

Problems with the New Zealand Government's Response to Kyoto

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Overview

New Zealand lobbied hard and successfully at Kyoto for inclusion of forest sinks, gained for itself a relatively manageable target (parity with 1990) for the First Commitment Period, and ratified the Protocol in 2002. Ten years passed after 1997, however, with no policy measures put in place to price or limit carbon emissions. On current projections New Zealand will exceed its CP1 target by 25%, forest sinks will fail to make up the deficit, and the country is faced with several billions of dollars of outlays to buy-in carbon credits. (In contrast Australia, which refused to ratify Kyoto until the end of 2007, has well developed policies moving forward and seems likely to meet its - admittedly very generous - targets for CP1.)

In September 2007 the New Zealand Government finally announced a belated policy package of measures to apply through CP1. Two central planks are an “emissions trading scheme” (ETS) and a ban on new construction of fossil-fuel-fired electricity baseload generating plant, with the expressed intention of making the New Zealand electricity system 90% renewable by 2025.

Methods and Results

The paper analyses these two measures and argues that neither represents serious engagement with the issues by policymakers. The ETS places no cap on emissions from any sector or from the economy as a whole, and is in fact a complex de facto carbon tax riddled with exemptions and distortions, which is not likely to reduce emissions by even one percent below business-as-usual during CP1. The ban on fossil-fuel generation is subject to a loophole that allows construction of plant “necessary to maintain security of supply”.

Two simple pieces of economic theory are presented and applied. The first sets up a model of a small open economy which is an Annex B party to Kyoto and exposed to world prices for carbon, shows the conditions that must be met for either a cap-and-trade scheme or a carbon tax to operate efficiently in this setting, and analyses why these conditions are not met for New Zealand under the new policy regime.

The second models the integration of renewable sources of electricity generation into a stand-alone national electricity grid and shows why security of supply considerations mandate the retention and/or construction of considerable thermal baseload capacity, unless the renewables portfolio is configured in such a way as to allow the various renewable technologies to backstop one another.

Conclusions

The paper concludes that New Zealand's politicians have yet to move beyond the rhetorical stage of climate-change policy formation, that central lessons from the EU's ETS experience have not been learnt, and that the country's adjustment to the global realities of post-2012 will therefore be unnecessarily painful.