Briefing: New Zealand's NDC commitment - timeline, implications, and opportunities

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Actions sought from Ministers		
Name and position	***Action sought***	***Response by***
To Hon Simon WATTS **Minister of Climate Change**	Provide feedback on the updated draft Cabinet paper *Delivering New Zealand's first Nationally Determined Contribution*	11 March 2024

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

Appendices and attachments
Appendix 1. Updated draft Cabinet paper - *Delivering New Zealand's first Nationally Determined Contribution* Appendix 2. s 9(2)(f)(iv)

Key contacts at Ministry for the Environment			
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Minister's comments

New Zealand's NDC commitment - timeline, implications, and opportunities

Key messages

1. This briefing provides you with an updated draft Cabinet paper *Delivering New Zealand's first Nationally Determined Contribution* following your feedback and direction from the Prime Minister and his office.

2. We are seeking your feedback on the updated draft Cabinet paper.

3. You have also requested additional information on NDC1. Officials have provided information on:

    i A chronological narrative of what was considered when setting New Zealand's NDC1;

    ii New Zealand's approach to achieving the NDC: international implications and consequences;

    iii s9(2)(f)(iv)

Recommendations

We recommend that you:

a. **Provide** feedback on the attached updated draft of the Cabinet paper and briefing note.

b. **Discuss** the briefing note with MfE and MFAT officials.

c. **Note** the inclusion of the additional requested information in the Cabinet paper.

d. **Provide** feedback on the inclusion of the additional requested information in the Cabinet paper.

e. **Note** officials have provided a timeline aligned with your preference of Cabinet in April.

Signatures

Mark Vink
General Manager – Markets
Climate Change Mitigation and Resource Efficiency
[Date]

Hon Simon WATTS
Minister of Climate Change

Date

New Zealand's NDC commitment - timeline, implications, and opportunities

Purpose

0. To seek your feedback on the updated draft Cabinet paper on *Delivering New Zealand's first Nationally Determined Contribution* (appendix 1).

1. Provide you with additional information related to NDC1 for your consideration on its inclusion in the Cabinet paper.

Background

2. On 21 February 2024, officials provided you with a draft Cabinet paper s 9(2)(f)

3. Following a bilateral meeting with the Prime Minister, you met with officials on 29 February 2024 to provide feedback on the Cabinet paper. We have updated the Cabinet paper to reflect your feedback. The paper is now titled *Delivering New Zealand's first Nationally Determined Contribution.*

4. You also asked officials for additional information related to the NDC1 for potential inclusion in the Cabinet paper. This information is included below in the briefing note.

Analysis and advice

A chronological narrative of what was considered when setting New Zealand's NDC

5. Table 1 provides a high-level timeline of events and decisions that resulted in setting New Zealand's NDC.

Table 1: Timeline of events and decisions in setting New Zealand's NDC

2015	New Zealand's INDC (2021-2030) was tabled in 2015 • The lead up to the Paris Agreement • The INDC was set to 30% below 2005 levels by 2030
2016	Ratification of the Paris Agreement confirming NZ NDC1
2018	IPCC report resulted in global pressure to limit warming to 1.5°C

2020	The Commission's assessment of NZ NDC1 compatibility with 1.5°C • *Process update to the NDC1*
2021	Government updates NZ NDC1 to better align with 1.5C • The Commission advises NDC1 is incompatible with 1.5°C • Science and value judgement are needed to define consistency with 1.5°C • Cabinet updates NDC1 to 50% below 2005 levels by 2030

2015: New Zealand's INDC (2021-2030) was tabled in 2015

The lead up to the Paris Agreement

6. Prior to the Paris Agreement countries were to communicate intended NDCs (INDCs). INDCs were to be a progression beyond the then current undertaking of that country, be fair and ambitious in light of national circumstance, and contribute towards the objective of the United Nations Framework Convention on Climate Change (UNFCCC). New Zealand's then current undertaking was its 2020 target of 5% below 1990 levels.

7. The cost of New Zealand's INDC was sensitive to carbon markets and forestry rules. As negotiations of the Paris Agreement had not yet been concluded, New Zealand did not know if the Agreement might restrict its ability to use carbon markets or its preferred approach to forestry. As such, the INDC was provisional pending confirmation of these rules.

The INDC was set to 30% below 2005 levels by 2030

8. In March 2015, the Cabinet Strategy Committee gave initial direction on the form and level of New Zealand's post-2020 contribution (STR Min (15) 2/1 refers) and:

    i noted the need to balance a number of considerations, including New Zealand's international credibility, costs to the economy, the implications for the agriculture sector, and the nature of signals that would be sent to different sectors of the economy;

    ii agreed that an appropriate post-2020 emissions reduction target would be the equivalent of ten percent below 1990 levels over the entire economy, conditional on factors such as: research and scientific developments (including in relation to livestock emissions mitigation options); [and] New Zealand's access to international carbon markets.

9. As of July 2015, all developed countries other than Australia and New Zealand had announced targets under the new agreement. These covered all sectors and

gases and represented greater emissions reductions than previous targets. Although these new targets represented progression, at the time they still collectively fell short to put the world on a pathway to the global two degrees goal [15-C-00788].

10. Cabinet was presented cost estimates to the economy of delivering different INDC targets, highlighted in table 2. Additional cost estimates included impacts on business sectors and households as well as caveats and assumptions around the cost estimates and sensitivities to key factors. These estimates excluded potential co-benefits and did not factor in any avoided damages from successfully mitigating climate change.

11. Annual cost estimates reflect a reduction of domestic economic outputs in 2027 relative to not updating the target. These estimates are not equal to the cost of international purchasing alone.

Table 2: Estimated cost of different economy-wide targets (nominal costs as of 2015). The INDC was set to -30% by 2030 (highlighted green). [15-C-00788][1].

Target reduction on 1990 by 2030	Target reduction on 2005 by 2030	Annual cost (reduction in RGNDI[2] in 2027)
Current RGNDI $220bn		
Projected 2027 RGNDI (business as usual) $299bn		
-5%	-25%	$3.5bn (1.18%)
-11%	-30%	$3.7bn (1.23%)
-15%	-33%	$3.9bn (1.32%)
-20%	-37%	$4.1bn (1.37%)
-40%	-53%	$5.0bn (1.66%)

12. The proportion of international purchasing needed to meet New Zealand's proposed target was modelled at [15-B-00772]:

    - 11% reduction target (-30% on 2005 levels) 70% international, 30% domestic
    - 40% reduction target (-53% on 2005 levels) 80% international, 20% domestic.

[1] These estimates were based on a global carbon price of $50 in 2030, Real Gross National Disposable Income (RGNDI) in 2027, assumes both the direct cost and the flow-on effects of domestic reductions and international purchasing. Estimates do not include forestry emissions/ removals, assumes no free allocation, and does not account for agricultural pricing [15-C-00788 refers].

[2] RGNDI is Real Gross National Disposable Income – a measure of the size of the economy based on GDP but better accounts for the cost of purchasing international units. Although percentage figures are given to two decimal places, they are not necessarily accurate to this degree of precision in absolute terms.

13. The modelling confirmed New Zealand's challenges in reducing emissions. This means that international carbon market access would be critical to control the costs of meeting a target.

14. The tabled INDC (later converted to NDC1) was set to [15-C-00788]:

- a target to reduce New Zealand's emissions across the whole economy:
    - 11% below 1990 emissions by 2030
    - for ease of comparability with other countries this would be expressed as -30% below 2005 by 2030.

15. Other factors included in the target were [15-C-00788]:

- The target will cover all sectors and gases and will be met by domestic emissions reductions, recognition of emissions and removals by New Zealand forests and the purchase of international carbon units.
- The INDC remains provisional pending finalisation of rules regarding access to international carbon markets and forestry accounting.
- There is a need for the development of commercially viable agricultural mitigation technology in order to deliver emissions reductions in this sector.

16. International carbon markets were always intended to play a significant role in helping meet New Zealand targets. Modelling suggested a large portion of NDC1 would be met through offshore purchasing and that the cost of domestic action alone would more than double [15-B-00772].

2016: Ratification of the Paris Agreement confirming NZ NDC1

17. The Paris Agreement was adopted in December 2015. A Parliamentary Treaty Examination process was undertaken, and New Zealand ratified the Agreement in October 2016.

18. At this time New Zealand's INDC was essentially converted to its first Nationally Determined Contribution. As the Paris Agreement did not restrict New Zealand's ability to use carbon markets, the Government removed provisionality from the NDC. New Zealand's NDC1 was committed to reduce emissions by:

    - 30% below 2005 levels by 2030

19. As part of the ratification process, the Government ramped up work on domestic mitigation, including launching an inquiry by the Productivity Commission[3]. The Government also began, and funded, work to build and develop links with international carbon markets; with the intention of ensuring New Zealand had

[3] Productivity Commission. Low-emissions economy. 2018.

access to offshore mitigation ahead of when the Paris Agreement's substantive provisions became operational in 2020.

2018: IPCC report resulted in global pressure to limit warming to 1.5°C

20. Global pressure to increase the ambition of NDCs mounted after the Intergovernmental Panel on Climate Change (IPCC) published its landmark 2018 Special Report on Global Warming of 1.5°C. The report highlighted the impacts of greater than 1.5 degrees of warming and the scale and urgency of emissions reductions needed to avoid the worst impacts of warming.

2020: The Commission's assessment of NZ NDC1 compatibility with 1.5°C

Process update to the NDC1

21. When the Paris Agreement was adopted, Parties were asked to communicate or update their 2030 NDCs by 2020 reflecting that five years would have passed since most countries would have considered their NDC.

22. New Zealand provided a process update in April 2020. This update highlighted the then ongoing process of seeking advice from the Climate Change Commission (the Commission) on whether the NDC1 should change to make it more consistent with limiting warming to 1.5 degrees.

23. In early 2020, the Minister of Climate Change asked the Commission to assess the compatibility of NDC1 with the 1.5°C global goal [CAB-20-MIN-0149 refers].

24. Aiming to align with 1.5 °C, Parties to the Paris Agreement committed to communicating an updated NDC1 in 2020 ahead of COP26. The Minister of Climate Change had intended to seek Cabinet approval to update the NDC1 to include a narrative about domestic action, while not changing the headline number.

25. In response to the IPCC report and the upcoming Commission advice, the Minister proposed not submitting an update until after receiving advice on New Zealand's NDC1 compatibility with the global temperature goal [CAB-20-MIN-0149 refers].

26. s6(a), s6(b)(i)

2021: Government updates NZ NDC1 to better align with 1.5C

The Commission advises NDC1 is incompatible with 1.5°C

27. The Commission published advice to the Government in 2021[4]. The report stated that “science alone cannot determine the share Aotearoa should contribute to global reductions.” The report identified equity principles which could be used to guide thinking about sharing the global effort between countries.

28. The Commission advised that the current NDC1 is not compatible with 1.5°C and that it would need to be “much more than 36%” below 2005 levels to be compatible. The Commission also recommended the Government should continue to enable the NDC1 to be met through a combination of domestic emission reductions, domestic removals, and the use of international carbon markets.

29. The Commission derived the benchmark number of 36% by assuming that New Zealand’s emissions should reduce at the same rate as global emissions of those gases in pathways consistent with 1.5°C. Given New Zealand’s status as a highly developed country and taking global equity into account, our emissions should reduce at a greater rate than the global average.

Science and value judgement are needed to define consistency with 1.5°C

30. Climate science alone cannot prescribe how the emissions reduction effort should be allocated between countries. A countries contribution to limit warming to 1.5°C depends on the assumptions one makes about how mitigation effort should be distributed.

31. A countries allocated contribution depends almost entirely on value judgments relating to equity. However, there is no single measure of equity to guide countries. Equity perspectives have been discussed in international literature and can be grouped into four categories [BRF-213 refers]:

    i Equality- access to the atmosphere to dispose of greenhouse gas emissions

    ii Capacity- to pay for the cost of mitigation

    iii Responsibility- for warming already caused by past emissions

    iv Need- the right to sustainable development

32. There is no single way an equity principle can be applied as different approaches and data sources affect what an NDC budget might be considered ‘consistent with 1.5°C’.

33. In the case of New Zealand, relevant national circumstances include [BRF-213 refers]:

    - the nature of our economy, society and environment;

[4] The Commission. Ināia tonu nei: a low emissions future for Aotearoa. 2021.

- abatement costs and potential for transformational change;
- existing climate policy architecture and feasible changes during NDC1 as well as future NDCs;
- the availability and environmental integrity of offshore abatement to complement domestic mitigation efforts to achieve a more stringent target by 2030.

34. Officials calculated NDC1 budgets that could be regarded as consistent with 1.5°C for each equity principle of equality, capability and responsibility. There was a wide range of 1.5°C-consistent NDC1 budgets depending on additional choices. These include the spread of across global 1.5°C-consistent emission pathways, choice of data sources, and additional value judgments such as when to start historical responsibility, or when equal per capita emissions should be achieved [BRF-213 refers].

Cabinet updates NDC1 to 50% below 2005 levels by 2030

35. In 2021, Cabinet was informed of the Commission's advice that the current or an updated NDC1 could not be met through domestic climate change action alone, and that international cooperation would be required to meet any target [CAB-21-MIN-0434 refers].

36. Cabinet was presented with five potential options to consider which included estimates of the potential costs of offshore abatement required to meet the updated NDC1. Table 3 outlines these options.

Table 3: Updated NDC1 options presented to Cabinet, option two (green) was agreed by Cabinet [CAB-21-MIN-0434 refers].

Option	**One**	**Two** (Cabinet agreed)	**Three**	**Four**	**Five (status quo)**
Target	54 per cent below gross 2005 levels by 2030 (45 per cent on a budget approach) (MCC preferred option)	50 per cent below gross 2005 levels by 2030 (41 per cent on a budget approach)	49 per cent below gross 2005 levels by 2030 (40 per cent on a budget approach)	45 per cent below gross 2005 levels by 2030 (36 per cent on a budget approach)	39 per cent below gross 2005 levels by 2030 (30 per cent on a budget approach) (NZ current NDC at the time of review)
Cost (overall to meet NDC1)	$9.3-$16.3 billion	$7.9- $13.8 billion	$7.5 to $13.2 billion	$6 – $10.6 billion	$3.9-$6.8 billion

37. In 2021, Cabinet agreed to option two - an updated target to reduce net emissions by 50% below gross 2005 levels by 2030 [CAB-21-MIN-0434 refers]. Under an emissions budget approach, this target equates to a 41 per cent net reduction on 2005 gross emissions by 2030.

New Zealand's approach to achieving the NDC: international implications and consequences

38. Officials from Ministry of Foreign Affairs and Trade have provided the following section.

s9(2)(h)

s9(2)(h)

s9(2)(h)

Foreign policy and relationship considerations

53. s9(2)(h), there are a number of significant foreign policy considerations that should be taken into account.

54. s6(a)

s9(2)(h)

s6(a)

55. s6(a)

56. s6(a)

57. s6(a)

58. s9(2)(g)(i)

s6(a)

59. Other questions may arise in considering New Zealand's NDC.

    i s6(a), s9(2)(h)

    ii Parties are required to report progress made in implementing and achieving NDCs. The first of these such reports is due 31 December 2024. This information is public, subject to technical expert review, and multilateral consideration. This scrutiny will identify any country that is not pursuing measures aimed at achieving its NDC and expose it to criticism and pressure to take remedial action from other governments and stakeholders.

    iii Currently, no country can say definitively it has, or will achieve its NDC. A country with a 2030 target will be able to prove it has achieved (or not) its NDC around 2032 at the earliest.

60. We are not aware of any instance where a country has reduced the headline ambition of its NDC. There are a small number of relevant instances to be aware of.

    i s6(a)

ii s6(a)

iii s6(a)

What offshore purchasing would look like in practice

Offshore cooperation types

61. International carbon markets are relatively new, and offer diverse and evolving opportunities to purchase emissions reductions. Governments are able to engage in different ways to suit their national context and priorities. s9(2)(f)(iv)

62. A portfolio of offshore mitigation could be derived from a combination of different cooperation types, with staggered lead times, volumes, application of New Zealand technical expertise, varying levels of host country government involvement, and more. Using a portfolio of offshore mitigation can:

    i manage and spread delivery;

    ii ensure emissions reductions have environmental integrity;

    iii manage delivery risks;

    iv manage varying levels of readiness in the market; and

    v produce a range of co-benefits for New Zealand and the host country.

63. Officials have been exploring different offshore purchasing options and have highlighted five of these cooperation types in table 4. These are currently the most viable options although new opportunities are frequently emerging. The cooperation opportunities identified are not exclusive. One or all of them can be used to build a portfolio of offshore mitigation.

64. All offshore cooperation types will require some form of Government-to-Government agreement with the partner country to ensure Paris Agreement compliance is maintained.

65. In some instances, engaging with the host Government is necessary to the discovery of potential projects or cooperation types. In other instances, host governments will expect partner governments to provide capacity building in the

form of technical assistance as a condition of engagement. This may not be limited in scope to development of opportunities for purchasing emissions reductions but may extend to support for other aspects of climate policy.

66. Almost all cooperation types have a lead time from the initial discussion to implementation and generating emissions reductions which vary from months to years.

Table 4: Offshore cooperation types

Offshore cooperation type	Description	How it would work
Government to Government cooperation	New Zealand and a prospective partner government agree to work together directly to develop emissions reduction activities and share resulting emissions reductions. This model could also be applied on a multi-country basis. For example, where a buyers' groups formed of multiple governments works together with a host government, or governments, to develop and enable purchasing of emissions reductions.	s9(2)(f)(iv)
Contribution to multi-buyer funds	Investment in funds administered by multilateral and non-government institutions to deliver emissions reductions from a range of projects and activities.	
Project Developers	Investment directly into specific projects and activities scoped and delivered by project developers.	

		s9(2)(f)(iv)
Emissions Trading Scheme (ETS) Linking	*One-way linking* where credits are purchased by the New Zealand Government and enter the NZ auction and/or NZ ETS secondary market; or *Two-way linking* where trade is open to participants in both ETS schemes.	
Purchase on secondary market	Credits purchased are from market intermediaries or others which have host government approval. Secondary market opportunities are nascent and still emerging. The Article 6.4 Central Mechanism will serve as a secondary market once it is established	

Other considerations

Consultation and engagement

67. Ministry for Environment and Ministry of Foreign Affairs and Trade have drafted this paper as joint advice.

Next steps

68. Officials have prepared a high-level timeline to align with your preference of a mid-April Cabinet date and a report-back in September/ October.

Table 5: Proposed Cabinet timeline

Date	Action
14-28 March 2024	Updated draft Cabinet paper for Ministerial consultation
April 2024	**Cabinet paper (1):** Delivering New Zealand's first Nationally Determined Contribution - lodge Cabinet paper
By October 2024	**Cabinet paper (2):** Report-back to Cabinet with potential pathways for Ministers to choose between
October/ November 2024	**Cabinet paper (3):** s9(2)(f)(iv)

Appendices

Appendix 1. Updated draft Cabinet paper - *Delivering New Zealand's first Nationally Determined Contribution*

s9(2)(j), s6(b)(i), s6(b)(ii)

s9(2)(j), s6(b)(ii), s6(b)(i)

s9(2)(j), s6(b)(ii), s6(b)(i)