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New Zealand Productivity Commission
Via email to info@productivity.govt.nz

5 June 2018

Re: Submission on the Low-emissions economy Draft report dated April 2018

Dear Productivity Commission,

I agree with the vast majority of the detail, findings and recommendations in the report. However, this submission draws the Commission's attention to five key matters which I consider require further thought, as summarised below (and discussed thereafter):

- Too much emphasis is placed on 2050 and not enough on subsequent periods.
- Forestry needs to be better understood and accepted.
- Tech should be the fourth pillar and double as insurance for agriculture.
- We should be bold with the electrification of transport.
- Consistency is paramount.

1. Too much emphasis is placed on 2050 and not enough on subsequent periods

While Hon James Shaw's December 2017 letter does signal various 2050 initiatives and refer to the Paris period, the letter does not narrow the ToR at all.

The ToR directs that *'the inquiry should have a long-term focus, while being cognisant of NZ's 2030 and 2050 emissions reduction targets'*. 2030 and 2050 are therefore dates that are on the timescale but not at its end – the end must be after that, i.e. 'long-term', which implies either indefinite sustainability or the second half of the century.

This is important because all the numerical analysis in the report, and the vast majority of the material discussion, seems to take 2050 as the end point. Not only does this not address the instruction in the ToR, but it is unfair for our mokopuna for whom we are trying to act.

To fix this, I recommend a separate section that considers the post-2050 period and that all logic, findings and recommendations applicable during the period 2018-2050 are reviewed in the context that NZ wants a long-term and sustainable model.

2. Forestry needs to be better understood and accepted

The carbon neutrality of forestry means that afforestation sequesters carbon, but deforestation pollutes. Forestry therefore only has value to the ETS when forests are planted ad infinitum, as the Commission points out. While NZ has opportunities to convert to forest for Paris (and Kyoto), we should take them, but there are some important commercial recommendations that should accompany such a strategy.

First, NZ should be upfront with the international community in the second Kyoto period (i.e. that the phasing of the forest lifecycle could well be what allows us to meet the targets, rather than any underlying reduction in emissions) and beyond, in a way that perhaps we weren't in the first Kyoto period (when we relied on EURs which undermined the credibility of our NZUs). International credibility will be important, e.g. when securing access to technology and carbon markets.

Second, either there should be a good elevator pitch created so foresters widely sign-up to the optional post-1989 arrangements, or those arrangements should be made compulsory but the financial risks and rewards associated with having NZUs tagged to inclusion in the scheme should be made more transparent and have a more prescribed governance process associated with it.

Third, notwithstanding that forestry will play a big part in meeting Paris targets, forestry should not be one of the *three* pillars on which NZ's sequestration strategy is based. Why not – because post-2050, when that pillar falls away, the two-pillared chair will fall to the ground. A fourth pillar is urgently required such that when forestry falls away, NZ's ability to physically reduce carbon emissions does not.

3. Tech should be the fourth pillar and double as insurance for agriculture

There are many references in the report which, when taken together, should justify technology being the fourth pillar. This is best summarised¹ when the Commission says “investing in new technologies will likely not only reduce the emissions price required for the transition; they may also open new economic opportunities for business investments with good returns, high-skill jobs, and profitable export opportunities”. The Commission should adopt a pillar approach (and a fourth pillar of technology) in order to capture this strategic thinking and help with the government's vision.

If NZ does not adapt, it will sooner or later be held commercial hostage by other countries that are early adopters in technology. If we assume that this is palatable during the Paris period (which is debatable), it certainly won't be palatable post-Paris after forestry creates a problem.

There are parallels here between post WWII Japan and NZ post Kyoto. Imagine Japan today if in the 1950s² it failed to invest in technology. Well, imagine NZ post-2050 if it fails to invest in technology. Falls from grace do occur. In the early 1900s, Argentina was the seventh richest country in the world.³ In 2001, Argentina default on USD 95 billion of debt. The lesson across these countries is that NZ must put good structures in place, and must adopt a targeted technology strategy in order to sustainably maintain the benefits of being a first world country.

We must not pay billions of dollars overseas due to a lack of planning or risk aversion in relation to climate change. In addition, we should want the physical benefits of a better environment to be achieved in our backyard, not in someone else's (let alone one that we also subsidise).

The Commission should recommend that the government adopts a vision to become a world leader in carbon sequestration. We need to be bold. If innovation is close to a 'silver bullet' as the Commission suggests, then what are we waiting for? Certainly the legislative thinking is on the right track with recognising carbon sequestration. We now need to double-down on targeted technology, and leverage it as much as possible like in x-prizes or similar. We can still sign up to international markets as a back-stop, but technology should be a pillar.

¹ Page 128. Other examples are page 63 and 68, and F3.7 and F5.11.

² http://www.iun.edu/~hisdcl/h207_2002/jecontakeoff.htm see section 3.

³ <https://www.aljazeera.com/programmes/countingthecost/2014/02/argentina-great-decline-20142614123613504.html>

Last, NZ needs to be commercially astute with agriculture. It will not be good enough to simply invest in methane-reducing technologies. Looking at the big picture, NZ is massively exposed to exponentially disruptive artificial milk and meat products which have the potential to ruin our main industry. The Commission should recommend that the government adopts a vision to become a world leader in artificial dairy and meat products to hedge our economy. That way, if our dairy industry collapses, the economy should be able to absorb the economic shock in addition to (and not just) having carbon levels also reduce. Look at what happened to wool.

4. We should be bold with the electrification of transport

A feebate scheme should absolutely be introduced, but the Commission should make bolder recommendations if electrification of transport is to become a very strong pillar. A 64,000 EV car target when there are millions of cars on the road is start but it lacks vision. At a minimum, the Commission should recommend the government phase out the importing of fossil-fuel only vehicles by a certain date. If this is a core strategy, the government should go for it, otherwise its books will suffer if households don't take their own initiative.

5. Consistency is paramount

NZ needs a consistent and coherent approach to climate change. The Commission should therefore:

- Make sure it recommends all possible recommendations that can be drawn from its findings.
- Recommend to government that it amends its gas and coal policies to be cognisant of their transitional role and that, in the absence of alternatives, gas pollutes much less than coal.
- Recommend to government that carbon leakage policies are regularly reviewed such that no industry participant should be subsidised (even if trade exposed) if failure is inevitable.
- Recommend to government that all types of GHG pollution are included in the scheme with no exceptions (albeit with some phase-in periods).

Conclusion

The Commission is 95% there with its draft report, but the recommendations should be bolder and more consistent. The report would benefit from adopting a four pillar strategy to carbon mitigation options – with forestry unbundled before it falls away, and with a massively increased focus on technology particularly sequestration.

The key is to understand post-2050, and in doing so, this provides a better set of across-the-board answers during the Paris period that not only looks at credible transition strategies, but ultimately should maintain or improve incomes and wellbeing (as required by the ToR).

A good report should become a great report to prevent a tragedy of the commons becoming a tragedy of sustainability. We need to think of our mokopuna.

I am happy for the Commission to contact me to discuss the points raised. If possible please redact my address prior to publication of my submission.

Yours sincerely

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