

Carbon credits - the way forward

“Why are you so negative?” she asked. “Always criticising. If you have a good idea, don’t bottle it up. Tell somebody about it!” I was explaining to my wife that the Government’s new forestry carbon rules wouldn’t work, but there was a better plan that might indeed promote the forestry sector.

I opened my mouth to tell her that I have been boring people with positive suggestions for nearly 20 years, but nobody takes any notice. (Best wait until Government officials fall flat on their face, pick them up and then explain that their shoelaces are tied together! Until the accident, they don’t want to know.) But I didn’t say anything. The truth is, there’s always someone new who hasn’t heard these ideas before. So here we go again, and apologies if your CD-player brain doesn’t respond well to my cracked vinyl recording.

The most serious objection to the current Kyoto rules on forestry is that they are based on 5-year commitment periods, whereas forestry operates over much longer timespans. For example, New Zealand is facing a carbon liability in about 2023 because of our planting boom in the 1990s and the harvesting boom that will surely follow from it.

The current Kyoto rules were not designed for a country where most of the forest activity occurs in the form of plantations, as they don’t take account of deliberate crop rotations: trees-to grass and back again. In attempting to dovetail domestic policy with Kyoto, the NZ Government has charged our forest growers with a deforestation liability corresponding to the peak of the sawtooth curve that represents changes in carbon stocks over a rotation. This is unjust because - on average - the carbon stocks tied up in vegetation are approximately only half this amount. You can work out the long-term average by adding up the carbon stocks for every year of a rotation, and dividing by the number of years. Or you can get exactly the same answer by averaging over space, in other words by working out the carbon content of a normalised forest with that same rotation. Everyone’s trees were planted at different times so you can think of your stand as being part of a global plantation forest.

Another reality is that afforestation is merely the converse of deforestation, and the accounting rules should be symmetrical. Admittedly, there is a slight difference of timing - you could totally remove all traces of a forest within a few months or years, whereas it takes decades to establish one and achieve the same carbon levels. But the fact remains that deforestation is merely the transformation of a vegetation cover that possesses high levels of carbon stocks to one that has lower carbon stocks, and afforestation is just the opposite.

The current domestic proposal is that growers could receive credits corresponding to stand growth, but should retain sufficient to compensate for harvest liabilities - so

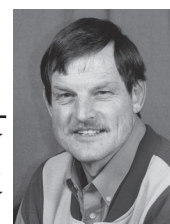
can’t risk selling more than a small fraction of them! Then there is likely to be an ongoing burden of measurement, auditing, trading and insurance costs, for what is - after all - a single one-off gain in carbon density on that particular piece of the planet. It has always struck me as weird that your descendants in a hundred years’ time should be paying a continuing cost for a payment that you were supposed to receive for the original decision to convert from non-forest to forest.

In total contrast, the “long-term average” approach would enable growers to receive credits up to half the quantity attained at the sawtooth peaks - and to sell those credits without incurring a liability following harvest or a natural disaster. For example, there could be three payments: at say ages 5, 10 and a final one at 15. When the “long-term average” position has been reached (typically at age 15 in a radiata pine stand with a 28 year rotation), there need be no further costs. Not even insurance. There will, however, be an obligation to maintain that land under a forest cover in perpetuity, by replanting the trees or else allowing a forest to regenerate. This is fairly simple and cheap to check (eg with Google Earth).

If it transpired that the intended forest regime would accumulate significantly more - or significantly less - carbon than had been transacted, adjustments would need to be made upwards or downwards at the final payout. Ball-park regional averages could be used for the first two payments, and a “wash-up” payment based on actual measurements for the last one. Further adjustments would be required only if there was a major shift in species choice, stocking or rotation length - or towards any other regime that carried a substantially different long-term carbon footprint.

If a farmer wished to shift his block of trees from one side of the valley to the other, he would have to wait half-a-rotation to earn sufficient credits on an equal area of land to afford to do so, but otherwise I can’t see a problem. Deforestation is no different from mining a coal-seam or a lime quarry. Times have changed and there are new penalties. Get used to it.

My proposed system would be simple, cheap and easy to administer. There would be genuine incentives to afforest land. OK, wife, so I’ve been positive this time, haven’t I? Haven’t I?



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