

7th June 2018

Productivity Commission
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Submission: Low Emissions Economy – Have Your Say

Dear Sir, Madam,

Background:

As per my submission in October 2017, I expressed my concern/belief that climate change is well under way and that it is 'happening faster than estimated'. In the short time since expressing that belief, the evidence has intensified, such as:

- 17 of the 18 hottest years recorded since 1850 have occurred since the year 2000* – just pause to ponder that fact if you read no further. The last three years have been the hottest trio ever seen.

*(Independent analyses by NASA (National Aeronautics and Space Administration) and NOAA (National Oceanic and Atmospheric Administration))

- The Arctic reached temperatures 30 C degrees above normal – the average for the 2017 – 2018 year was some 5 degrees C (8.81 deg F) above normal.
- Some scientists predict Ice free Arctic in 5 years. The behaviour of the Arctic affects the whole planet. Complex -The question is not *if* things are going to change, but how fast and when and what are the changes we're going to see.

Implications of ice free arctic include such as:

- the release of methane in a thawing tundra and Siberian Shelf are huge and not even factored in by IPCC.
- slowing Gulf Stream = global extreme unprecedented weather changes such as the present colder extremes experienced in the Northern hemisphere. Michael Mann* climatologist said this is happening 100 years before predicted.

*(and geophysicist, director of the Earth System Science Center at Pennsylvania State University,)

- The Antarctic now unexpectedly melting from below – previously thought unaffected.

- NZ waters in 2017 2C above average and up to 6.5 degrees above off the West Coast
- In March 2018, it is announced it is 14 months since NZ's temperatures have gone below average described as 'pretty exceptional'.
- Hottest January 2017 in Northland since records began. Maximum January air temperature records were set in Whangarei (26.2C, up 1.7C), along with 11 mean minimum air temperature records, including in Kaitaia (18C, up 2.9C), and in Kerikeri (17.4C, up 3.3C). Kaikohe recorded its strongest-ever January wind gust at 89km/h, and Kaitaia its third-strongest at 93km/h.

I also previously expressed concern at other simultaneous threats such as the uncertainty of available cheap fossil fuels, the unstable global debt laden 'ponzi' financial system, resource depletion, ocean acidity, peak soil, peak water, pollution, extreme inequality, deforestation, species extinction, lack of food production diversity and I repeat that concern.

I concluded that we may be too late to mitigate therefore we must prepare to adapt to the inevitable crisis approaching, one such response being that of the global grassroots Transition Town Movement to build resilient all-inclusive local communities – resilience in local food, local energy and local economy.

Paradigm Shift in Life Styles Required – Lets talk.

Local resilience is a huge topic which cannot be detailed in this submission except to emphasise the need to start the public discussions at all inclusive, community levels. The conversation would include topics such as a move away from - political agendas; mono culture to diversified agriculture; to permaculture and biodynamic production; move away from centralised energy supplies; produce and buy local; 'cradle to cradle' waste systems; local currencies; and more.

Expert Opinions Support Adaption.

A number of experts/academics are on the same page as above and are included in the Appendix below – a summary of their comments include: “the lack of research into community disruption at grass roots level,... founded on 'business as usual' instead of sharing and circular economies, NZ needs to focus on adaption as well as mitigation, Our political institutions are failing to safeguard the welfare of future generations,..... Climate Act needs to be enabled more quickly than we appear to be,..... New Zealand has experienced decades of delay by some lobby groups,..... the UK Climate Change Act (CCA) was possible because there was strong cross-party commitment to tackling climate change,.... am not convinced we have the same level of commitment here in New Zealand today,.... government needs to be active and willing to step in when markets fail,.....”

Lack of Public Concern. Whilst the word 'climate change' has finally been heard in the main stream media's vocabulary, public awareness, thus concern, is still lacking. This ignorance is well illustrated on social media and by the lack of any movement in political polls.

And even then, it is only extreme storm/weather/sea level events that are mentioned. Less tangible threats such as local food resilience don't appear to be on the radar. Higher temperatures will have a major impact on plants – not only from the obvious moisture stress, storm damage but on the inability to photosynthesis. World food supply is dependent on a very few crop species that are threatened by rising temperatures.

Carbon Sequestration.

To briefly refer to the mitigation aspect, has any thought been given to the ability for the ability of pasture sequestration of carbon. Attached is a Discussion Paper from Peter Bruce-Iri, Northtec Taitokerau for your information.

Conclusion

The conversation/research/assistance has to be instigated with local communities on the adaption response of building resilience in local food, local energy and local economies.

Thank you

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Appendix.

- Rod Oram's May 2018 report - <https://t.co/19KWxibXJr> echoes my above concerns of the need to build resilience in our communities to adapt to the disruptive changes ahead. The weaknesses illustrated -The reliance on new technology, yet to be defined; the lack of research into community disruption at grass roots level, the ultimate 'wellness' barometer; founded on 'business as usual' instead of sharing and circular economies. NZ needs to focus on adaption as well as mitigation.
- Simon Upton, Parliamentary Commissioner for the Environment (PCE) recently released his report on how the Govt can achieve zero carbon. Reviews say that NZ needs to focus on adaption as well as mitigation. I quote some of the academic's conclusions:
- "A key question that remained unanswered in the PCE report is whether the Commission should also look at climate adaptation and risk assessment. The IPCC has two separate Working Groups assessing adaptation and mitigation but there is some overlap. The New Zealand Zero Carbon Act will probably include both.

- “However, there will be so much urgent work for the Climate Commission to undertake initially on mitigation efforts in order to meet our international obligations and to catch up with emission reduction actions being taken by many other countries after our relatively slow start, that adaptation and resilience issues could best be left to the existing Climate Change Adaptation Technical Working Group hosted by the Ministry for the Environment.”
- Another - “Our political institutions are failing to safeguard the welfare of future generations who will inherit a badly damaged climate system unless we shift urgently toward low-emission development. Implementing an independent Climate Commission that delivers capability, credibility and influence will be an important step in the right direction.”
- Another - “Finally, this Commission and associated Climate Act needs to be enabled more quickly than we appear to be, while we certainly need cross sectors support, New Zealand has experienced decades of delay by some lobby groups, who are adept at advising governments to slow down. This new government has a once in a generation opportunity and a clear mandate and now needs to set out a timetable for action and implement it.”
- Another - As the report acknowledges, the UK Climate Change Act (CCA) was possible because there was strong cross-party commitment to tackling climate change. I lived through this period in the UK and I am not convinced we have the same level of commitment here in New Zealand today. As the report notes, there has been a reluctance to implement policies that ‘bite’ in New Zealand – this is true of National with their rural electorate, but also true of Labour to date. This means that in New Zealand there is a risk that this legislation might be repealed or watered down by future administrations
- Another - “The biggest challenge to climate policy in NZ is not enacting the Zero Carbon Act or establishing a Climate Commission, it is overcoming the non-interventionist ethos that has engulfed Wellington in the last decade or so. There are times for government to be hands-off and let markets get on with it – for sure – but when radical change is need, government needs to be active and willing to step in when markets fail.”