

Submission to

**The Productivity Commission**

On

**The Low Emissions Economy Report**

From

Geoff Thompson

7 June 2018

# Submission

## Introduction

This is a submission by Geoffrey W.F. Thompson in his personal capacity but built on his nearly 50 years' experience in plantation forestry.

Geoff is active in the forest industry as founding and continuing chair of the Forest Growers Levy Trust, Chair of two small-scale plantation companies first planted in 1970. He has a long-standing interest in climate change issues and was a member of the Ministerial Review Group for the Emissions Trading Scheme in 2011 (for forestry input). He has just retired as the co-convenor of the NZ National Party environmental policy group, the Blue Greens, and was a hill-country pastoral farmer for 35 years.

Geoff is strongly supportive of the role plantation forestry can play at offsetting New Zealand's Green House Gas (GHG) emissions and his submission addresses Chapter 10 of the Report.

He compliments the Commission on the breadth of its coverage of GHG emission issues in the report, but regrets a failure to deal substantively with two critical features:

- a. Input to the review of the structure and rules of the Emissions Trading Scheme (ETS)
- b. Discussion on the principle driver of land use change

These issues are linked as will be explained.

## A. Forestry as Carbon Mitigator

The report is correct to identify New Zealand's natural advantage in growing *Pinus radiata* – over 100 years of breeding and management experience; a combination of good soils and climate for quick and quality growth, and a successful economic business model from planting to harvest and marketing. The 1.7 million hectares of existing plantation forest should be expanded, but the constraints are severe.

The current "1 billion new trees" programme creates a lot of noise but will be difficult to achieve other than in the long term. At planting rates averaging 1000 seedlings per hectare, a million hectares will be hard to identify and free up for forestry, quite apart from the rising cost of even poorer quality pastoral land. There is also the labour requirement, even as technology improves mechanisation of the industry.

Accordingly, the Commission's proposal for planting an extra 1.5m to 2.8m hectares to provide carbon sinks to bring NZ to zero net emissions by 2050 is truly heroic, even if the figure does incorporate the Minister's target.

This brings me to the first obvious gap in the report.

The targets will require planting extensively on pastoral farming land. It has to be accessible by a road and for the economies of cropping, to be within a reasonable distance of a mill or port. I accept that a small proportion of the extra planting will be in permanent forest, both exotic and indigenous, but this goes to the core – what would persuade a pastoral farmer with suitable land to convert to forestry?

In this presentation I discount the foreign-owned corporates – about 1.2m hectares of plantations owned currently. They replant their harvested areas, but few, with the probable exception of Ernslaw One, are expanding their areas of new planting.

The Commission needs to present material on what will encourage change from economically marginal pastoral farming to tree planting and indeed, replanting by small-scale forestry groups.

I think there are two main elements:

- a. "Certainty" for the foreseeable future about the conditions of the forestry industry is necessary. No one can be 100% sure of conditions at the end of a tree life cycle of 25 – 28 years, but there need to be structures and commitments in place which give confidence now to proceed with a forestry investment
- b. A sure financial return from the investment. This is where a revised ETS can play a significant part. Planting *Pinus radiata* for the 25 – 28-year ideal growth period of *Pinus radiata* requires an act of faith that an attractive market will exist on harvest. However, if the ETS is reformed a substantial supplementary income is possible from NZUs issued for the sequestered carbon at regular intervals. This is only possible if most of the sequestered carbon is enduring and not subject to claw-back on harvest.

## **B. Possible solutions to the forgoing points:**

- a. I support the introduction of a Climate Commission for New Zealand largely modelled on the UK example. I was responsible for arranging the visit of Lord Deben, Chair of the UK Climate Commission, in early 2017 when he explained how cross-party agreement was reached in the British Parliament to create their Commission, whose primary role is to set emission targets and monitor performance. This was a revelation to many of our climate change advocates and I suggest the atmosphere is promising now for developing a cross-party consensus on creating such an institution for New Zealand.

This would boost confidence in the scheme and the emission reduction objectives – a strong signal that an effective and enduring scheme will be put in place, with cross party cooperation.

- b. Government can add to the confidence in the future of the forestry industry by endorsing the "Wood First" movement. The construction industry was disappointingly slow to develop this in response to the Christchurch earthquakes, but attitudes are improving amongst architects, engineers, property developers through to local authorities (with Rotorua District leading the field). It is not difficult to promote the use of wood for commercial as well as domestic use. This attitudinal change is matched by the developments in wood technology. With the use of glue-laminated and engineered wood products New Zealand should be at the forefront of use of its timber for buildings.
- c. The principal driver of a forestry investment is financial return. I am sure there is a small percentage of land owners and investors who are motivated to take action to mitigate GHG emissions for high-minded motives such as the public good. But the majority, I am sure, of pastoral farmers who need to be persuaded to change the use of some of their land, is the financial return – if one can see better money in forestry than in raising animals. The driver is money. So, the scheme to promote a huge land use change must be financially rewarding and enduring.

The ETS is in place and has all the elements needed for creating a market price for units issued for sequestered carbon. It was introduced as a comprehensive "all gases all sectors" scheme with the purpose of changing people's behaviour towards lower emission options.

That purpose has been a failure, but the mechanisms can be reformed. I support the introduction of a floor price for units and a regularly revised cap price to acknowledge international movements e.g. the EU scheme upon which the NZ scheme was modelled has moved quite swiftly in recent months to €15 – 16 per unit.

The registry should be solely with the EPA and MPI or the new Forestry Ministry, removed from the administration.

The key point for forestry in the ETS is the need to introduce a set of rules for creating carbon units that are suitable to New Zealand. There is no logic or other reason for continuing with Kyoto rules. They are out-of-date and irrelevant to New Zealand's requirements.

The point for New Zealand is whether the forests planted here produce carbon units that stand up to international scrutiny for measurement and integrity. Well, New Zealand relies on a process of nature – photosynthesis, to convert the GHGs to carbon sequestered in the tree. This is readily measured and continuous over the life of the tree.

The rules for forestry carbon can be changed. We have no continuing obligation to the LULUCF or UNCCC rules for determining our forest carbon measurement. There are three rules in particular to change:

- (i) Introduction of "averaging" in the calculation of units earned and issued
- (ii) Acknowledgement that carbon does not instantly oxidise on the tree being harvested. There needs to be smart judgment applied to calculate a formula for carbon retained for different periods in harvested wood products ("HWP")
- (iii) There is no logic at all in disqualifying a grower from participating in the ETS because his land previously had trees planted on it. The issue is carbon retention in the tree and the condition of the underlying land is irrelevant

### **C. Biological Emissions**

The inclusion of agriculture in the ETS should be signalled. Despite no break-through as yet in the research for methane and nitrous oxide neutralisers, the research efforts should be strongly endorsed for a vaccine or pasture change. But introduction should be gradual until there is a remedy for the emissions. The suggestion of a commencing 95% discount reducing annually is reasonable.

But it does raise the question of whether more effort should be applied to calculating the effects of the GHGs. The short-term nature of methane gas should be recognised in measurement.

Also, the point of measurement and liability should be the individual farm, so individual effort can be rewarded.

### **D. Conclusion**

New Zealand's unique emissions profile includes its ability to grow *Pinus radiata* quickly and rewardingly. The Commission's recommendations for substantial additional planting is commendable and should concentrate on this species and developing the driver for land use change - improved financial rewards.

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