



Choices about target delivery

Date Submitted:	25 July 2019	Tracking #: 2019-B-05838	
Security Level	[REDACTED]	MfE Priority:	Urgent

	Action sought: match to recommendations	Response by:
To Hon James Shaw, Minister for Climate Change	Meet with officials to discuss and provide feedback	30 July 2019

Actions for Minister's Office Staff	Return the signed report to MfE.
Number of appendices and attachments 1	Titles of appendices and attachments (ie separate attached documents): A. Targets
Note any feedback on the quality of the report	

Ministry for the Environment contacts

Position	Name	Cell phone	1 st contact
Principal Author	Todd Croad	9(2)(a)	
Responsible Manager	Craig Salmon		
Acting Director	Matthew Cowie		✓

Choices about target delivery

Key Messages

Purpose

1. This is the first in a set of related briefing notes about the need for Government to make further decisions over the coming months about how our Zero Carbon Bill (ZCB) targets and New Zealand's first Nationally Determined Contribution (NDC) will be delivered.
2. These notes are intended to form a useful basis for a discussion with your colleagues about these subjects and they also describe the areas where engagement with Cabinet will be required. The purpose of each individual note is the following:
 - I. **This note:** explains the relationship between the ZCB and NDC targets and the implications of this for upcoming decisions about how to meet these targets. We are also seeking your initial feedback on how we can best support you in future discussions with Ministerial colleagues on these issues.
 - II. **High level policy approach to reducing emissions – 2019-B-05822:** this work for the Provisional Emissions Allowance (PEA) describes the likely initial package of policies and measures needed to deliver both the ZCB and NDC targets. This note will seek direction on how you wish to progress these issues.
 - III. **International carbon markets (access and environmental integrity) – 2019-B-05771 and 05804:** will update you on the international carbon market work programme. We advise that in the next two months you seek Cabinet oversight of our work with these partners to have options for market access in place from 2021.
 - IV. **Recommunication of New Zealand's Nationally Determined Contribution – 2019-B-05574:** seek agreement for a process to reassess and recommunicate New Zealand's Nationally Determined Contribution.
You will receive advice on I and III next week and IV the week following.
3. The table below sets out these work programmes and an explanation of why we are seeking decisions now, to progress work over the coming months.

	<i>Why now</i>
Provisional Emissions Allowance (PEA)	<p>We need to release a public consultation document on the PEA following the introduction of the CCRA to the house in late September to provide context to the NZ ETS framework in the Bill.</p> <p>Decisions by Ministers about the PEA are needed now in order to produce this document.</p>
Engagement with partners on international carbon markets	<p>In-principle agreement, later this year, to enter into formal negotiations in future is necessary to secure options for access to these high-integrity international carbon markets from 2021 onwards (due to the time necessary to negotiate and implement any instrument).</p> <p>Direction is needed now to ensure that we have appropriate Ministerial oversight of the pre-negotiation discussions with EU/WCI, as this will impact any future negotiations the Government enters into.</p>

Recommunication of the NDC

We will be expected to have recomunicated our NDC by Feb/March 2020.

Work, including targeted public engagement, needs to begin now in order to allow this.

4. These work programmes all contribute to the delivery of the Government's overarching climate change policy framework (leadership at home and internationally; a productive sustainable and climate-resilient economy; and a just and inclusive society). The International Carbon Markets and PEA work also directly impact on the achievement of New Zealand's existing emissions reduction targets. While the final decisions for each of these work programmes are some time away (anticipated to all be within the next six months), decisions are needed now to allow the work to take place.

The relationship between the ZCB and the NDC targets

5. We have two sets of targets:

- The NDC for 2021-2030 is an emissions budget for the years 2021-2030, with a headline of reducing emissions to 30% below 2005 levels by 2030. This equates to a commitment to reduce emissions to approximately 601Mt CO₂e across the 2021-2030 period. To do this we need to reduce emissions, increase removals, or deliver mitigation offshore by 145Mt more than what current policies and settings are projected to deliver.
- The ZCB sets three single-year targets to reduce emissions, to reduce:
 - emissions of biogenic methane to 10% below 2017 levels by 2030;
 - emissions of biogenic methane to 24-47% below 2017 levels by 2050; and
 - net emissions of all other greenhouse gases to zero by 2050

Alongside this, the Bill also establishes a system of five-year emissions budgets in order to step progressively towards the 2050 target. While the first full emissions budget is only expected in 2021, the PEA is an interim budget which needs to be consulted on in late 2019 and decided in early 2020.

A fuller explanation of these targets; their relationship; and the consequences for choices about delivery is attached (**Appendix A**).

6. The budgets under the ZCB have yet to be set; however, based on the 2050 target and the ambition of the NDC, it is likely that the total volume of mitigation that needs to be achieved over 2021-2030 will be driven by the NDC rather than the ZCB target.¹ Therefore, over 2021-2030 New Zealand needs to achieve 145Mt more mitigation than current policies and settings are forecast to deliver.
7. In the coming months Ministers will need to make choices about how to deliver this further 145Mt volume including:
 - how much of this 145Mt to guarantee will be delivered within New Zealand, and how much flexibility to source offshore mitigation is appropriate (to manage risk and economic impacts); and
 - the specific policies and measures that will be used to deliver this mitigation

¹ The Government has flexibility over the budgets for the ZCB, but they are unlikely to exceed the current NDC in ambition over the 2021-2030 period. Further, if ZCB budgets exceeded the ambition of the current NDC we would likely have to reconsider and increase the ambition of the NDC (as NDCs are to reflect a Party's highest possible ambition).

(whether domestically or offshore).

8. Designing a successful package of policies will require ensuring that individual decisions form a coherent and internally consistent whole, and an awareness of the trade-offs being made across the whole package. Ministers will need to consider issues and trade-offs including:
 - the need to use international carbon markets;
 - the need for higher NZ ETS prices;
 - that particular decisions may foreclose other options (for example choices about the NZ ETS will open/close options for access to high-integrity markets);
 - the degree to which the costs of meeting our targets are borne by polluters vs taxpayers; and
 - the design of a suite of policies to complement the NZ ETS.
9. The second BN in this set (**High level policy approach to reducing emissions – 2019-B-05822**) which will be provided next week, will provide more detail on the options for this policy package. We note that progressing these issues will likely require a number of Cabinet decisions.

RELEASED UNDER THE
OFFICIAL INFORMATION ACT
1982

[REDACTED]

Recommendations

We recommend that you:

- a. **Note** that MfE will provide you with advice on the Provisional Emissions Allowance and International Carbon Markets work programme in the next week, and the recommunication of the NDC the following week
- b. **Note** that all three of these processes are likely to be of interest to your Cabinet colleagues.
- c. **Note** we are seeking feedback on how we can best support you in these future discussions.
- d. **Meet** with officials to discuss this briefing note and provide feedback Yes/No
- e. **Agree** that this briefing and appendices will **not** be released proactively on the Ministry for the Environment's website Yes/No

Signature

Matthew Cowie
Acting Director
Climate Change

Date

Hon James Shaw
Minister for Climate Change

Date

[REDACTED]

Appendix A - Targets

New Zealand's Nationally Determined Contribution – 2021-to-2030

What is the NDC?

1. The NDC is the mitigation contribution (target) that New Zealand will make to global mitigation efforts under the Paris Agreement for the period 2021-to-2030.
2. The NDC is an emissions budget for the years 2021-2030 (calculated using the UNFCCC methodology for emissions budgets which has been used for all previous targets), with a headline of reducing emissions to 30% below 2005 levels by 2030.
3. This target equates to a commitment to reduce emissions to approximately 601Mt CO_{2e} (million tonnes of carbon dioxide equivalent) over this period. In comparison, over this period we project net emissions under current setting to be 746Mt. This means additional mitigation of 145Mt is needed.

NDC budget (2021-2030)	601 Mt
Projected net emissions (2021-2030) ²	746 Mt
Mitigation needed	145 Mt

What are the relevant requirements for NDCs?

4. In setting our NDC, New Zealand was guided by decisions taken by all Parties to the UNFCCC (including New Zealand). Decision 1/CP.20 meant that our intended NDC had to:
 - be a progression on beyond New Zealand's previous undertakings; and
 - contain information on how New Zealand considered it to be a fair and ambitious contribution to global efforts in light of our national circumstances.
5. Article 4 of the Paris Agreement also contains the following (paraphrased) requirements for NDCs:
 - New Zealand must always maintain an NDC;
 - successive NDCs are to represent a progression beyond our then current NDC and reflect our highest possible ambition; and
 - NDCs may be adjusted at any time to enhance their level of ambition

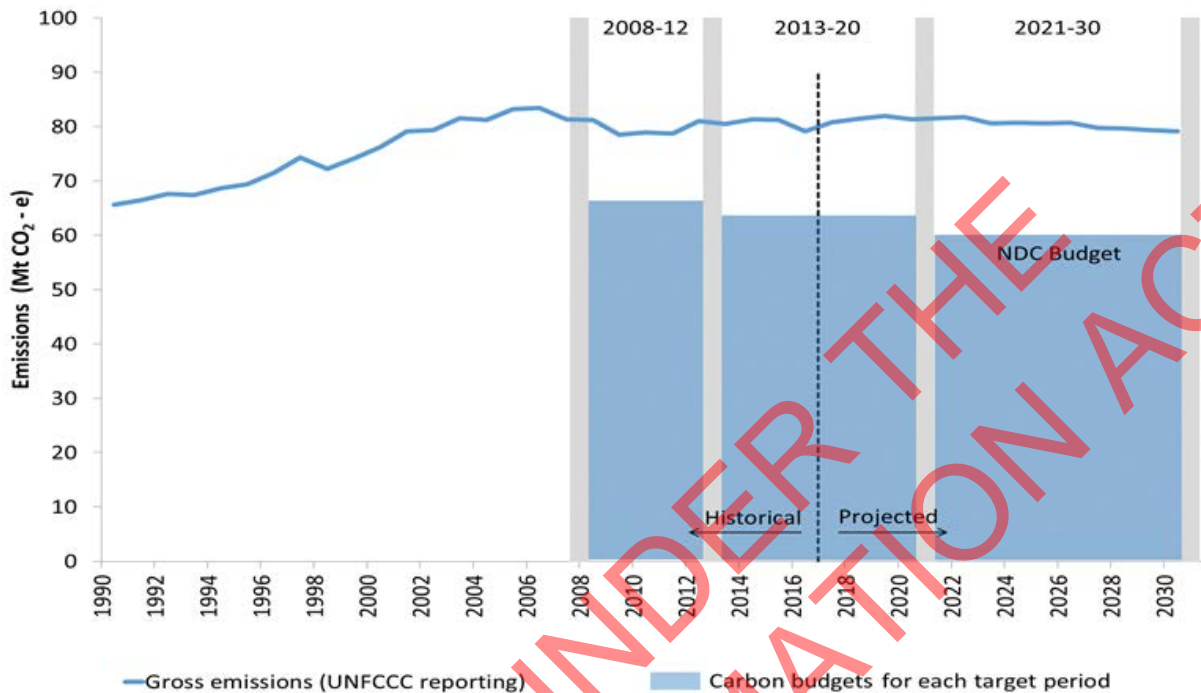
How was the NDC set?

6. The choice of this target followed a process of extensive analysis and public consultation, with more than 17,000 written submissions. Based on this, officials recommended an emissions budget target, with an endpoint of between -10 to -40% on 1990 levels – and Cabinet selected an NDC that is equivalent to -11% on 1990 levels.

Credible range for NDC presented by officials	-10 to -40% on 1990 levels
NDC headline	-30% on 2005 levels (i.e. -11% on 1990 levels)

² Using target accounting.

7. The above graph demonstrates the progression of the NDC beyond previous targets.



How can the NDC be met?

8. The NDC can be met through:

- reducing gross emissions (e.g. less usage of fossil fuels);
- increasing removals of emissions (e.g. afforestation); and/or
- offshore mitigation (i.e. conducting/funding emissions removals and reductions outside of New Zealand)

9. It is clear what is needed to meet our NDC – we need to achieve 145Mt of additional mitigation and, as long as the mitigation is real, the NDC is agnostic about where this occurs.

10. However, when choosing how to deliver this 145Mt Ministers need to make choices about the policies and balance between domestic emissions reductions, domestic removals, and offshore mitigation that make sense in a broader context, namely:

- knowledge that future NDCs will need to be a progression beyond our current one;
- a need for New Zealand itself to undergo a just transition to a low-emissions and resilient economy; and
- our broader societal and economic goals.

Are we on track to meet the NDC?

11. We are not currently “on track” - our projected emissions under current settings are not in line with our target. We need to implement or strengthen measures to further reduce emissions, increase removals and obtain access to offshore mitigation to put us on this path. Even with measures for strengthened domestic action it is likely that New Zealand will need to use offshore mitigation to meet the NDC.

What is recomunicating the NDC?

12. As a Party to the Paris Agreement, New Zealand is required to maintain successive NDCs, to be communicated every five years. Parties are required to “communicate or update” their NDCs at least 9-12 months in advance of the relevant Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). Based on MFAT legal advice, New Zealand should recommunicate its NDC by February/March 2020 to satisfy this requirement.
13. We will provide specific advice on a process to reassess and recommunicate the NDC in two weeks [Recommunication of New Zealand’s Nationally Determined Contribution – 2019-B-05574 refers].

Zero Carbon Bill targets and emissions budgets

What targets and emissions budgets does the ZCB set?

14. The ZCB sets three single-year targets to reduce emissions, to reduce:
- emissions of biogenic methane to 10% below 2017 levels by 2030;
 - emissions of biogenic methane to 24-47% below 2017 levels by 2050; and
 - net emissions of all other greenhouse gases to zero by 2050
15. The ZCB also establishes a system of five-year emissions budgets in order to step progressively towards the 2050 target

How can the targets and emissions budgets be met?

16. Just like the NDC, ZCB targets and emissions budget may be met through
- reducing gross emissions (e.g. less usage of fossil fuels);
 - increasing removals of emissions (e.g. afforestation); and/or
 - offshore mitigation (i.e. conducting/funding emissions removals and reductions outside of New Zealand).

However, unlike the NDC, the ZCB specifies that these targets and budgets must be met as far as possible through domestic action – and that the use of offshore mitigation is subject to a limit

How do the NDC and ZCB targets relate?

How do these targets compare to one another?

17. The chart on page 10 shows the NDC alongside the ZCB targets. While the budgets under the ZCB have yet to be set, this chart includes an example of a straight-line trajectory (the blue wedge) to meet the 2050 targets.

What does this mean for choices about the delivery of targets?

18. Based on the 2050 target and the ambition of the NDC, it is likely that the total volume of mitigation that needs to be achieved over 2021-2030 will be driven by the NDC rather than the ZCB. Therefore, over 2021-2030 New Zealand needs to achieve 145Mt more mitigation than current policies and settings are forecast to deliver.
19. Over the coming months Ministers will be faced with choices about the optimal way to deliver this 145Mt of abatement within New Zealand’s broader economic and social context.

What’s the difference between an NDC emissions budget and a ZCB one?

20. The Government has flexibility over the emissions budgets set under the ZCB between now and 2050 (noting that these will be informed by the recommendations of the Climate Change Commission). In comparison, the NDC for 2021-2030 has been set, and can only be altered to increase its ambition (in other words, the emissions budget volume can only be reduced). The other difference is that the NDC itself is agnostic about where mitigation occurs, but the ZCB has an emphasis on domestic action.

RELEASED UNDER THE
OFFICIAL INFORMATION ACT
1982

OFFICIAL INFORMATION ACT
1982

Comparison of NDC and proposed ZCB targets

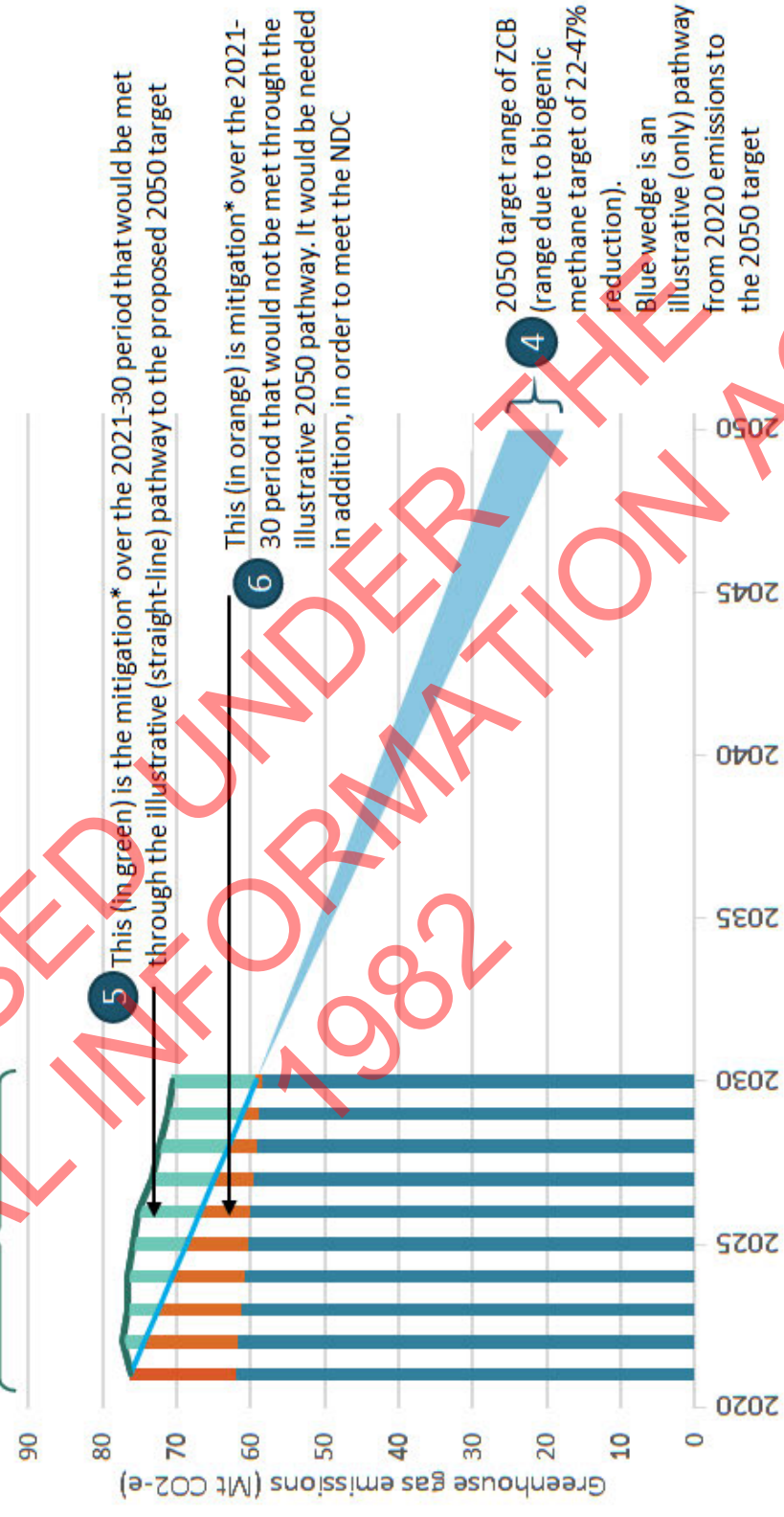
****"mitigation" could mean a combination of any or all of:**

- reductions in gross emissions
- removals by forestry
- international units

1 NZ's projected BAU net emissions for the period 2021-2030 (target accounting)

The green and orange bars together represent the amount of mitigation* needed to meet the NDC for 2021-2030

2 The teal bars represent the NDC budget over 2021-2030



3 This (in green) is the mitigation* over the 2021-30 period that would be met through the illustrative (straight-line) pathway to the proposed 2050 target

4 This (in orange) is mitigation* over the 2021-30 period that would not be met through the illustrative 2050 pathway. It would be needed in addition, in order to meet the NDC

5 2050 target range of ZCB (range due to biogenic methane target of 22-47% reduction).

6 Blue wedge is an illustrative (only) pathway from 2020 emissions to the 2050 target