

## What post-2012 forestry policy for NZ?

New Zealand's policy on Climate Change? Doesn't exist! All may be forgiven by this Journal's printing date, but so far the Government's record is pathetic. Given that the Kyoto Protocol is due to kick off on January 1st 2008, the delay has been astonishing. Exporters are now complaining that our tardiness is affecting our international image: how can we pose as "clean and green" without a clear policy on this flagship issue? How can we argue that "food miles" and "wood miles" shouldn't penalise our exports, because we run an environmentally tidy ship?

But regardless of our sorry situation, and the improbability of establishing a working policy by the end of the imminent 5-year commitment period, we must decide what to do in the longer term. Last week, at a conference exploring the best post-Kyoto climate-change options for New Zealand I said that, for several reasons, forestry should be omitted altogether.

I can share some of the blame for the initial inclusion of forestry in the 1992 United Nations Framework Convention on Climate Change. Back then, I argued that afforestation is just the converse of deforestation and New Zealand could quantify it (admittedly, at a national level using voluntary, unverifiable data and assuming that all planted trees were pine). Our governmental delegation managed to convince a sceptical IPCC. Eager to kill two birds with one stone - Global Warming and Deforestation - environmentalists were happy to provide support, and forestry became bundled up in the agreement.

If only I had foreseen the huge complications that forestry would introduce! Innocently, I had assumed that both the sector and the planet would benefit. But after zillions of man-hours of negotiations and air-miles we now have: Kyoto and non-Kyoto forests, instant decomposition of wood upon harvest, gorse being "non-forest" whereas manuka is forest, no credits for the carbon gained during 1990-2008, and 5-yearly or even annual accounting of sequestration.

There is absolutely no question that New Zealand's plantation forests now contain more carbon than they did in 1990, but in the current year how are they performing? In other words, is the gain in carbon in our forest estate increasing or decreasing over time? Only an accountant - used to annual reporting - would consider that an important criterion, but it is the way in which we are being judged. The eyes of such accountants glaze over when you try to explain the long cycles in forestry: how the effects of any perturbation (be it cyclone, planting boom, or price spike) can be detected many decades or even centuries later, and how the ultimate test of your forestry policies must be the standing stocks of carbon. Are the stocks expanding over the long term? But that's not in the Kyoto rulebook.

Because we could quantify carbon changes at a national

level with an acceptable degree of precision, some people have wrongly assumed we could do the same at the level of a woodlot. The Government could, they say, "devolve" credits so you could trade them and justify your holiday to Rarotonga with them. But small projects cannot be quantified with any degree of confidence and at any reasonable cost.

It's not just the tortuous policy maze or the mind-boggling complexity of measurement that horrifies me; it is the fact that so few people seem to understand even the basics of forestry. They can't think in terms of forests, only in terms of stands. They confuse sinks with reservoirs. For example, they may ask: "how many trees do I need to plant to offset the emissions from my power station, or dairy farm, or car?" Sighing wearily, I try to summon a good answer from those I have given over the last 20 years: "Trees don't keep growing forever. If you have ongoing emissions, then you need ongoing tree-planting to compensate. The atmosphere doesn't care whether the trees are harvested in coupes or whether they individually fall over and rot. The direct benefit of afforestation is merely that you are increasing the level of biomass carbon on the site". And so on.

Occasionally, someone pops up who fully understands the above paragraph. This is refreshing. You can explain how New Zealand has an imbalanced age-structure in our plantation resource. The planting boom of the 1990s has left a poisonous legacy - a harvesting boom of Kyoto forests that will begin in 2022. Even if New Zealand were carbon-neutral in all other respects, these forests would pump carbon into the atmosphere for a least a decade. Our forests will be a source, not a sink. We will curse them.

So why do we bother with forestry at all, if it's going to turn around and bite us? Globally, forestry is a trivial tool for greenhouse mitigation. There is at least ten times the quantity of carbon underground about to be mined than could ever be packed onto plantable land in the form of trees and other biomass. Deforestation may be a problem - it's currently responsible for 20% of the world's emissions - but its relative importance is declining.

Forestry, of course, is about more than on-site carbon sequestration. It is about production of wood. And wood is a very climate-friendly material. We certainly need to promote greater use of wood - but let's not do it by including forests in the new "Son of Kyoto" protocol.

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