projected shortfall of yy-yy in meeting the NDC.

<sup>2</sup> Article 4.2

- 62 These projections are model-derived estimates and not forecasts of actual out-turns, and so do not reflect a wide range of additional uncertainty around the levels of underlying economic activity that leads to emissions.
- 63 The low ends of these projections are based on full and successful implementation of all measures being progressed through the current ERP. It will take determined implementation and rapid corrective action to achieve this low end of the projected emissions.
- 64 In other words, the projected shortfall is at least yy over and above currently maximised domestic action.
- 65 It is still possible that circumstances might change over the next 7 years to be more in line with the Climate Change Commission's 'tailwinds' scenario. When this was modelled over two years ago it suggested potentially an additional 25 MtCO<sub>2</sub>-e of emissions reductions might be achievable.
- 66 However, this scenario is (in the Commission's own words) is "heavily reliant on factors outside the Government's control", eg. highly favourable technology availability and cost improvements and behaviour change resulting in much faster uptake of methane inhibitors and vaccines and electric vehicles.
- 67 The Commission's later October 2021 NDC advice presented economic modelling that suggested trying to force a tailwinds scenario outcome could impose ten times the expected economic cost of meeting the emissions budgets. The Commission advised that further domestic abatement by 2030 beyond the tailwinds scenario would be exponentially more expensive still.
- 68 The ERP sets out the portfolio and agency responsibilities for developing and implementing the more than 300 emissions reductions actions it contains. The Climate Change Chief Executive's Board (CCIEB or CCCEB?) has responsibility for monitoring progress and advising on corrective action that can be taken [CAB ref].
- 69 The CCIEB has recently provided Ministers with its first six monthly assessment report. This has noted significant implementation and outcome risks have already arisen.
- 70 Cabinet decisions over the first six months of the ERP to not progress some key elements as anticipated (notably the Sustainable Biofuels Obligation) have likely reduced projected emissions reductions by the order of at least one MtCO<sub>2</sub>-e abatement in the first emissions budget, and more in subsequent budgets. One MtCO<sub>2</sub>-e is around 10% of the additional abatement that was built into ERP1 after the emissions budgets were set, in order for it to be sufficient to meet the first emissions budget.
- 71 The CCIEB has assessed the current range of potential options to remedy this gap, and found that there are no straightforward options to offset this loss.

*Additional domestic action to reduce emissions*

- 72 However, even with this significant domestic action there is still a projected shortfall.
- 73 The relative costs of reducing emissions in New Zealand compared to overseas compared to is a key factor in expanding domestic action in line with the Government's preference, and in balancing the mix of domestic and international reductions needed.
- 74 But – as the CEFA clearly shows – estimates of costs are still highly uncertain, especially around the potential future price of internationally traded emissions reductions.
- 75 Meeting the first NDC will therefore be an ongoing challenge for government over the next eight years.
- 76 As things stand today, all currently readily feasible domestic emissions mitigation options have been incorporated into the ERP. This includes strategy and policy development processes over the next 2-3 years that should identify significant opportunities to enhance domestic action.
- 77 We now need to commit to a better and more enduring policy process to identify further additional domestic options. This will involve continuously working to develop, assess, decide on and implement a range of options to achieve the significant additional emissions reductions needed to meet the NDC, and make New Zealand's full contribution to the ambition of the Paris Agreement.
- 78 The established domestic mitigation arrangements under the CCRA (for setting emissions budgets and developing and implementing successive emissions reduction plans over time to meet them) already provide a process for finding new options over time to meet or exceed emissions budgets.
- 79 Building and maintaining a buffer against the risk of any element under-performing requires ongoing identification of new options. Deliberately developmental elements of the ERP (such as the energy strategy) also provides a mechanism to identify and develop significant new and additional mitigation actions.
- 80 This played out already between the time Cabinet considered the enhanced NDC in 2021 and finalised the emissions reduction plan in 2022. In addition to work on policies and proposals expected to be included in the first emissions reduction plan, officials also identified a broad range of early proposals for other domestic emissions reduction initiatives.
- 81 At the time Cabinet directed officials to undertake a process to narrow the list of proposals for domestic initiatives aligned with the emissions reduction plan and budget processes. The pathway to consider and develop these proposals further was subsequently built into the emissions reduction plan and the CERF budget round.

- 82 More new options can continue to be developed, built up and implemented through emissions reduction plans, for example through ongoing work on the energy strategy and the climate innovation platforms. These components of the emissions reduction plan were reconfigured to enable this in response to the initial exploration of significant additional domestic opportunities in 2021.
- 83 Any new options for additional domestic action to make even more significant in-roads into the NDC shortfall would of necessity involve some fairly radical and disruptive departures beyond the established domestic transition pathway.
- 84 Delivering an additional reduction to significantly close the current gap of around 100 Mt CO<sub>2</sub>-e by 2030 would need serious consideration of options across the range of remaining generic emissions reduction potential, such as:

5.9(2)(f)(iv)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Serious options will need time and effort to develop to the point where the full and wider costs and benefits can be clarified and realistically compared to acquiring international mitigation.

- 86 There are some historical lessons about the economic risks and social licence implications of governments driving through these sorts of 'big call' projects. There are also successful examples, both domestically and internationally, but there are no simple solutions.
- 87 [TBC: Cabinet recently made decisions on and investment package for a significant decarbonisation proposal and future engagement with other very large emitters. [CAB ref]]
- 88 There are other major low-emissions technology upgrade investments already being contemplated in New Zealand. These examples reveal a general challenge of low-emissions options that have the potential to be economically feasible with a positive NPV from a national resource perspective, but face a private investment hurdle as they do not generate the required commercial rate of return on capital and/or are not the most profitable option.

89 s 9(2)(f)(iv)

As clearly set out in the emissions reduction plan, the public and private sectors need to work together to provide the funding and financing that will be needed to reduce our emissions.

*Domestic sequestration and carbon removals*

- 90 The current contributions to NDC sequestration come almost entirely from forestry, and due to the time lags in afforestation and forest growth, these are mainly already fixed for NDC1.
- 91 However, ongoing incentives and the implications of policy settings that are being determined now are critical for NDC2, because of the long investment horizons and lag times involved.
- 92 There are a number of related policy decisions that are currently being progressed, which will impact how sequestration might fit into the Government's climate and land use policy framework.
- 93 There are some potential tensions between these workstreams. For example, the option set for the ETS review includes separating the market instruments to incentivise forestry from incentives for emission reductions, as a potential solution to the 'gross versus net' incentives issue and the potentially adverse environmental and social consequences of significant pine forest expansion. Whereas the He Waka Eke Noa sequestration strategy announcement has potentially created an expectation that additional sequestration categories could and should be brought into the ETS as it currently operates, alongside forestry.
- 94 Officials are undertaking a piece of work which considers how additional sequestration could be incentivised across the current and future climate and land use markets while also achieving a range of other outcomes including enhancing biodiversity, improving climate resilience, increasing innovation, and prioritising gross emissions reductions.
- 95 This is being advanced with urgency in order to inform policy decisions around the ETS review and agriculture pricing. For the purposes of the NDC strategy, it is sufficient to note that additional sequestration is unlikely to play a significant role in delivering. Any additional significant domestic intervention would need to come from the new policy interventions outlined at paragraph above.
- 96 Another contentious issue relates to the different ways that the GHG Inventory, the NDC target accounting system and the ETS treat the LULUCF sector. This creates confusion over distinctions like net/net and gross/net accounting when assessing progress against targets and ultimately draws into

question New Zealand's consistency with the 'economy-wide absolute emissions reductions' i.e. all sources and sinks, as required under the Paris Agreement and the CCRA.

- 97 I propose we set a longer term strategic goal of fully accounting for the LULUCF sector in subsequent NDCs and steadily bringing all valid forms of carbon removal into New Zealand's GHG Inventory and NDC target accounting systems as the science evolves and technology develops.
- 98 This would align our international target accounting with our domestic net-zero goal as we advance closer towards the 2050 net-zero target and means we will be able to account for all sources and all sinks of long-lived greenhouse gases on a net/net basis. However, there are some complications to overcome. The NDC target would need to be recalibrated as the 2005 base year emissions will be different when estimated on a net basis. Recalibration and revisions of this nature make it more difficult to track increased ambition through time, especially for international reporting purposes.
- 99 While in principle this approach could be expanded to deal with any major developments in ocean sequestration and non-nature based carbon capture and storage over time, the main focus for the foreseeable future in New Zealand is improving the net balance of emissions and removals in the LULUCF sector.
- 100 Bringing in all valid forms of carbon removal also brings in the risk of reversal, leading to increased emissions instead of increased removals. If all land use classes are brought into the accounting system ahead of our ability to manage them, the NDC gap might become larger rather than smaller.
- 101 New Zealand's non-forest land uses are currently an increasing net source of emissions. While our understanding of the land carbon balance in these land uses and how to manage that will improve over time, the near-term focus for these land uses will be on reducing emissions first.
- 102 Achieving the goal of fully accounting for the LULUCF sector and bringing all valid forms of carbon removal into the emissions inventory and target accounting the process therefore needs care and will take considerable time. There is a high likelihood that progress on scientific and methodological improvements would be relatively slow and measured.
- 103 However, the likely slow pace of achieving comprehensive LULUCF accounting need not become an obstacle to some important short-term progress. It will be important not to unnecessarily block initiatives that can secure additional carbon sequestration (or removal) where this can be validated to a reasonably high standard of integrity and additionality in advance of full inclusion in the Inventory or NDC target accounting. This flexibility will likely prove essential to enable progress to be made on CNGP off-setting, VCM development and HWEN sequestration incentives.

*International cooperation*

104 International cooperation will be required to meet the NDC. Currently it is the default option for up to two thirds of the NDC commitment if we cannot meet it from other sources. Availability and price are both still highly uncertain.

s 9(2)(f)(iv)

106 s 9(2)(j) Early movers will help 'set the rules' by influencing international best practice and the standards governing international carbon markets. It is better for New Zealand to be one of the more active 'rule-makers' rather than a passive 'rule-taker'.

s 9(2)(k)

108 A more detailed paper on building the international mitigation portfolio is on track to be considered [alongside/following] decisions on the NDC strategy.

*Overall strategic approach*

109 The fundamental challenge is to meet the NDC commitment in a way that:

109.1 maximises New Zealand's overall interests, taking a broad economics and wellbeing perspective

109.2 is distributionally fair and contributes to an equitable climate change transition.

110 Many high-level policy decisions around the NDC have already been made and clearly communicated, for example recognising the unavoidable need for both domestic and international action to meet the level of ambition and international responsibility New Zealand has committed to.

111 However, the challenge and potential high cost of meeting the NDC commitment is an ongoing concern. This tends to resurface each time difficult decisions come before Ministers on how to progress components of the high level NDC policy.

112 The recent public release of the first CEFA has further brought the size and potential economic cost of the NDC ambition into sharp focus.

- 113 I propose our strategy needs to have both an ongoing medium term focus over the remainder of the NDC period out to 2030, and a more immediate short term focus on critical immediate actions.
- 114 Over the medium term a range of options will need to be identified, developed, assessed, decided and implemented on an ongoing basis. A relatively high level of ongoing Ministerial engagement will be needed to adaptively manage the optimal balance of the options in light of ongoing assessments over relative costs and how these should be distributed.
- 115 We do not currently have an ongoing systematic 'pipeline' process in place to continue to identify possibilities for new and additional options and develop these to be decision-ready proposals (although the Climate Innovation Platforms and sector strategies under the ERP go some way to address this).
- 116 In 2024 there will be significant new reports and advice from the Climate Change Commission on the net zero target and emissions budgets, and the next emissions reduction plan will be finalised.
- 117 This points to late 2024/early 2025 as being the earliest that government can take a full assessment of initial progress towards the NDC and make any mid-course correction needed. In 2025 New Zealand is also expected to submit its second NDC. The Paris Agreement provides that successive NDCs will represent a progression compared to the previous NDC and reflect each country's highest possible ambition.
- 118 It will be important for Ministers not to seek to pre-empt or anticipate trade-offs and decisions that are not necessary to make now and would be best sequenced over the next 2-3 years.

s 9(2)(f)(iv)

[Redacted content]

- 120 I propose officials should begin developing and communicating a public-facing articulation of the Government's NDC strategy, based on the contents of this Cabinet paper. This strategy should be further refined in parallel with developing the second ERP over the next 18 months. There would also be an

international-facing version in the first international NDC progress report (ie. the first Biennial Transparency Report) also due by the end of 2024.

121 This would include some clear lines of strategy such as:

121.1 International abatement will be necessary under all options:

121.1.1 We need to do this effectively and efficiently.

121.1.2 There will be competition from other countries, and early mover advantage (including spreading portfolio timing risk between early and later purchase).

s 9(2)(f)(iv)

121.2 We need to ensure that the mix of international and domestic effort considers overall value to all New Zealanders:

121.2.1 This requires careful ongoing assessment of opportunities and risks of directing funds to international mitigation (including wider international strategic issues on climate change, development assistance, trade rules, biodiversity etc.).

121.2.2 It also requires careful ongoing assessment of opportunities and risks of re-directing international funds domestically.

122 This strategic approach will also need to recognise and deal with significant uncertainty about several key elements, notably:

122.1 wider macro-economic fundamentals that can have a much greater impact on emissions and emissions reductions than specific government interventions

122.2 the amount of emissions reductions that can be achieved through domestic mitigation (under current plans or with enhanced government action/investment)

122.3 the price/cost of offshore mitigation options and New Zealand's ability to access them as needed

122.4 the extent and timing of forest planting and deforestation

122.5 the realistic potential for other forms of carbon removal and the speed with which measurement, verification and accounting methodologies can be expanded to accommodate them.

123 We need to shift thinking about the NDC and decision-making norms to better deal with the inherent complexity and uncertainty. This would build on past

- Cabinet advice on setting the emissions budgets and the first emissions reduction plan and make a renewed case for a dynamic adaptive approach.
- 124 Taking a dynamic adaptive approach means careful sequencing of decision-making so that the options are sufficiently well-specified and the information needed to assess them is sufficiently well-developed. It also requires active monitoring of progress and reviewing/revisiting direction-setting and decision-making over time.
- 125 Some key adaptive management elements include:
- 125.1 establishing regular monitoring and reporting to clarify current settings and what they can contribute – recognising wide error/uncertainty margins
  - 125.2 agreeing the critical next step immediate actions (eg. ICM decisions, determined implementation of ERP1)
  - 125.3 clear processes, accountabilities and timeframes for developing serious options to enhance domestic action
  - 125.4 clear processes, accountabilities and timeframes for building the evidence base and analytical toolkit that will be needed to make choices on how hard and when to push the different options (balancing the portfolio)
  - 125.5 progress tracking and reporting: regular/ongoing (through IEB and CRMG); CEFA updates; international reporting
  - 125.6 identification of time frames and trigger points for sequencing key decisions over a number of years
  - 125.7 mechanisms to ensure coherence and integration of inter-dependent policy processes and decisions over time.
  - 125.8 being disciplined about not ‘end-gaining’ ie. not seeking to make decisions to finally decide and invest in ‘big call’ alternative ideas before 1) the time is right and 2) they are ready for decisions to commit to them.
- 126 Relative cost is a key factor in balancing the mix of enhanced domestic action and additional international mitigation transfers over time. However, current estimates of costs are still highly uncertain, especially around the possible future price of internationally traded emissions.
- 127 Serious options for additional domestic action will need time and effort to develop to the point where the full and wider costs and benefits can be clarified and realistically compared to acquiring international mitigation.
- 128 In 2024, the government must publish its next emissions reduction plan (ERP2) as required by the CCRA. The Climate Change Commission will be

providing their independent advice on the high level policy direction for ERP2 by 31 December 2023.

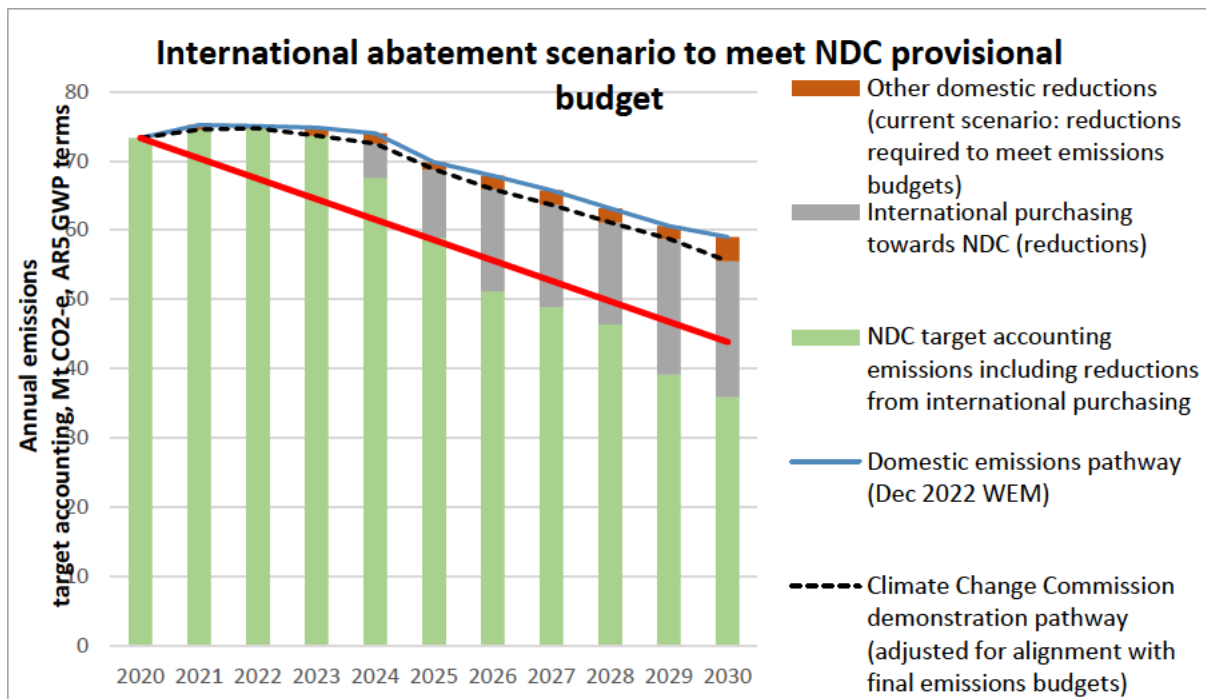
- 129 The process for developing ERP2 will require officials to prepare options for Cabinet on a mix of policies and initiatives that will be sufficient to meet the second emissions budget for 2026-2030, including building in a buffer to manage any risks of underachievement.
- 130 This paper seeks agreement to expand the ambition and scope of this work to also develop policy options for significant additional emissions reductions to contribute more domestic action towards the NDC.
- 131 I believe we need to provide a focus for the process of policy development and assessment for inclusion in the next ERP by setting a clear goal for additional domestic action. s 9(2)(f)(iv)
- 132 As they do so, they should consider:
- 132.1 The probability of the action delivering its projected emissions reduction
- 132.2 The costs to each action, both direct and indirect, Crown and private.
- 132.3 The benefits from each action, both within and beyond the NDC period
- 132.4 The distributional implications of each action, including its impact on Māori and Pacific populations and for specific localities.
- 133 In the same way as the emissions reduction plan also needs to lay the foundations for future emissions budgets periods, this additional scope should also include potential contributions to future NDCs.
- 134 A focused, properly resourced and well-sequenced programme of work will be required to identify, develop, and assess the range of greatly enhanced policy options and significant investment business cases that will be needed. This will be a significant step up for the whole machinery of government compared to the level of ambition and the policy development pipeline under the current settings and the first emissions reduction plan.
- 135 I therefore propose that we direct officials through the CC IEB to design and plan the policy development pipeline with a view to either
- Option 1: a focused report back or consideration at a suitable meeting of the CRMG Ministers group, or

Option 2: incorporation into a paper I propose to bring to Cabinet in [July] setting out the proposed development pathway for ERP2 as a whole

- 136 I further propose that officials should develop and build into existing monitoring processes a more regular NDC progress and outlook dashboard (including eg. offshore mitigation secured and accumulated shortfall YTD) and report regularly to IEB/CRMG.

#### Indicative chart to illustrate NDC progress/outlook

[Note the graph would be updated as additional domestic action began to displace international purchasing over the life of ERP2 from 2026-2030]



#### Financial Implications

- 137 There are no fiscal or wider economic implications directly arising from this paper, beyond those already considered when the strengthened NDC commitment was made.
- 138 The two subsequent processes for 1) developing additional domestic action through ERP2 and 2) developing a portfolio of international cooperation for mitigation provide the mechanisms for a through identification and assessment of fiscal and wider economic implications of specific proposals as these come up for decision.
- 139 For example, the CERF Budget process and the [forthcoming/parallel] paper on building the international mitigation portfolio provide the vehicles for determining the initial fiscal outlay needed to enable the international cooperation portfolio development s 9(2)(f)(iv)

- 140 The recently published CEFA contains the latest and most comprehensive assessment of the fiscal and wider economic implications of New Zealand's climate change response, including the NDC commitment.

### **Legislative Implications**

- 141 There are no legislative implications directly arising from this paper.

### **Impact Analysis**

#### *Regulatory Impact Statement*

- 142 A regulatory impact statement is not required for this paper.

#### *Climate Implications of Policy Assessment*

- 143 [TBC] Although decreasing greenhouse gas emissions is the key policy objective of this paper, it does not of itself create any additional implications requiring a Climate Implications of Policy Assessment [TBC]

### **Population Implications**

- 144 There are no specific implications arising as a direct result of the proposals in this paper. However, the results of any future decisions could have flow on impacts for communities, regions, iwi/Māori and other population groups.

### **Human Rights**

- 145 The proposals in this paper are not in any way inconsistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

### **Consultation**

- 146 [This is an initial first draft that has not yet been circulated outside MfE. The description of consultation undertaken on this paper will be included once it is complete]

### **Communications**

- 147 This paper proposes developing and communicating a public-facing articulation of the Government's NDC strategy, to be refined in parallel with developing ERP2, and for inclusion in the first international NDC progress report due by the end of 2024.

### **Proactive Release**

- 148 I [do/do not] intend to release this paper in full within 30 business days.

## DRAFT Recommendations

The Minister of Climate Change recommends that the Committee:

*Restate and confirm the nature and implications of New Zealand's NDC commitment*

- 1 **note** and/or **reconfirm** previous decisions and understandings reached when setting and enhancing the NDC commitment
- 2 **note** the expected contributions to NDC (domestic and international) and cost estimates etc. from when the NDC was set and note the updated estimates from the CEFA
- 3 **note** that we are already over 2 years in to the 10 year NDC period, and there is already a significant shortfall in meeting the commitment
- 4 **note** that the NDC commitment includes an international transparency and reporting element, ie. the requirement to “show as we go” and demonstrate progress and regularly report this for international scrutiny, beginning in December 2024.
- 5 **note** the imperative is to make all possible efforts to do so from the outset so we can report this progress internationally
- 6 **agree** a broad “no delay, no/low regrets” approach to advancing efforts to meet all aspects of the NDC commitment
- 7 **agree** to the following expression of the NDC commitment as a formal Government priority:

“In order to play our part in the global fight against climate change and be aligned with limiting global warming to 1.5 degrees Celsius, New Zealand has committed to a Nationally Determined Contribution that:

- sets a headline target of reducing net emissions by 50 percent below 2005 gross emissions levels by 2030
- commits to achieve this through a multi-year emissions budget approach over the period 2021-2030
- clearly sets out New Zealand's intention to use a mix of both domestic action and international cooperation to meet it.

NDCs represent the highest possible level of international commitment short of a legal obligation.

The Government's order of priority for meeting the NDC is:

- maximising domestic action as its first preference

s 9(2)(iv)

*Adaptive management approach*

- 8 **agree** the need to manage significant ongoing uncertainty about key elements, such as wider macro-economic fundamentals, potential emissions reductions through domestic mitigation, and availability and cost of offshore mitigation options
- 9 **agree** a phased multi-year sequence of work programmes and report backs for dealing with NDC related issues
- 10 **agree** that the work programme to start developing a portfolio of international abatement opportunities and options is an urgent priority
- 11 **reconfirm** previous Cabinet directives that the emissions reduction plan must be closely monitored and tightly managed to ensure it delivers
- 12 **reconfirm** previous Cabinet directives that the CC IEB is the mechanism to ensure that any corrective action needed to keep the emissions reduction plan on track is taken with high priority and urgency
- 13 **note** other relevant policy processes (including ETS review, HWEN sequestration strategy) that will be reporting back over next 12 months

s 9(2)(i)

- 15 **agree** that the relevant strategies being developed under ERP1, ie energy (incl. hydrogen strategy, gas transition etc.), bioeconomy (incl bioenergy), circular economy, etc. must all report back early in 2024 with specific options for enhanced domestic action to contribute to the NDC
- 16 **agree** that the Climate Innovation Platforms (CIP) being developed under ERP1 must all report back early in 2024 with any early likely candidate specific options for significant enhanced domestic action to contribute to the NDC
- 17 **agree** that development of ERP2 in 2024 following the Climate Change Commission's advice and 12 more months of ERP1 implementation is the right timeframe and vehicle for deciding whether to progress (and fund) options from ERP1 strategies or CIP or other enhanced measures to achieve or exceed the second emissions budget

- 18 **agree** that development of ERP2 in 2024 following the Climate Change Commission's advice should include a process to identify, develop and assess significant new proposals capable of over-achieving the second emissions budget:
- s 9(2)(f)(iv)
- 19 **note** the scale, complexity and potential disruption inherent in a plan to deliver our NDC1 commitments primarily through domestic actions
- 20 **direct** officials through the Climate Change Chief Executives Board to design and plan the policy development pipeline (in recommendations 15-18 above) and report back either
- Option 1: for consideration at a suitable meeting of the CRMG Ministers group, or
- Option 2: for incorporation into a paper I propose to bring to Cabinet in [July] setting out the proposed development pathway for ERP2 as a whole]
- 21 **agree** to set a longer term strategic goal of fully accounting for the LULUCF sector in subsequent NDCs and steadily bringing all valid forms of carbon removal into New Zealand's GHG Inventory and NDC target accounting systems as the science evolves and technology develops.
- 22 **note** the implications and challenges that would need to be overcome in order to achieve the longer term strategic goal of fully accounting for the LULUCF sector in subsequent NDCs

*Progress tracking and reporting*

- 23 **note** that regular (annual?) Climate Economic and Fiscal Assessments (CEFA) and Paris Agreement Biennial Transparency Reports are the formal transparency mechanisms for reporting NDC progress and implications to domestic and international audiences respectively
- 24 **agree** that officials should develop and build into existing monitoring processes a more regular NDC progress and outlook dashboard (including eg. offshore mitigation secured and accumulated shortfall YTD) and report regularly to IEB/CRMG
- 25 **agree** that this must address the latency (lag) of information and be designed to enable corrective action
- 26 **agree** a report back on development of the monitoring tool, and how it will be used by 1) officials and 2) Ministers

*Mid-course assessment in 2025*

- 27 **note** that Climate Change Commission will provide advice on 2050 targets and emissions budget for 2036-2040 and the inclusion of emissions from international shipping/aviation by 31 December 2024
- 28 **agree** to initiate now a focused two year work programme preparing for the assessment and submission of NZ's second NDC due early in 2025.

*Developing a public-facing articulation of the NDC Strategy*

- 29 **direct** officials to develop and communicate a public-facing articulation of the Government's NDC strategy, to be refined in parallel with developing ERP2 for inclusion in the first international NDC progress report due by the end of 2024

Authorised for lodgement

Hon James Shaw

Minister of Climate Change