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Title of Paper:	Summary of key points from the Businessdesk series by Adrian Macey and David Frame (Sept-Oct 2022)		
Title of any referenced previous Board Paper/s:			
Referenced Papers Link/s if required to be added to			

Cover Note for Board Paper/Presentation

Purpose

1. This paper provides a high-level summary of the late-September, early-October **Businessdesk** series by Adrian Macey and David Frame about New Zealand's NDC.

Recommendation:

note the key points presented by Macey and Frame **note** the staff observations and considerations on the series, and the proposed next steps.

Key points raised

- 2. The articles were critical of the government decision to strengthen the NDC, and raised several concerns:
 - That insufficient attention was paid to the potentially high cost of offshore mitigation
 - That insufficient weight was put on New Zealand's limited domestic mitigation potential
 - That New Zealand is alone internationally in relying so heavily on offshore mitigation for its NDC
 - That GWP100 misrepresents the warming effect of reaching our emissions targets
- 3. While there are several minor inaccuracies in Macey and Frame's articles, the broad thrust of their argument is a values-based challenge to the Government's decision-making process.
- 4. The articles both rely on and criticise our advice. However, fundamentally they are taking issue with Government decisions and their criticisms are generally not aimed at the Commission.

Our advice on the NDC

- 5. We were not asked what New Zealand's NDC should be but were asked whether the NDC was compatible with contributing to limiting warming to 1.5 degrees, and if not, how to make it compatible. Thus, the scope of the request from the Minister of climate change shaped the analysis and direction of our advice.
- 6. Our recommendations on these questions in Ināia Tonu Nei were:

We recommend that to make the NDC more likely to be compatible with contributing to global efforts under the Paris Agreement to limit warming to 1.5°C above pre-industrial levels, the contribution Aotearoa makes over the NDC period should reflect a reduction to net emissions of much more than 36% below 2005 gross levels by 2030, with the likelihood of compatibility increasing as the NDC is strengthened further.

How much the NDC is strengthened beyond 36% should reflect the tolerance for climate and reputational risk and economic impact, and principles for effort sharing, which require political decisions. Any changes to the NDC should be developed in partnership with Iwi/Māori, to give effect to the principles of Te Tiriti o Waitangi/The Treaty of Waitangi and align with the He Ara Waiora framework.

Fundamentally, their argument is about what a fair share is

7. Macey and Frame are arguing for a weaker international target on the basis of potentially high costs to procure offshore mitigation. This is the issue that the Commission argued was beyond our mandate to address and should be addressed by elected decision makers.

Many of the issues they raise are issues we also recognized

- 8. We included a chapter in Ināia Tonu Nei (*Chapter 22: Factors relevant to setting the level of the Nationally Determined Contribution*) that covered many of the issues Macey and Frame raise in their articles including:
 - That targets under the Paris Agreement are required to become more stringent over time
 - That domestic mitigation will not be enough to meet the original first NDC, let alone an extended NDC
 - That offshore mitigation is not yet available, and it is unclear yet where it will come from
 - That the offshore mitigation could come at a high fiscal cost to New Zealand
- 9. In this sense, the articles are leaning into the debate that the Commission argued ought to occur.

Frame and Macey's discussion about metrics

- 10. One area where Macey and Frame directly challenge the Commission is about the use of metrics. They have consistently advocated for a wider role for GWP*.
- 11. Macey and Frame say that GWP₁₀₀ is inaccurate, that GWP* is better, and that the Commission was wrong in our advice about it. They refer to their submission to the Ināia Tonu Nei consultation.

- 12. They focus largely on domestic targets being critical of the use of GWP₁₀₀ in emissions budgets, as they say it overstates the contribution of methane. (Note, the use of GWP₁₀₀ in emissions budgets is prescribed in the Climate Change Response Act). They push for measures more closely tied to warming impact to be used in policy and international comparisons.
- 13. Macey and Frame are also critical of the form of our NDC, arguing that the NDC itself should follow a split-gas approach. GWP₁₀₀ is the metric that has been agreed internationally to be used by developed countries for NDCs. They consider that Aotearoa should depart from this approach, and they are critical of the argument that this would not meet international expectations.

The Commission's advice on metrics

- 14. The Commission included a section on metrics, including GWP* in the Supporting Evidence to Ināia Tonu Nei. It is this advice that Macey and Frame criticised. We considered their submission at the time and amended our supporting evidence where we considered it was appropriate to do so. This resulted in us amending some (but not all) of the passages they objected to.
- 15. On emission budgets, we did not use a metric to set the balance of biogenic methane and other gas reductions, as these were aligned with achieving the split-gas targets. The metric was only used to aggregate the total emissions (of different gases) into budgets as required by law.
- 16. We agree that GWP* more accurately and precisely models the warming effect of a stream of methane emissions over time. However, Macey and Frame conflate the IPCC statement on this matter with international support of the use of GWP* for policy matters.
- 17. We assert that different metrics are useful for different purposes and that all metrics involve value judgements there is no "correct" metric. In our advice we said:

Although understanding of GWP* is still developing, it appears to be more suitable than GWP100 for analysing global emissions reduction pathways to limit temperature increases.

However, GWP* is less useful in other accounting, reporting and domestic policy applications because it relies on more complex interactions over time. It cannot be applied consistently to a pulse of emissions in a given year as the warming effect depends on the level of warming over previous decades. As a warming metric it is also more uncertain than a forcing metric such as GWP100 as it incorporates uncertainty in the global temperature response to a given level of forcing.

Next steps

18. We will consider any new information on metrics as part of the 2050 target review. For example, the recent PCE report illustrates how GWP* could be used to calculate how much planting would be needed to offset warming from methane from livestock.