

FORESTRY REFERENCE GROUP

FINAL REPORT

2 November 2018

Members of the Forestry Reference Group have been invited to table a paper at the closing meeting of the group on 6 November, outlining our advice on the Climate Change Forestry Package of proposed options under the ETS, and outlining our advice on issues related to climate change and forestry in a wider context. Accordingly we offer this report.

Summary

1. We appreciate the opportunity to provide advice to MPI and MfE over the last two years on technical aspects of forestry and the ETS. We believe the package of ETS changes now proposed for forestry is helpful, and that the collaborative approach used to test them has led to a better outcome.
2. Over the period officials have received extensive feedback on the proposed changes from many sources. We believe that they now have all the information they need to develop robust policy and improve the efficiency of the ETS for forest owners, in line with their brief. However we suggest that even with the planned changes, any belief that the ETS alone can drive significant land-use change is misplaced.
3. Further, the ability of forests to store more and more carbon is limited by the availability of land and its capacity. Promoting forestry as anything but a temporary solution distracts from the real need to cut emissions at source.
4. We fully understand that new forests can be an important tool in seeking a zero-carbon economy. However rural land use is primarily driven by market economics and regulation. Both these factors must point in the direction of forestry before farmers (and regrettably some local authorities) will accept it as a socially and economically valuable land-use.
5. Separately, targeted regulation is needed to align landowner decisions and practices with emerging expectations of 'sustainable land use,' including GHG emissions, water quality, erosion, biodiversity and economic outcomes.
6. Future market opportunities for New Zealand under climate change are unknown and possibly short-lived. We believe land use flexibility will be increasingly important, and forestry is not a flexible land use. Trees grow slowly; and forests under the ETS cannot be cleared for other land uses without repaying all of the

issued carbon credits. Offsetting may lessen the impact of the ETS on land use flexibility.

7. The potential of the ETS to encourage afforestation is confounded by other factors. These include the reluctance of farmers to change land use, uncertainty around carbon prices, high land prices, and controls on forest establishment and harvesting. Unless these factors are addressed in ways that *fairly spread the sectoral costs* it is unlikely we will plant anything like the area of trees suggested in zero-carbon models.
8. Without the buffer of those new forests, New Zealand will need a fast and effective way to reduce gross GHG emissions. The obvious place to look is in agriculture.

The ETS in perspective

9. Models for our zero carbon future offer reassuring scenarios of mosaic landscapes, with trees integrated into patterns of highest-value land use. Aside from the Conservation estate all land uses in New Zealand are driven by market economics and regulation. Delivering a low GHG-emission landscape will only be possible through one or both of these drivers.
10. The ETS is not designed to deliver either of them. It imposes a cost on targeted emitters who fail to reduce their GHG emissions, offers a one-off cash benefit to those who do better than required, and allows trading between the two. In theory, falling targets and rising carbon prices should lead to the development of low carbon technologies and low carbon industries.
11. Properly implemented and given time the ETS should bring us to a zero carbon future, but the land uses in that future will be those that fit the economics and regulations of the time. We are remote from every market that buys our primary products, and susceptible to technological advances that might rapidly change our economic landscape. Land will be increasingly in limited supply, *flexible land use* will be essential, and a mosaic landscape might not be the outcome.

Forestry in the ETS

12. **Administration.** Although the forestry sector is in the ETS fewer than 20% of commercial plantation forests are actively involved and their participation generates significant administrative work and cost. We appreciate officials trying to simplify the system for forest owners and reduce non-compliance for the benefit of both users and administrators.
13. **Pre-1990 land.** Because forestry is included in the ETS, pre-1990 forest owners are obliged to replant after harvest. Some Maori acquiring forest land under Treaty settlements, and some landowners whose forestry joint ventures predate

the ETS, find the replant costs a challenge. Their stress affects others and discourages afforestation.

14. New Zealand has 7.5 million ha of pre-1990 commercial and indigenous forests, and the ETS provides no incentive to improve their carbon storage. We are disappointed that Government has not considered devolving carbon benefits to owners of pre-1990 native or exotic forest where it can be demonstrated that an increase in carbon stocks has occurred due to changes in forest management.
15. To simplify and de-risk the process of including new forests in the ETS, we welcome the work underway that aims to produce a national map distinguishing 'forest land' from 'non-forest land' at 31 December 1989.
16. **Forest Averaging.** We support the introduction of forest averaging and the flexibility for registered post-1989 forest land owners to transition to forest averaging should they choose.
17. **HWP.** We support the creation of a Harvested Wood Products fund administered by industry and backed by the Government to fund research and promote the use of wood fibre as a low-emissions substitute for steel, concrete and plastic. Poorly implemented, HWP could inflate the export parity cost of logs to domestic processors and so we believe it essential that the Government promotes and regulates the inclusion of HWP within the construction industry. It will encourage investment in both forestry and wood processing, and is a prerequisite to achieving a zero-carbon economy.
18. **Flexible land use.** As future market opportunities for New Zealand under climate change are unknown and possibly short-lived, land use flexibility will be increasingly important. However forestry is inflexible: trees grow slowly and forest management cannot respond quickly to market changes. Also, before they can change land use, pre-1990 forest owners - and post-1989 forest owners who join the ETS and sell their land use flexibility (in the form of NZUs) - must repurchase that right at an unknown future cost. Only post-1989 forest owners who stay out of the ETS or bank their NZUs may change their land use without penalty.
19. For commercial foresters, land is an input cost and an asset of potentially increasing value. The fundamental importance and capital value of land use rights is one of the reasons forest owners are not joining the ETS. Some who have joined are simply holding their carbon credits as a liquid hedge against the future liability of land use change. For these forest owners the ETS is not an incentive, but an added cost and a source of regulatory uncertainty.

20. **Offsetting.** We support the inclusion of spatial offsetting for both pre-1990 and post-1989 forest land. This will help address some of the concerns we have raised about enabling flexible land use.
21. **Carbon prices.** We want carbon prices to be relatively stable, sufficient to drive emissions reductions, and aligned with international markets. Accordingly we support the regulation of carbon auctioning; and to avoid the risk of arbitrage, which was exploited in the past, we would prohibit NZ emitters from directly buying international units to satisfy their domestic obligations. We advocate that the revenues from auctioning be applied to low carbon projects, and recycled into the community to help meet the social costs of climate change adaptation. See point 25.
22. We note in passing that high carbon prices will not change the logic of land use flexibility and capital gains. Although high carbon prices will encourage more landowners to register forests in the ETS and sell carbon, those that own 'flexible' land will value it more highly and demand more for it, pushing up land prices (see point 23). Meanwhile those who have sold carbon and want – or are forced – to change land use out of forestry could be devastated by the cost (see point 18). These are mixed outcomes.
23. **Buying farmland for forestry.** Higher carbon prices will not necessarily encourage purchases of farmland for new planting. If high carbon prices lead to higher land prices there may be no economic advantage in land use change. With a few exceptions, the commercial forest sector is not driven by the ETS and will only expand when domestic and international markets for logs and wood products suggest it makes long-term economic sense to do so.
24. **Retiring farmland for forestry.** From point 22 however, we expect higher carbon prices will encourage both new planting on land already owned by farmers, and the native reversion of marginal land. The extent of such new afforestation will depend on farmer education; environmental regulation of competing, flexible land uses; whether the land suits commercial forests or carbon forests; how they can be financed; and their long-term economics. Difficult country might suit native reversion more than active afforestation. In this respect we note that of the 1.5 million ha of Māori freehold land, over 45% is Land Use Class 7 and 8 (i.e. mostly red zoned for erosion risk) and almost 80% is Land Use Class 6 and higher.
25. **Social equity.** If large scale forestry does occur on farmland there will be social consequences. Māori are over-represented in remote communities where both Māori and non-Māori marginal land is being farmed and supplementing local incomes. Slow rural depopulation through farm amalgamation has occurred for generations but if the rate accelerates there may be social disruption. The billion tree programme or income from auctioning carbon credits might offer scope for

the Government to manage this adjustment, *provided that* any such social intervention must avoid flow-on effects that further distort rural land prices.

Agriculture

26. **RMA reform.** The original aspiration of the RMA was to ensure land-use activities were sustainable and did not erode the country's natural capital of air, soil, water, culture and biodiversity. It never achieved its goal. Competing sectors with similar 'adverse effects' are regulated differently both within, and between, local authorities. We support progressive and targeted reform and enforcement of the RMA to assist New Zealand meet its zero-carbon objective. It could reduce the need to drive land use change through high carbon prices on agricultural emissions.
27. **Reluctance to change.** High capital values associated with land use flexibility offer strong financial incentives for dairy farmers to resist regulation and change. Consequently, while there are good case studies, we do not believe voluntary action to adopt technological change and best practice in the dairy sector will be sufficient to substantially reduce GHG emissions. Regulation is necessary.
28. As an example, Dairy NZ launched its "Dairy Action Plan for Climate Change" in 2017; years after other sectors were drafted into the ETS. Prior to this it had largely ignored climate change for effluent management and water quality. We believe voluntary action on climate change will move even more slowly.
29. **ETS.** We support the phase in of increasing ETS compliance obligations for agriculture as soon as possible. However, cutting agricultural GHG emissions using the ETS and environmental regulations will be difficult. For example the perverse behaviour observed where nitrate 'rights' are grand-parented; deciding points of ETS obligation; measuring GHG emissions; determining a starting date (one that stops participants from inflating emissions prior to entry so as to achieve easy reductions afterward); deciding the starting level of participation, and agreeing the rate for tightening emission and environmental controls.
30. **Stock numbers.** The fastest way to reduce GHG emissions from agriculture and improve water quality is to cut stock numbers. We believe officials should address this as a serious alternative.
31. **Political and financial cost.** Any policy that constrains the agricultural sector's 'freedom to farm / pollute' will reduce land values. The historic freedom to farm and pollute has inflated land values within the sector. Officials must find a way to manage the political backlash of the social and economic restructuring necessary to align the agricultural sector with a zero-carbon economy.
32. **Methane.** The argument that methane is a 'short lived gas' that should be treated differently in the ETS is a distraction. The latest IPCC report shows that

the climate change justifies reductions of *all* contributing GHGs to the maximum possible, and under Paris accounting we are obliged to reduce methane emissions from all sources, including fugitive methane from landfills, coal mines, and agriculture. Suggesting separate treatment of ruminant methane from 'current' and 'new' stock will create significant problems of regulatory complexity, increase delays, and offer free capital gains to farmers if their 'existing' emissions are protected.

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