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NZETS Review Consultation

This submission is made by Dr Hugh Barr, My background has been as a practicing applied mathematician and scientist, initially employed by the Department of Scientific and Industrial Research (30 years) and then as a private consultant, specialising in advice to many parts of New Zealand's service and production industry, and also an interest in risk management. I request to be heard in support of this submission.

1 Paris COP21- substitute for ALL Fossil carbon by 2050:
Here the conclusion was that over 180 countries pledged to try to reduce their primarily fossil carbon emissions so that greenhouse gas emissions were kept at a level where global warming from greenhouse gases was to be kept below 2 degrees celsius, and aspirationally, if possible to 1.5 degrees celsius, if possible (because of lobbying by the small pacific island states, many of whom are watching their islands sink below the sea).

To meet the 2 degree warming target, the world has 35 years approximately, in which to phase out all fossil carbon completely, meaning changing to renewable technologies to **remove ALL Fossil Carbon**, and including lifestyle changes and other changes to substitute for present fossil carbon use.

It is up to each country to choose, given the present state of various renewable technologies, to decide the path that is most effective for them. Renewable electricity technologies have been improving in terms of their costs and outputs at a very fast pace.

For example **photo-voltaic electricity generation from the sun**, has become cost effective in the last few years, because of Chinese R&D. Because of learning curve effects, and continuing Chinese R&D expenditure, prices are almost certain to keep reducing. Similarly for **wind electricity generation**. So the outlook is promising that these and other renewable energy technologies can replace fossil fuel industries, given that suitable plans are prepared.

Failing to plan is planning to fail, as Winston Churchill is credited as saying. So a workable plan reviewed regularly, as potential new technologies emerge, provided that markets are allowed to reward the innovative with greater profits, is essential. Many companies see the opportunity of showing their green credentials, as a promotional advantages, as well as being keen to pull their weight in transforming to renewables, and enhancing their future capabilities, as being early adaptors.

2 Post Kyoto - whole new Ball Game – ETS schemes now obsolete:

Whereas Kyoto was about the rich countries (who were the major users of fossil fuels) having to protect their industries from jumping to a non-Kyoto country, because it had non Kyoto obligations, now every country is in the same boat, with the need to get rid of all fossil carbon, no matter where they are located. Of course, companies and countries that want to be part of that future, will obviously be watching trends, and doing R&D on sustainable technologies to maintain their future prospects in this new renewable world.

The **ETS was a product of the Kyoto world. It has now obsolete**, as all countries have the same objective of phasing out fossil carbon, and phasing in renewable technologies. Playing games with carbon credits is equally obsolete, and more akin to belief in sub-prime mortgages performing. In any case, it is arguable that the NZ ETS never reduced NZ's fossil carbon use by anything more than Business as usual.

Any desire by the NZ Government to play with carbon credits is like operating a Ponzi scheme, with the goal being to do nothing about reducing fossil carbon. Geoff Simmons (working for Gareth Morgan)
https://garethsworld.com/blog/environment/governments-lack-of-action-on-climate-change-coming-home-to-roost/
has shown that NZ has wasted money on worthless Ukranian "hot air", that did nothing to reduce GHG emissions. Though it presumably helped increase the wealth of this corrupt regime.

Answer to Question 1, p 11 of the MFE Review 2015/16:

I agree that the NZ ETS has been a disaster in terms of reducing GHGs in NZ. It is clear too that few players believed that the NZ Government was serious about even its ETS Scheme, as the price collapse would indicate.

Why speculate on carbon credits when the NZ Government's position has been inconsistent in addressing climate change, and still is. For example, still having a policy of allowing deep-sea drilling in \areas as yet untested for hydro-carbons. Clearly very much at variance with the world obligations to meet the 2050 deadline.

It is almost as if John Key's currency-trading background blinds him to the reality of climate change, and that he thinks doing deals, as with currency speculation, is the only way to go. There is too NZ's $2 Billion/year hydrocarbons export industry which needs to be effectively phased out, to give benefits to the NZ Economy, and be replaced by new renewable industries.

So, it appears up to various industry players to get on with things, and have a high carbon tax as I argue below. As expected the Industry players are usually keen to do their bit. The group that does not appear to do its bit is the present National Government and its hangers on.

Regarding the present mess created by the Kyoto ETS, the sooner it is fixed to meet what obligations NZ's fossil carbon industries have agreed to, including refunding the carbon credits stolen from the NZ Plantation Forest industry, the better.

Conclusion: Use a re-distributive high fossil carbon tax to aid the transition to a renewable world.

The sooner the NZ ETS is dismantled the better, as described above. The best thing to replace it with is a fossil carbon charge at source, on all fossil fuels.
This fossil carbon charge should be large eg $90/tonne of CO2 or equivalent, immediately, with re-disribution of collected funds to all New Zealand nationals currently in New Zealand. This redistribution represents an endeavour to redistribute the charges on a per capita basis to all New Zealanders, to compensate for any inflation that the tax may otherwise cause. This re-distribution should be kept well away from that neandertal department, the NZ Treasury.

At present the very low carbon credit levels are not even enough to stop fossil fuel obsessed Fonterra from using coal, because, as a commodity trader it will always choose the cheapest fuel, as it counts its clean, green image of as no value. A **Fossil Carbon tax of at least $24/tonne, and probably $50/tonne, seems needed currently to penalise the likes of Fonterra, and get them going down the biofuels pellet wood system.**

As new renewable technologies develop, any carbon tax on GHGs, should start to reduce the cost of transition to a sustainable world. The Carbon Tax should therefore rise to speed the transition to renewables, eg to $200/tonne, $500/tonne etc to drive the change.

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