



Office of the Prime Minister

Prime Minister

Minister for National Security and Intelligence

Minister of Tourism

Minister Responsible for Ministerial
Services

14 APR 2016

Andrew Riddell

Email: fyi-request-2797-50f80e9c@requests.fyi.org.nz

Dear Andrew Riddell

Review of Official Information Request for Information Relating to the Cost of Climate Change Reductions

I refer to your Official Information Act request of 2 June 2015 where you stated that "*today [2 Jun 2015] during Parliament's question time you [the Prime Minister] asserted that a reduction in carbon emissions of 40% by 2030 would have too great an economic cost.*" You also requested "*...copies of the reports and assessments you are relying on in making that assertion.*"

On 29 June 2015 I wrote to you advising that, included in the information identified as relevant to your request, was a briefing provided to the Prime Minister by the Department of the Prime Minister and Cabinet (DPMC) and that this had been withheld.

You have asked the Ombudsman to review the decision to withhold this briefing. I can confirm that, in April 2015, DPMC was provided with a document from the Ministry for the Environment (MfE). Given the passage of time since your original request, on receipt of notification of your complaint, MfE was consulted on the status of the version of the document that had been originally provided for the Prime Minister. MfE has advised that this document may now be released to you.

Accordingly, enclosed is a copy of the relevant MfE document titled "*Economic modelling of post-2020 climate change target, MfE, 21 April 2015.*" This document was provided to the Prime Minister in April 2015 and I believe would satisfy your original request.

Yours sincerely

Wayne Eagleson
Chief of Staff

Enc: MfE document "*Economic modelling of post-2020 climate change target, MfE, 21 April 2015.*"

Cc: Judge Peter Boshier (Chief Ombudsman) – Attention: Michelle Taylor (Senior Investigator) [408234]

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Economic modelling of post-2020 climate change target, MfE, 21 April 2015

This note sets out an explanation of the costs presented in the draft discussion document on New Zealand's post-2020 climate change target as at 20 April. Table 1 from that document is reproduced below

Table 1 Annual economic impact of New Zealand's target out to 2030 for a global carbon price reaching \$50 at 2030

	Gross National Income in 2027 (in 2012 prices)	Estimated annual economic cost to the economy
No target	\$299 billion	None
5% below 1990	\$295.4 billion ^a	\$3.6 billion
10% below 1990	\$295.4 billion	\$3.6 billion
20% below 1990	\$295.1 billion	\$3.9 billion
30% below 1990	\$294.5 billion	\$4.5 billion
40% below 1990	\$293.9 billion	\$5.1 billion

The following questions were raised by Minister Smith with officials in relation to these figures:

1. Why is there a substantial cost even for a -5% target?
2. Why is there no apparent difference between the economic cost of a -5% and a -10% target?
3. Why is there not a consistent pattern of increasing marginal costs with the target level?

Modelling background

We have conducted economic modelling with two CGE (Computable General Equilibrium) models (Landcare and Infometrics). The results in the discussion document are from the more conservative model (Infometrics). The Infometrics results have been peer-reviewed and signed-off by NZIER. Note these results do not include the impact of forestry on emissions, due to uncertainty on what forestry rules will apply under the new agreement. All results here assume a global carbon price rising to \$50 per tonne in 2030. Domestic emissions reductions costing less than \$50 per tonne are taken up before the model switches to international purchasing to fulfil targets.

Response to questions

We have looked into the specific questions above with the economic consultant concerned. We are confident these issues can be explained by a combination of the following factors:

1. Rise in emissions under 'business-as-usual'
2. Choices made on rounding figures
3. Impact of global carbon pricing

1) Rise in emissions: New Zealand's gross emissions are currently around 21 per cent above 1990 levels and will be around 38 per cent above 1990 by 2030 under 'business as usual' projections. This means the bulk of effort required for a given target is to bring emissions back to 1990 levels. This equates to 22 Megatonnes of annual emissions reductions (Mt CO₂e) versus 26 Mt for a -10% target.

2) Rounding: The figures in the discussion document are rounded to reflect the accuracy available from the model. These figures were used deliberately to avoid providing 'false precision' in the discussion document. However, this is not the most suitable presentation for exploring the incremental impact of deeper targets at the level in which Ministers are interested. More precise model runs are available. These are shown in Table 2 below and plotted in the graph (Figure 1). Note that although given to a greater level of *precision*, these model results are not necessarily any more *accurate* in absolute terms.