

Heat treatment

To combat climate change, all polluters must pay – farmers included – says the Sustainability Council's **SIMON TERRY**

New Zealand's climate-change policy was built upon major mis-estimates and stray projections of the nation's position under the Kyoto Protocol – worth well over a billion dollars.

Their initial effect was to allow ministers to think New Zealand was doing a great deal better with its greenhouse gas emissions than it really was. They also masked the cost of plans to exempt agriculture from having to pay for any of its half of the nation's emissions.

Now the risk is not just that these implicit subsidies will be granted, even though the estimates on which they were based have fallen over. The key threat is that this approach will stymie the single most important response the government could make to climate change.

That response is a price on emissions across the economy. Plans to deliver a privileged position to agriculture will delay this reform by six years or more.

This is more than just two election cycles away. It's the precious time New Zealand could be using to get serious about adapting to a world that is increasingly serious about pricing "carbon".

The costs of not taking robust collective action are truly scary, whichever way you look at it. The expected long-term damage from climate change provides clear moral and economic grounds for New Zealand to play its part.

Even on the narrow basis of trade interests, the risk to the nation warrants it. A further rationale with a sharp end to it is the Kyoto bill.

New Zealand's emissions have grown relentlessly and are now 22% above the Kyoto target of a return to 1990 levels. By the time the nation must pay for excess emissions (between 2008 and 2012), they are projected to be 30% above the target.

On the government's most recent assumptions, the bill for that 91 megatonnes of excess emissions will be \$1.36 billion during the protocol's first five years.

However, not all the credits required to offset that excess need to be obtained overseas. Forests established since 1990

provide a local source of credits. Their ability to soak up carbon brings the overall excess down to 41 megatonnes, and payments to offshore parties of \$600 million, on government estimates.

Much depends, however, on the international price of carbon, which could go far higher than the assumed \$15 a tonne of carbon dioxide.

If New Zealand were to square up now for the 41 megatonnes of net emissions, at the March 9 price on the European exchange of about \$30/tonne, the bill would be \$1.23 billion. The future price could be lower, or much higher.

There is also a great deal of uncertainty about future emission levels. If these were at the high end of official projections, the bill would nearly double – to \$2.23 billion, at \$30/tonne.

The government's original plan was to largely meet the emissions-reduction target without counting the forests, allowing the credits to be sold overseas.



A cabinet paper in October 2001 noted that the government had pledged internationally “that it would not seek to avoid meeting its commitments” to cut emissions by instead using the forestry credits to mop up any excess.

Since then, the Environment Ministry has overseen a spectacular collapse of the figures supporting the Kyoto accounts, with two major mis-estimates and the separate failure of projections to foresee the sharp decline in forestry plantings.

The first jolt, which went unreported at the time, occurred within a year of Parliament receiving the estimates that underpinned New Zealand joining the protocol.

By April 2003, the ministry had publicly documented figures revealing that the emissions target (1990 levels) had been over-estimated by a full 18% in the report provided to Parliament. In other words, the estimate of what New Zealand could emit without penalty had dramatically shrunk, so deeper cuts would be required to meet the new target.

That mis-estimate was worth close to \$1 billion on current assumptions. However, after slashing the figure for expected emissions and making a new entry for emission reduction policies, it was projected that the taxpayer would still be well inside the Kyoto target and making money once the forest credits were counted. The government had decided by this point that it would claim essentially all the forestry credits and liabilities, having earlier considered sharing a proportion of the credits with forest owners.

Then, in May 2005, the stuffing came out of that reworked position. The Environment Ministry’s reporting of this billion-dollar deterioration in the accounts suggested it was largely a result of an increase in “projected emissions”. However, careful comparison with the previous year’s numbers shows a rise of less than 1% in the forecast for actual emissions.

What a review had uncovered was this: that the government programmes supposed to reduce total emissions by 10% turned out on closer examination to be worth 0%, and that this accounted for most of the change. The inconvenient truth was that all the announced steps the Environment Ministry had for the past three years sworn were going to make a meaningful difference to New Zealand’s emissions were assessed to have no measurable effect.

This extraordinary performance with the accounts undermined ministers’

ability to make appropriate policy and blew away much of the lead-time the nation had to tool up for change. Also undermining serious action, however, were the campaigns by a grouping of major industrial emitters and Federated Farmers. They, and the National and New Zealand First parties, played a key role in the government abandoning its previous central policy of a \$15/tonne carbon tax and having to again face the question of what to do.

After contemplating the options for a year, the government has now released a series of consultation documents. However, they are carefully constructed to work around the elephant in the room. While most options are technically on the table, if the government holds to its current thinking, then only a quarter of all emissions have any real prospect of being

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priced in the next six years.

The major four-legged obstacle largely outside the pricing equation is agricultural emissions. These account for 49% of New Zealand’s total emissions and over 42% of the expected growth in emissions above 1990 levels. Nearly all that growth is from the dairy industry, a good part of it caused by conversion of forested land to dairy – a true lose-lose in climate-change terms.

Using the government’s conservative price for carbon, agriculture’s excess emissions represent a wealth transfer from taxpayers to the sector of \$575 million.

However, after one of the loudest protests in recent years, and applications of “fonterror” behind the scenes, the government confirmed that before 2013 it would “shield the agriculture sector ... from the cost New Zealand will incur due to growth in agricultural greenhouse gas emissions”. It then believed that “Government has access to [forestry] credits to cover New Zealand’s greenhouse gas liabilities”.

A 2004 Memorandum of Understanding (MOU) documented the deal whereby agriculture’s only contribution would be \$8.4 million a year towards researching ways to reduce farm emissions.

Federated Farmers declared in the run-up to this that: “The government needs to stop passing the buck to rural New Zealand for the Kyoto commitments it made on behalf of all New Zealanders.”

Meaning that “an industry which is

proudly subsidy free” wanted ordinary taxpayers to meet that part of the bill generated primarily as a result of land newly converted or more intensively farmed, in pursuit of commercial gain.

Once agriculture is deemed a sacred cow, it is much more difficult, politically, to tackle other sectors. Accordingly, the government is planning to not price emissions from the second-largest growth sector, transport, which is expected to account for 20% of total emissions and 38% of the blowout over 1990 levels, with diesel vehicles the runaway excess story.

Which leaves just the 23% of total emissions now produced by stationary energy plant as the government’s proposed focus for pricing – with electricity generation getting special profile but accounting for only 8% of emissions. This when the cabinet was told that a major review of climate-change policy a year ago “concluded unequivocally that if New Zealand wished to pursue emission reductions over the long term, a broad-based greenhouse gas price would be the most

important part of any policy response”.

Non-price measures are also vital but the extent to which the government is looking to pursue these will not arrest the excess greatly, either.

The current timid approach comes at a time of fundamental transformation of the politics of this issue. Public and business support for action has leapt and there is wide recognition of the increased risk of abrupt, rather than gradual, climate change.

International realities are also catching up with Federated Farmers, which must be straining its mandate with progressive farmers and could not hope to get away with running another “fart tax” campaign. Any statements construed as a refusal to acknowledge responsibility for agriculture’s contribution to global warming would quickly reach Fonterra’s competitors in Europe, who would parade this to Fonterra’s customers.

Whatever the “carbon” content of New Zealand’s pastoral exports individually, as the government has noted, “our record in tackling greenhouse gas emissions offers us no defence”. It is a potent marketing threat.

This and increased public awareness make it fruitless for any grouping to push for New Zealand to walk away from the protocol. The politics have moved beyond that for a trading nation whose emissions per person rank sixth-highest in the developed world.

Forests can soak up emissions, but investors are looking for a share of carbon credits.



New Zealand's deteriorating Kyoto accounts

Projected megatonnes of carbon dioxide equivalent, 2008-12, NZ government documents.

YEAR OF PROJECTION	2002	2003	2004	2005	2006
Projected emissions	415-440	383	399	402	399
Allowed emissions	365	309	308	308	308
Excess emissions	50-75	74	91	94	91
Other emissions liabilities	0	0	10	8	7
Emission reduction policies	0	25	39	0	0
Total emissions deficit	50-75	49	62	102	98
Forest credits	110	105	95	71	57
Net emissions position	35-60	56	33	-31	-41

It has also become clearer that farmers have real options to cut emissions. While there is little beyond destocking to reduce methane production, nitrous oxides account for the other third of agricultural emissions and new products targeting these are available.

Nitrogen inhibitors can cut up to 75% of nitrous oxide emissions and have other benefits that make them economic in any case. The products' environmental performance remains to be tested over time, but an indication of their potential is that if they were on average 50% effective and universally applied, agricultural emissions would fall by 15%. That translates to a two-thirds reduction in agriculture's contribution to the Kyoto bill.

In all, a great deal has changed since 2002. Rather than the government continuing to "cowtow" to agriculture and offering up lame justifications, it is time to activate the memorandum's clearly marked exit clause and inform the sector that it will be paying for its emissions, and so will everyone else.

The flipside of enforcing "polluter pays"

involves a fair share of the forestry credits (and liabilities) being passed to forest owners. This unwinds the other major distortion in land use. While the absence of these credits was not the most important influence on planting rates going into freefall, this change is important to restoring confidence in forestry investment.

Such a passing-through of the costs and benefits is the approach required to protect against large transfers of wealth from taxpayers to emitters, and from foresters to taxpayers. It would also provide crucial price signals – to investors in new dairy farms in particular.

This would bring home the future reality of a carbon-constrained world where a price on emissions will be a normal cost of production. The question then is whether

pastoral farmers can pass on those costs to end-consumers (in whose name the emissions are produced), or whether land values are shaved or there are changes in land use.

The best response to that challenge is to position at the premium end of overseas markets, where less volume can be sold at

higher prices, and to take leadership in delivering the environmentally sustainable products they increasingly value. It is about turning threat to opportunity and getting ahead of the competition, not being "shielded" from change that is needed for the country as a whole.

The Prime Minister recently offered a basis for real change by stating that "More than any other developed nation, New Zealand needs to go the extra mile to lower greenhouse gas emissions and increase sustainability".

Committing to price all sources of emissions, and setting an ambitious timetable for transition to a full price, are key steps to such transformation. ■

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