

Introduction

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On the **Climate Change Contribution Consultation**

Closing date 3rd June 2015

The consultation exercise is welcomed. This is not a select committee consultation process, but sufficiently important for all of our future that hearings be conducted, at least in Wellington, and submitters be given the opportunity to discuss their ideas with the minister and his climate change committee. I would be willing to attend and participate in these hearings. In particular, I would be willing to attempt to shed some light on the targets of the US: 17% below 2005 levels in 2020 and 26-28% below 2005 levels in 2025, and conceptualize what that would mean if adopted by NZ.

Being an advanced developed nation with a good standard of living and track record of advanced social policies and international good citizenship, NZ should offer leadership in GHG reductions. The growing middle class can afford Auckland homes at \$800,000 average cost, so can clearly afford to do much more to join world leading countries in setting strong targets for massive GHG reductions over the next decades.

Rising ocean levels and the degradation of water purity are already with us. Even if we manage to keep the average temperature increase to 2% (and many believe this is already beyond the possible), there will still be serious problems. With a 4% increase this will, one fears since the models predict it, result in "water wars" which will have a far more detrimental effect on the global economy, and hence that of NZ, than some changes which we need to make, and should make anyway.

The discussion document put out for this consultation exercise, entitled "New Zealand's climate change target: our contribution to the new international climate change agreement", appears defensive of our weak position, and "hedging our bets", so as to protect current living standards of the well-off, and cause as little change as possible to our current way of doing things. Hence the emphasis, throughout the document, of buying ultra cheap carbon credits to meet out "obligations" under agreements, and to opt-out should those markets not continue.

It is in the spirit of the leadership that many thoughtful citizens would like to see us offer in this area, that we set targets completely independent of carbon markets. That was absolutely clear from the consultation in Hamilton which I attended. Yes the economy is growing as it has for many decades at an underlying rate close to 2% (net of the CHCH rebuild), yes the world needs more food, but changes in technology are already established which would enable us to set excellent ambitious targets.

Q1. (a) do you agree with the above objectives for our contribution?

Objective 1: agree. To be seen as fair they would need to be comparable with the published targets of the US and EU, both of which have strong agricultural sectors.

Objective 2: this objective has so many words which are unqualified so as to be meaningless: fair for whom? Appropriate for what?

Objective 3: delete "over the long term". We need to be guided NOW, GHG reduction is urgent.

Q1 (b) What is most important to you? Objective 1, but not only “seen” which has the aspect of political “spin”, but “It IS a fair and ambitious contribution to the reduction of GHG emissions” would be more to my liking. It is also an important objective that, maybe at long last, we use this opportunity, with partly enforced change, to modernize aspects of the NZ economy, so as not to have it based so strongly on raw commodities, but to accentuate advanced manufacturing.

Q2. What do you think the nature of NZ’s emissions and economy means for the level of target we set?

Since 1990 NZ’s Carbon dioxide emissions have increased by 36.3%. Of this increase the energy sector, including transport, increased by a factor of more than 2.5 more than agriculture’s total emissions, according to the Ministry for the Environment’s 1990-2013 “Greenhouse gas inventory”. This is hardly evident from the consultation document. Thus, good reductions can be achieved by addressing the energy sector.

The move away from burning coal or natural gas, for example by closing Huntly at 500MW, and moving more aggressively to wind and solar energy, would bring about a significant set of improvements in the energy sector. There are many options emerging now for electric and hybrid vehicles, which will also, given some encouragement by government, make a significant difference. Then, over the period, there is a lot to be gained by encouraging the development of high-density living centres, rather than our expensive to reticulate urban sprawl, so loved by property developers. This, over the planning period, could go hand-in-hand with greatly improved public transport availability.

There are many other ideas which could be implemented by progressive governments over the planning period. One mentioned at the consultation was to replace street lights with LED’s and to turn them off during low use night hours. This could make abundant energy available to recharge the electric and hybrid vehicles.

Farmers in some parts of NZ are already needing to cope with frequent periods of drought. This will most likely only get worse with climate change. We need to spend more on research to assist these farmers, accentuating for example grasses that are drought resistant (like the grape vines grown in Spain with deep roots, some of which have been growing and producing fruit for 100s of years).

Q3. What level of cost is appropriate for NZ to reduce its greenhouse gas emissions? For example what would be a reasonable reduction in annual household consumption?

In Table 1 we see a level of 40% cost per household at close to \$2,000 per annum. Because businesses will pass on costs to households, we are assuming I believe that there should be no net cost to business. This would mean no incentive for businesses to adopt lower emissions policies.

Also the “user-pays” policy, consistent with taxes like GST and student fees, means that this cost will fall on all citizens in equal amounts, not in proportion to their levels of consumption or ability to pay. Should the methodologies and technology changes be implemented as described above, the need to reduce household consumption should be at a minimum, while still retaining the 40% target.

Q4. Of these opportunities which do you think are most likely to occur, or be most important to NZ?

They are all likely to occur globally, and need to be encouraged for adoption in NZ, where businesses are research and development shy and slow to adopt new ideas – this phenomena has been well documented by many expert commentators on the NZ economy

Q5 How should NZ take into account the future uncertainties of technologies and costs when setting its target?

Not at all. The target should be set as a “hard ambitious target” and not qualified and hedged as we see at present. Solar power and electric vehicles are already with us, at no cost to the NZ tax payer. Wind power is already well established in NZ. Using the hydro lakes as batteries for additional power provided by wind or solar (by pumping water back up into lakes for example) is easy to implement, we already have good examples of drought resistant grasses. We know how to make weather tight homes which retain heat and so lower costs.

Policies like higher density housing will take a little time, but there are so many good examples around the world of how this can work well: see for example Singapore or Seoul or NY, where high density living is high quality and high amenity living, with so much excellent public transport, that even the well-off travel in comfort and efficiently on that mode, saving the car for a weekend drive in the country side. NZers don't in the main want the section and garden maintenance tasks so favoured by earlier generations. Older folk are moving at some speed into retirement villages, especially to be relieved of the tasks, and the new generations are not interested.