

SUBMISSION ON FORESTRY IN THE ETS

15 August 2017

The New Zealand Productivity Commission has published an Issues Paper that seeks public submissions on opportunities for reducing agricultural emissions, for land use change and for sequestering carbon in forests in New Zealand (Questions 4, 5, 6 and 7).

Representatives of several forestry sector organisations have been closely following work by officials on the review of the Emissions Trading Scheme. Officials' interim conclusions, published by MfE on 26 July [refer <http://www.mfe.govt.nz/nzets/2015-16-review-outcomes>], suggest that so far the scheme has not been effective. We believe part of this failure is due to significant contextual issues. Until these are addressed, the ETS – however finely tuned - will not encourage the significant areas of new planting needed to offset emissions elsewhere in the NZ economy. We have set out below a list of observations and conclusions describing the contextual issues we find most concerning. In summary:

- We accept the need for New Zealand to make drastic changes to its 'business as usual' approach in order to reduce or offset GHG emissions and meet its Paris target. In particular, we endorse the idea of planting another million hectares of forests to help sequester CO₂.
- Of course to qualify as 'additional' those forests must be planted on grassland. The forestry sector does not own grassland.
- Foresters won't buy grassland off farmers to plant more trees, because it costs too much. The price reflects the capitalised tax-free environmental and carbon subsidies that farmers presently enjoy. Farmers themselves have little economic incentive to plant trees and, in places, an economic incentive not to.
- Further, the Government has no planting targets for forestry and no tools to deal with high land prices.
- Land use will only change if officials either remove the 'subsidies' that inflate the cost of farm land, or encourage farmers to plant trees. Either outcome or both could be achieved within existing legislation if there was the political will.
- Without that resolve, 'business as usual' will continue. Land uses, GHG emissions and environmental outcomes will remain as they are. Forest areas will remain static, or even decline if public sentiment or legislative settings move against the sector. As sector professionals, voters and taxpayers aware of the need for emissions reductions, we find this singularly worrying.
- Land use change is essential in the absence of wholesale change in the use of fossil fuels or farming practices. We ask that the Government urgently consider a mix of:
 - a) **Making pastoral agriculture directly liable for its environmental footprint** in order to reduce its current levels of harm, which should cap - if not bring down - land prices; **AND**
 - b) **Phasing agriculture into the ETS**, so encouraging planting by farmers; **AND**
 - c) **Reforestation Government grasslands**, through active management of new plantings or wilding conifers.

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OBSERVATIONS AND CONCLUSIONS

Land Value

Observations

1. Forestry is one of a range of land management choices available to rural land owners.
2. Most rural land owners and land-related investors act to maximise financial returns, in cash or capital gains. Some take a long-term view and defer short-term returns, while others prefer short-term gains over long-term benefits. Many use the land's 'highest and best use' valuation to leverage investment with mortgage and seasonal finance to fund their operations.
3. For land use change to occur, the perceived benefits of the new opportunity or change of ownership must outweigh the owners' (and their financier's) resistance to change. They are likely to have less knowledge of the 'new' activity and an associated sense of higher risk.
4. The market value of land is determined by the highest returning opportunity whether or not it's the current use. As new opportunities arise, land values can increase. Capital gains from rising land values are not taxable under current law.
5. Agricultural land uses generally offer the highest returning opportunities, and so determine rural land values. Those returns are inflated by the GHG costs of agriculture being passed on to other parts of the economy, and the generally benign regulation of agriculture under the RMA.
6. The market price of land, whether purchased or rented, is a major determinant of profitability for any rural land use. Ample evidence exists that high agricultural land prices and unfavourable regulation encourage deforestation. They act against both afforestation, and replanting after harvest.

Conclusions

7. It is pointless to even expect the forestry sector to plant new forests without addressing the issue of land prices. Differential treatment of agriculture under the RMA and CCRA inflates land prices and discourages forest investment. A level playing field could only be created by subsidising the forest sector to a similar extent.
8. The alternative is to introduce a meaningful emissions cost to agriculture and enforce environmental legislation. The resulting market signals would encourage some farmers to plant woodlots, purchase land for afforestation and /or find ways to reduce emissions; and depress agricultural land prices allowing forestry to become relatively more attractive as an investment.

Wildings

Observations

9. While climate change analysts are arguing for more forests, the Government is attempting to deforest land that is being colonised by wilding conifers. Most wildings are establishing in areas that were grassland in 1990 and if left growing would count as GHG removals under New Zealand's Paris emissions target.
10. Wilding conifers in areas of low conservation value not only offer an opportunity for cheap carbon capture, but suitably managed will provide shelter for natural forest regeneration, active recreational opportunities, wildlife habitat and /or biofuels.

11. Where wilding eradication is feasible at reasonable cost, and justified to prevent spread into more sensitive catchments, the carbon sequestered by wildings in contained areas elsewhere could be used to fund their clearance (and replacement with alternative native, or non-spreading exotic forest species if desired).
12. Forest establishment and management on Government grasslands within the DoC estate and in areas vested in LINZ and the NZ Defence Forces involves no cost of land, and is therefore cheaper than afforestation by the forestry sector.

Conclusions

13. Review of the Government's wilding control policy could offer immediate fiscal benefits through reducing wilding control costs; and more substantial fiscal benefits later through low cost abatement of GHG emissions.
14. Management of self-sown conifers on some parts of the Crown estate (DoC, LINZ and Defence lands) will require the Crown to evaluate and make trade-offs between competing environmental outcomes, or to encourage the replacement of wildings with less invasive species while maintaining carbon stocks.

ETS and Related Sovereign Risk in Forestry Investment

Observations

15. Afforestation rates in NZ have varied greatly over time. A log price spike in the early 1990s, coupled with reduced agricultural land prices following removal of SMPs and other direct Government subsidies for agriculture, resulted in higher forestry ROI projections leading to a period of market-driven rapid afforestation.
16. Many 1990's forests were woodlots planted on farms to diversify income. Subsequent increases in agricultural land values arising from higher dairy returns and the introduction of indirect subsidises such as grand-parented diffuse-source nitrate pollution rights, irrigation programmes and agriculture's exclusion from the ETS makes these woodlots highly susceptible to 'conversion' back to farmland after harvest.
17. Under the ETS the carbon credits arising from a post-1989 forest represent a one-off opportunity for a taxable return. From then on, the landowner faces on-going compliance and insurance costs and a liability tied to the land. While 'averaging' should reduce compliance costs, it will not restore freedom of land use.
18. Understanding this, many ETS participants have acquired and held credits sufficient in many cases to cover their harvest and /or deforestation liabilities. This defensive strategy has allowed them to retain the freedom to change land use, and hence protect their land's 'opportunity value' and possible capital gains.
19. There is a 'sovereign risk' that regulations such as the Climate Change Response Act and subsequent budget announcements, the Waikato Regional Council's (WRC) Variation 5 and WRC Plan Change 1 will be used to selectively preclude such conversions, forcing the landowners into long-term forestry.
20. Meanwhile other farmers with poor or erodible land who had not planted trees - and who may never intend to plant - would benefit from tax free capital gains if carbon or timber prices increased to the point where forestry became the 'highest and best' use of their land. In a scenario of rising carbon prices it is conceivable that such land could remain bare, as there would always be the prospect of higher capital gains.
21. Forest owners understand that 'averaging' as proposed in the ETS review would remove much of the harvest liability, encourage them to sell credits, and reduce the long-term compliance cost of remaining in the scheme. However many would oppose *compulsory* averaging that limited their commercial opportunity to earn and trade credits under the

ETS. The whole point of having an Emissions Trading Scheme is to *encourage* people to earn and trade credits.

22. Indeed, some investors expecting carbon prices to fluctuate or decrease under the ETS viewed them as an opportunity for trading, and made windfall gains through arbitrage until prevented by legislation. This rational economic behaviour demonstrated the industry's full awareness of the implications of the scheme.
23. The ETS was originally planned as an 'all gases, all sectors' approach. However, forestry was the only sector that was required to account in full for its carbon credits and liabilities from day one. Likewise, regulations in 2014 to restrict arbitrage using international units were imposed on post-1989 forestry well before they were extended to industrial EITE emitters.

Conclusions

24. The availability of tax-free capital gains from the 'opportunity value' of holding land outside the ETS, suggests that by itself the ETS will not influence landowners to plant or sell land for afforestation on a rising carbon price.
25. Some investors, aware of the unrewarded sovereign risk inherent in forestry, will limit reforestation and afforestation to land where forestry gives the highest and best return for reasons other than carbon credits. That area has been further reduced by the recently gazetted National Environmental Standard – Plantation Forestry (NES-PF), which now effectively excludes some land from production forestry due to erosion risk.
26. Because of uncertainty around the ETS, rising land prices and the increasing sovereign risk, the Government faces a significant contingent liability associated with the likely conversion of post-1989 forests to farmland after harvest.
27. If the Government wants more owners of grassland to plant trees and join the ETS – and remain in forestry – it must acknowledge and practice the original principle of inter-sectoral equity.

Public Benefit at Private Cost

Observations

28. Forests are associated with a range of public benefits in addition to carbon sequestration. The cost of providing these public benefits is imposed on forest owners through the RMA and Wildlife Acts, via conditions in Resource Consents or the NES-PF, or as conditions of OIO approvals.
29. Public benefits have been recognised as a significant motivation for government-funded afforestation. The Lake Taupo forests were planted to protect the lake against farm development; Woodhill to prevent the movement of sand dunes; the East Coast Forestry Project (principally) to limit erosion.
30. Despite this, the New Zealand Government ceased direct investment in forestry in the mid-1980s and sold cutting rights to the State Forests. Buyers were required to pay commercial rents based on a 'higher and better use' valuation of the underlying Crown land.
31. Elsewhere - for various reasons - countries with substantial forest holdings (the USA, Canada, Russia, China) retained large areas in State control. Log prices are set by international demand and independent of the costs of managing such forests. As a result, although each country seeks to cover its forest management costs from stumpage, it might receive little or no return on land value.
32. In New Zealand responsibility for the delivery of forests' public benefits such as erosion control, watershed protection and landscape enhancement was passed to local

authorities in 1991. Their risk management strategy was to transfer that responsibility to forest landowners.

33. Regulation of plantation forestry by Regional Councils addressing the potential for adverse effects from forestry and forest harvest can substantially increase both the RMA compliance costs and the costs of forest management. This is particularly apparent in relation to the new NES-PF, where forestry on Class 6 and 7 lands will require a Resource Consent. The net effect will be to discourage afforestation in radiata (the species best suited to clearfell harvesting and the preferred species for rapid carbon sequestration) on NZ's least cost hill country land.

Conclusions

34. Local authorities require forest land owners to provide public benefits such as active recreation, watershed protection and biodiversity /habitat enhancement, services not demanded of pastoral landowners. This increases the costs of a 'licence to operate' and discourages investment.
35. The rising cost of a licence to operate is an investment risk separate from the ETS and sovereign risk.
36. Where feasible, the costs of providing public services from forests should be minimised with corresponding benefits devolved in some form to forest owners. An example would be to give forest owners Nitrate Discharge Allowances equal to farmers on similar classes of land, and to allow trading in such allowances.

Harvested Wood Products

Observations

37. Harvested Wood Products are recognised under the Paris Agreement on climate change as a means of quantifying the carbon captured and stored in processed wood products.
38. Wood products can displace less benign alternatives such as concrete and steel, which have high embedded emissions. From a GHG perspective, a building framed in wood represents a lower liability than one framed in steel; a Cross Laminated Timber panel offers a lower liability than a concrete tilt slab panel. The built environment is a significant net emitter of GHG emissions in all developed countries.
39. In the ETS, Government policy differentially protects manufacturers of GHG-intensive building products such as steel and cement by providing comprehensive environmental subsidies through EITE rebates. Similar rebates are not by-and large available to solid wood processors because they are not GHG-intensive: traditionally, most wood processors' primary energy needs have been met with the use of wood residues.
40. Unrelated Government policy aimed at lowering the costs of building materials appears to selectively ignore imports of steel and cement. The ETS does not address this trade bias which further weakens demand for wood construction and impedes any shift toward a reduced reliance on fossil fuels. Forest owners believe the Government should adopt a more integrated approach to climate change.
41. Segregation and separate management of wood-based construction and demolition waste could be used to improve carbon capture and storage, or used as a feed stock for GHG-neutral energy production. Bioenergy, and landfilled woodwaste or biochar, are both acceptable means for carbon capture and storage under the Paris Agreement.
42. Government intervention in the building products market through the promotion and preferential specification of wood, including development and promulgation of wood-related building codes and standards, could bolster the demand for and value of wood products. Precedents exist in other OECD countries for such interventions.

43. Any related increase in the market value of wood arising from such a policy would initially benefit the processing sector and flow through to domestic log prices and fundamental forestry returns.

Conclusions

44. The benefits of wood products could be enhanced through a national 'wood encouragement' policy that strengthened the domestic wood processing sector (in preference to exporting logs), fundamentally improved domestic log prices and forestry returns; and reduced the consumption of materials with high embedded emissions.
45. An improvement in the profitability of any part of the wood supply chain will – sooner or later – make forestry investment more competitive and assist afforestation of marginal farm land.

Forest Sector Policies under the CCRA 2002

Observations

46. Farmers avoid afforestation because it reduces farm income, reduces land use flexibility and ties up capital for unacceptable lengths of time.
47. The market price of farmland is higher than forestry investors are prepared to pay. Current forest sector policies under the CCRA 2002 do not assist in bridging the 'value gap' between farmland and forest land.
48. Pre-1990 forest land, which does not benefit from carbon income, is at risk of being deforested and converted to farmland or Manuka forestry as and when 'off-setting' and /or the prevailing carbon price makes conversion attractive.
49. Carbon forestry under the ETS is unattractive:
 - a. The ETS has a 10-year track record of political and carbon price uncertainty and investors do not yet have confidence the situation will improve.
 - b. ETS compliance costs are high and sometimes problematic, while income from carbon sequestration accrues over the long-term.
 - c. The requirement to surrender carbon credits on harvest is seen as a risk. High carbon prices could discourage harvesting and create large contingent liabilities exceeding the value of land and trees. Over-mature exotic forests do not hold their carbon stocks indefinitely.

Conclusion

50. The Climate Change Response Act 2002 does not encourage afforestation, harvesting and replanting or the permanent storage of carbon in forests.
51. The distinction between Pre-1990 and Post-1989 forest land is hindering New Zealand's response to addressing climate change and achieving Paris Agreement commitments.
52. The Paris Agreement and related international debates have focused attention on how forestry and wood products can be used to help tackle climate change. Forests are recognised around the world for the positive benefits they offer in a wide range of public policy issues, from erosion and watershed protection to restoration and maintenance of biodiversity and regional and economic employment. Formal recognition of the value of an integrated and long term approach to the management of forests is the norm in most arboreal regions of the world. The development and adoption by this Government of an integrated and intergenerational forest policy is recommended by other New Zealand forestry professionals, and endorsed by the authors below as a logical and overdue development.