

Consultation on setting New Zealand's post-2020 climate change target



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Objectives for the contribution

Do you agree with these objectives for our contribution? No

1b. What is most important to you?

The critical element is to appropriately manage the risks associated with climate change. This involves considering all uncertainties and consequences of action or lack of action.

The report really only focuses on adverse effects and the uncertainties that arise in the means of mitigation.

Much greater consideration needs to be given to the uncertainties in the intervention logic i.e.

Human GHG emissions -> GHG concentrations attributable -> temperature increase attributable -> adverse consequences of that temp increase

There are very large uncertainties in the above at each link on the chain. In particular there is increasing evidence that the GCMs that the IPCC relied on to get from GHG concentrations to temp have over estimated climate sensitivity. Any policy intervention (aka contribution) needs to be robust in the face of this uncertainty.

On the other hand the cost of a contribution will be large, real and much more certain and needs to be taken account of.

The answer is for NZ to adopt a policy that is sensitive to outcomes in the target (i.e. global temp) rather than sub-optimally focused on an uncertain input (GHG emissions). This follows best practice for risk management and adaptive planning.

So the objectives for our contribution should include:

"Minimizes the risk (consequence X likelihood) to NZ of increasing global temperatures having regard to all costs and benefits factors and the uncertainty in them"

A simple way to make the contribution we deem as appropriate sensitive to the uncertainty in the assumed link between GHG emissions and temperature rise would be to include a discount/inflation factor reflecting the actual evolution of the relationship. The ratio of the 30 year (to reflect climate artifacts) immediate past actual temps to a selected IPCC projection for the corresponding period would achieve this.

What would be a fair contribution for New Zealand?

2. What do you think the nature of New Zealand's emissions and economy means for the level of target that we

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set?

As noted above, the more important issue is to make sure that we aren't foregoing well being today with certainty in the event that our sacrifice is unnecessary or has limited impact on what we are seeking to avert.

How will our contribution affect New Zealanders?

3. What level of cost is appropriate for New Zealand to reduce its greenhouse gas emissions? For example, what would be a reasonable reduction in annual household consumption?

The level of contribution will be time dependent because rising temperatures are an uncertain but gradually evolving risk in time. In setting international commitments we should be seeking to set our contributions up so that we tend to minimise the net cost to New Zealanders. Think about acceptable "reasonable reduction in annual household consumption" is the wrong place to start with this as a policy problem. The simple answer is we don't know so we need to set the process up so it tends towards an optimal outcome.

4. Of the opportunities for New Zealand to reduce its emissions (as outlined on page 15 of the discussion document), which do you think are the most likely to occur, or be most important for New Zealand?

The last sentence on p15 sums it up correctly "it is difficult to predict what effect such take up of new technology will have on our emissions over time". Again we are managing under uncertainty, the correct way to frame the policy issue is how do we set the environment for technology uptake so we respond appropriately to changing global temperatures.

Summary

5. How should New Zealand take into account the future uncertainties of technologies and costs when setting its target?

By setting the environment up so we heuristically seek out the optimum behavior.

Other comments

6. Is there any further information you wish the Government to consider? Please explain.

I'm reminded a little of the advice the local gave to tourists when being asked directions to a city: "I wouldn't start from here".