Overrated

New Zealand's Emissions Reduction Target for 2020

The New Zealand Government is relying on wildly inaccurate rankings of its 2020 emissions reduction target in order to answer critics at the Copenhagen negotiations. When corrected, the rankings reveal New Zealand is far from being even a mid-range performer – it is a tail dragger.

A number of independent research groups have evaluated the actions pledged by countries to reduce their emissions by 2020. As greater scrutiny is now being applied to the efforts proposed by each country, these independent assessments have become increasingly important.

One set of comparisons that the New Zealand delegation in Copenhagen describes as "probably the most comprehensive analysis" and its Minister Tim Groser highlighted[1] has classed New Zealand's 2020 target as "medium", and thus a pass mark, when it should clearly be classed as "inadequate" under this system.[2]

The analysis conducted jointly by EcoFys, Climate Analytics and the European Climate Foundation evaluates only gross emissions[3] and makes the unreasonable assumption that New Zealand's pledge to cut to between 10% and 20% below 1990 levels would be fulfilled by actually cutting emissions (in gross terms).[4]

Yet the Government acknowledges that its chief response to climate change, the Emissions Trading Scheme, will cut no more than 10 Mt in gross emissions over the period to 2020: it will simply slow the rate of emissions growth, not cut it.[5]

The Government is instead relying very heavily on using crop forestry to offset emissions that are in excess of its target. New forest can count as a true reduction in greenhouse gas levels if the growing trees became permanent forest. However, the owners of the forests it is counting plan to mill them in the 2020s and at that point, the

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1 "We are not top of the class - only Japan and Norway are assessed as 'satisfactory' - but we are clearly in respectable territory and this is completely consistent with the position our Prime Minister took to the NZ electorate - namely, that NZ, with its unique carbon footprint, would not strive to 'lead the world', but would 'play its fair share'. Below NZ, the EU, by contrast but with a higher nominal offer of -20% to -30%, is assessed as 'inadequate' - along with the others." Tim Groser, Climate Change Negotiations Minister, *Trade and Climate Change: A Negotiator's Perspective*, 8 December, 2009.

2 See www.climateactiontracker.org

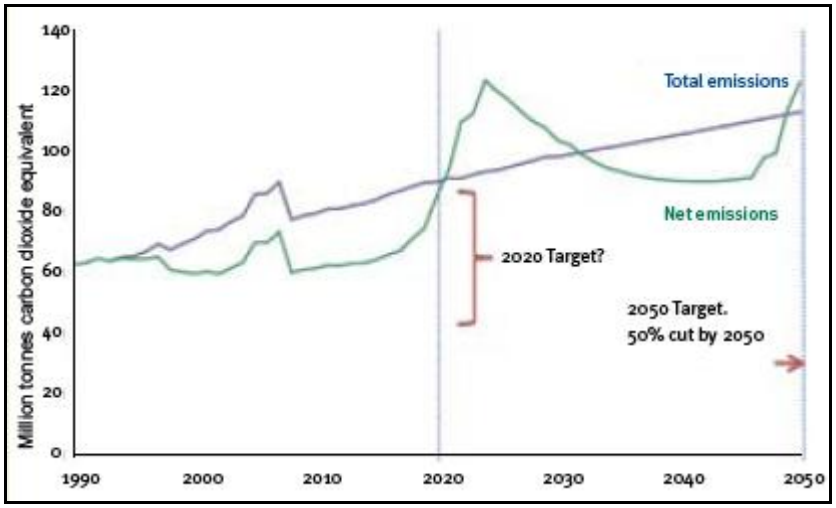
3 "Excludes emissions from land use, land-use change and forestry (LULUCF)" the site states.

4 "Targets are defined with respect to emissions excluding LULUCF", according to the site.

5 Stated by Climate Change Minister Nick Smith to Parliament during the third reading of the bill to amend the ETS in November 2009.

recently stored carbon is released again so there is essentially no net reduction in emissions through this crop forestry at the end of the day.[6] On current information, New Zealand's pledge to reduce emissions must overall be interpreted as simply a shifting of emissions reduction responsibility to another period. There is next to no real emissions reduction planned to take place that will not be cancelled out by tree felling planned for the 2020s.

The following graph produced by the Government at the time it was consulting on the 2020 target illustrates the position. One line shows New Zealand's emissions trajectory without forestry credits being considered (labelled "total emissions") and the other shows the data with forestry offsets and later harvesting emissions included (what it calls a "net emissions" path). By 2030, any gain from crop forestry in the 2010s is wiped out.



The New Zealand Government made clear when announcing that it would reduce emissions to between 10% and 20% below 1990 levels that this was conditional on what it termed "an effective set of rules" governing forestry offsetting.[7] Unlike most other countries, it did not set an unconditional target and when pressed, New Zealand's Climate Change Ambassador stated: "If our conditions are not met we reserve the right to drop (our target) below 10 per cent".[8] This made clear the degree to which the Government is relying on forestry offsetting as opposed to cutting gross emissions.

Industry lobby, the Greenhouse Policy Coalition (GPC), has also been arguing that the above study shows New Zealand's target is strong relative to other nations. In addition, it claims: "The cost of emission reductions is 8-10 times higher for New Zealand than other countries".[9]

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6 There are proposals to amend the current rules such that for the next period, a proportion of a felled tree could assumed to not release greenhouse gases in the short term (eg for sawn timber). However, this would cover a minority of the emissions ultimately arising from harvesting and unless and until these rules are in place, the default is that harvesting essentially cancels out the credits previously earned.

7 http://www.beehive.govt.nz/release/2020+target+balances+economy+amp+environment

8 Stian Reklev, *NZ could backtrack on climate target: negotiator*, Point Carbon News, 29 Sep 2009.

9 Greenhouse Policy Coalition, *NZ Emission Reduction Target Rated Better Than Many*, 9 December 2009.

The researchers that have estimated the cost to each nation of fulfilling its pledge are based at the International Institute for Applied System Analysis in Austria and have produced the GAINs study.[10] The GPC claim is wrong because this modeling team has also made incorrect assumptions arising from the complexities of accounting for forest credits.

This study uses only net emissions data. However, New Zealand's pledge is based on a gross emissions baseline and forest credits being allowed to offset this (thus comparing a gross base with a net outcome). It therefore significantly overstates the stringency of New Zealand's pledge. Instead of the 79% cut relative to the business as usual projection for 2020 assumed in the GAINs study, in reality the pledge amounts to a 33% to 41% cut. That immediately reduces the costs to half, or less, of that estimated.

However, an even larger reduction is likely because the GAINs study assumes a relatively high price for New Zealand acquiring the offsets required to achieve the target. In particular, its assumes domestic offsets will cost around NZ$80/t when the forest credits could well sell for much less than that. Price caps under the Emissions Trading Scheme and potential restrictions on the export of forest credits are particular market conditions that would take the price below the world level if applied in that period.

Even then, a key difference in New Zealand's case is that taxpayers and/or polluters may not pay for more than a small minority of these offsetting forest credits during the period leading up to 2020. The credits are issued by the UN to the Government, not forest owners. The owners have to apply to receive them and as at 31 March, only 8% of the forest area that can earn Kyoto credits had applied to receive these. If for example this low level of participation were to remain the same through to 2020, the Government could then use the 92% of the forest credits it holds and incur no cost in doing so prior to the major deforestation charges landing in the 2020s, which it would then face.[11]

Which leads back to the fundamental point about crop forestry which the New Zealand Treasury puts as follows: "for every tonne of carbon absorbed by forestry there is an associated future liability. In the long term the forestry sector is essentially a zero sum game".[12]

Unless and until the owners of the trees are willing to convert their plantings to permanent forests, offsetting using crop forestry does not deliver any lasting emission reductions. New Zealand's target would be met primarily by just temporarily storing carbon, and leaving the bill for truly squaring it away to a future generation. As this tends to limit the capacity of that future generation to make additional cuts, this device for time shifting responsibility for emissions is corrosive of future efforts.

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10 Fabian Wagner and Markus Amann, *Analysis of the Proposals for GHG Reductions In 2020 Made by UNFCCC Annex I Countries by Mid-August 2009*, Draft version, International Institute for Applied System Analysis, September 19, 2009

11 This is because forest owners have been assured that if they do not collect carbon credits, they can harvest their trees for free and so avoid taking a risk on the price of the deforestation charges that would apply if they did pick up the credits.

12 Emphasis as per original. The Treasury, *Aide Memoire: Further Analysis on 2020 Targets*, Note to the Minister of Finance, SH-10-8-4-6-0, 28 July 2009, p 2.