

NEW ZEALAND BUSINESS ROUNDTABLE

Submission on the Climate Change Response
(Moderated Emissions Trading) Amendment Bill

October 2009

1. Introduction

- 1.1 This submission on the Climate Change Response (Moderated Emissions Trading) Amendment Bill (the bill) is made by the New Zealand Business Roundtable, an organisation comprising primarily chief executives of major New Zealand business firms. The purpose of the organisation is to contribute to the development of sound public policies that reflect overall national interests.
- 1.2 The Business Roundtable believes that policy development on climate change has entered a more constructive phase over the past 12 months. We were critical of the previous government's 'carbon neutrality' ambitions because of their enormous potential adverse economic impact; the lack of an adequate regulatory impact analysis as a basis for policy; many design features of its Emissions Trading Scheme (ETS); and the rushed process. We were pleased that the select committee reviewing the scheme abandoned the unrealistic March deadline for a report, and we believe its deliberations over a longer period contributed to a better understanding among policy makers and the public of the difficult issues New Zealand is grappling with.
- 1.3 During this time there has been better economic analysis of some of these issues, in particular the work by the New Zealand Institute of Economic Research and Infometrics on the economic impacts of an ETS and the work by Treasury on the burdens on different countries of 2020 targets. However, the NZIER/Infometrics modelling is not a satisfactory basis for analysing the complex effects of climate change policies, for reasons we explained in a submission to the select committee. Estimates of costs derived from it that have been quoted by the Minister for Climate Change Issues have a spurious accuracy. Moreover, no estimates of the benefits to New Zealand of adopting climate change measures have been made, hence no reliable regulatory impact statement (RIS) has been produced. It is also a concern that much of the important design work for an ETS has still not been done and firms are getting conflicting advice from officials. In addition, we strongly believe New Zealand should not be taking

firm decisions on climate change policies until the outcome of the UN Copenhagen conference is known and Australia has taken final decisions on its policy.

- 1.4 For these reasons we feel New Zealand would still be getting ahead of itself in seeking to enact an amended ETS scheme this year with an implementation date of 1 July 2010 for important sectors. We discuss key issues in subsequent sections of this submission. We also reiterate our preference to plan for implementing a carbon or energy tax in the first instance. Before discussing these issues, we briefly recapitulate on the approach we have taken on climate change.

2. General approach

- 2.1 We have seen the climate change issue as comprising three elements: the science, the economics, and the politics.
- 2.2 On the *science*, as our February 2009 submission to the select committee indicated, we regard the UN Intergovernmental Panel on Climate Change (IPCC) reports as constituting an important body of scientific opinion which is sufficient to justify some governmental action to mitigate or adapt to the threat of dangerous warming. However, we strongly criticised claims that “the science is settled”. The order of magnitude of human-induced global warming is uncertain and controversial. The science continues to evolve, and its future evolution should influence whether government policy actions should be intensified or scaled back. Particular points policy makers should bear in mind include the absence of any global warming for nearly a decade (contrary to model predictions); the fact that increasing CO₂ emissions have a progressively lower impact on temperatures; and the likelihood that any warming in New Zealand will be below global temperature increases, and at moderate levels could be beneficial for many decades. Eminent critics such as Professor David Henderson, formerly Head of the Economics and Statistics Department of the OECD Secretariat, have also argued that

the IPCC process is deeply flawed.¹ We believe the New Zealand government should be making the case for greater objectivity and a wider range of analysis and opinions in the IPCC's work.

- 2.3 In respect of the *economics*, it seems clear that the only feasible global response to the threat of dangerous warming is the widespread adoption of low-cost technologies that do not yet exist or adaptation. Countering likely trends with current technologies is simply too expensive. Hence the standard recommendation of leading economists that initial action should be modest and be 'ramped up' over time if justified by the evolving science and made more affordable by technological breakthroughs. The Stern report attempted to overturn this recommendation but its discount rate assumptions were widely criticised.
- 2.4 These arguments are even stronger in New Zealand's case because it is now well accepted that: New Zealand industries are generally operating at or around best practice levels; a high proportion of our electricity generation is based on renewables; the immediate opportunities for low-cost emissions reductions are limited, for example in agriculture; and the scope for carbon leakage (industries migrating to other countries) for no environmental gain is substantial.
- 2.5 The *politics* of climate change is ultimately the critical element. This is not a matter of elite opinion but of the opinion of the electorate at large. The question is, what sacrifices are voters prepared to make in the interests of contributing to global action? While some are taking voluntary action, there is evidence that many are unconvinced (i) about the robustness of the science; (ii) that costly action could do much to alter temperature trends and is therefore a poor use of resources, given their opportunity cost (the Lomborg arguments); and (iii) that large sacrifices by present generations are justified in the interests of future, much wealthier generations (or even in the interests of later generations, since what is of most importance to

¹ See, for example, David Henderson, *Climate Science, Economics and Policy*, American Institute for Economic Research Economic Bulletin, Vol XLIX, June 2009.

them is the capital stock they inherit through economic growth). Democratic governments must respect voters' beliefs and wishes; if they do not they will be thrown out of office.

2.6 A remarkable feature of the regulatory impact statement (RIS) accompanying the bill is the certainty officials put on future international developments. In our view these are far more speculative. An underlying theme is that some potentially stringent agreement like the Kyoto Protocol with real sanctions will be in place after 2012 – indeed the whole framework of the New Zealand ETS is based on this assumption. Given widespread scepticism about what can be achieved at Copenhagen and beyond, the assumptions in the RIS might turn out to be unfounded. The US has recently stated that it wants a new approach that would move away from a legally binding world agreement to one where individual countries pledged cuts in their national emissions without binding timetables and targets.² Moreover, it remains to be seen whether citizens at large will share the cost and benefit assessments of policy elites. If not, bad policy outcomes and policy instability can be expected.

2.7 Having regard to these factors, the Business Roundtable remains of the view that there is no good case for New Zealand moving ahead of other countries, Australia and the United States in particular. The extent to which world emissions rise is a global issue beyond New Zealand's capacity to influence. In practical terms the issue now comes down to the positions of the United States and China, the world's largest emitters. Until recently, consideration of alternative strategies, such as the adoption of a carbon tax, a cap-and-trade regime or regulation, was premature. Once Australia ratified the Kyoto Protocol the landscape for New Zealand changed, and with the Australian and US governments envisaging action in the period

² Similarly, a report in *The Guardian* (28 September 2009) reads:

Stuart Eizenstat, who negotiated Kyoto for the US, said "Copenhagen is more likely to be a way station to a final agreement, where each country posts the best that it can do." A top European official told *The Guardian*: "We've moved on from the idea that we can negotiate on targets. That's naive and just not the way the deal will be done. The best we can get is that countries will put in what they want to commit to."

ahead, we believe New Zealand should be in a position to be able to do likewise. But it is uncertain whether either country will succeed in enacting legislation before Copenhagen; indeed in the case of the United States it seems virtually ruled out. We think that what New Zealand should do, and its timing, should be decided in the light of international and other developments, which we discuss next.

3. Regulatory impact statement

3.1 In our submission to the select committee reviewing the ETS, we said that:

It is of paramount importance in evaluating possible climate change policies to know whether the costs to New Zealand are likely to be in the order of, say, \$50 million, \$500 million or \$5,000 million annually, and similarly the order of magnitude of the benefits. Legislators cannot possibly reach informed conclusions without such analysis, nor can submitters offer well-considered views. The regulatory impact statement accompanying the Emissions Trading Scheme (ETS) legislation contained no such analysis and was recognised as being woefully deficient, including by current officials.

3.2 The NZIER/Infometrics modelling threw some useful light on the *cost* side of the equation but it was not an RIS, as the authors made plain. On the basis of this work, the government indicated that the cost of its proposals is expected to be of the order of \$165 per year for the average household. If this figure could be relied on it would seem to be in a sensible ballpark and might be sustainable politically. However, limited confidence should be placed on its accuracy. Moreover, no analysis of costs beyond the transitional period (to 2013) has been presented; these could be much higher if, as is possible, the scheme is not capped after the transition. Nor does the estimate take into account the possibility that any post-2012 agreement will require developed countries to agree to make financial transfers to developing countries to help them cope with climate change. On some accounts these transfers could amount to something like New Zealand's total aid budget.

3.3 A competent RIS must also analyse the *benefits* of regulatory action to allow policy makers to set them alongside the costs. We have pointed out that the two main benefits in New Zealand's case are to maintain good international relations (to be seen as a responsible

international citizen by other governments) and to protect our commercial interests (against action by other governments on 'food miles' grounds, for example). They do not include reducing any global temperature increases because New Zealand's emissions are too small to have any material effect and many New Zealanders may benefit from moderate warming. The new RIS still fails to assess these benefits, and thus provides no basis for informed policy decisions. Our guess is that they are more likely to be near the lower end of the \$50-5,000 million range that we mentioned in our previous submission.

- 3.4 The RIS also puts weight on the benefits of limiting the fiscal costs to citizens of meeting New Zealand's Kyoto Protocol commitments. We think this is problematic for several reasons. First, on the latest estimates it seems likely that New Zealand will meet its Kyoto commitments because of forestry planting. Second, we have long been sceptical that New Zealand taxpayers would have to meet the costs of any first commitment period shortfall or that New Zealand would face additional burdens in subsequent periods as a result. As a recent *Economist* article (26 September 2009) noted, "At the last count, Canada had overshot its Kyoto target by 29%, and everybody knows it will not be punished." (Likewise we were sceptical that New Zealand would receive a 'cheque' for \$0.5 billion when estimates suggested it was in a surplus position.) Third, many reports suggest that any post-2012 agreement is unlikely to take the form of a new Kyoto treaty with binding emissions targets. As noted, a more likely outcome is differentiated commitments by countries based on some broad assessment of what constitutes burden sharing. In this event the argument in the RIS that a benefit of the ETS is to constrain fiscal transfers overseas is null and void.
- 3.5 It follows that rhetoric about New Zealand taxpayers subsidising 'industrial polluters' lacks a solid foundation. In our view, the debate should be refocused on the international relations and commercial benefits of action by New Zealand and the burden (including aid transfers) that New Zealanders should be asked to bear. In

addition, we think more analysis is needed on the costs of reducing gross emissions rather than assuming that any emissions commitments can be met by unlimited purchases of offshore units. Not all countries can play this game, and limits may be placed on it in any agreement. Moreover, to the extent that other countries try to do the same thing, the supply of units (eg under the Clean Development Mechanism) will become scarce and prices could be well above the levels currently envisaged.

3.6 However, the absence of comprehensive and valid cost and benefit calculations is only the first of the problems with the RIS. It is extremely important that the Treasury has certified it as inadequate for a number of reasons. As far as we are aware, this is an unprecedented step. As the Treasury noted, the quality of the analysis presented is not commensurate with the significance of the proposals. This RIS comes shortly after the government strengthened regulatory processes in the Government Statement on Regulation. In that Statement, the government asked to be held to account for bad regulatory practices. We submit that on the basis of the Treasury view that “the RIS does not provide an adequate basis for informed decision-making” the committee should reject it and ask for it to be redone, taking into account points made above and later in this submission.

3.7 The Treasury statement refers to the lack of an analytical basis for aligning a New Zealand ETS with the currently proposed Australian Carbon Pollution Reduction Scheme (CPRS) and associated risks. We concur with these concerns and discuss them in the following section.

4. Relationship with Australian CPRS

4.1 The committee will be well aware of the issues surrounding the legislation that is currently before the Australian parliament. If, as the Australian government hopes, it is passed before the Copenhagen meeting, it will likely be on the basis of amendments agreed with the Liberal Party. These are not yet known. If this does not happen, the

final shape of Australian policy will be even more uncertain, and may not be known until after a 2010 election. (Similar uncertainty attaches to US climate change legislation; indeed it now seems certain that legislation will not be adopted by Congress before the Copenhagen meeting.) One example of the kind of adjustment that could occur to the Australian bill concerns the so-called 'decay rate' of free allocations (1.3 percent pa) that New Zealand has aligned itself to. Our counterpart organisation, the Business Council of Australia, is advocating that the decay rate be abolished after 5 years. Another example relates to the pressure from coal-based electricity generators for more assistance which, if granted, could disadvantage New Zealand producers.

4.2 There are other issues in relation to Australia that concern us. First, Treasury research indicates that New Zealand's conditional commitments to a 2020 target could be more burdensome than those of Australia. Second, we interpret the decision to set a price cap of \$25 for the transitional period, combined with a 2 for 1 rule for purchasing emissions units, as being related to the current Australian proposal for an initial fixed price of A\$10/tonne of carbon emissions under the CPRS, and we comment on this below. Third, unlike in New Zealand, agriculture is not included in the Australian scheme at this stage. Fourth, Australian policy is backed up by much more impressive and detailed analysis than has been undertaken in New Zealand (the Australian RIS is 247 pages, for example, including a whole chapter on governance that we refer to in section 7). Fifth, the CPRS is at this stage not due to come into effect until 1 January 2011, six months later than the next stage of the New Zealand scheme. It could be further delayed.

4.3 What this brings out is that Australian preparations have been more thorough and detailed than those of New Zealand and the CPRS seems likely to be less economically burdensome. Having regard to the relative wealth for the two countries and the greater vulnerability of Australia to global warming, the situation should be the other way round. The United Nations Framework Convention on Climate

Change (UNFCCC) process has always envisaged “common but differentiated” commitments according to countries’ different circumstances, including levels of wealth. New Zealand per capita income levels are only some 70 percent of those in Australia. It follows in our view that New Zealand burdens should be scaled accordingly. For example, if Australia sets an initial carbon price of A\$10/tonne of CO₂, we think the New Zealand price should be in the NZ\$5-10 range that we have previously recommended. This might give New Zealand some competitive advantages over Australia but these are essential in our view if New Zealand is to bridge the per capita income gap between the two countries by 2025, which is the government’s goal. Policy needs to be made in New Zealand’s interests, not those of Australia or any other country. There are real risks in aligning our scheme too closely with any Australian scheme.

- 4.4 The conclusion we reach is that New Zealand should not make final decisions on its policy until final Australian decisions are known, and then ensure that the economic burden they impose is less onerous.

5. ETS versus carbon or energy tax

- 5.1 The Treasury’s Regulatory Impact Analysis Team did not comment on the ETS versus carbon tax discussion in the RIS. We consider that discussion to be seriously inadequate.
- 5.2 The first argument put forward for an ETS in the RIS is that it provides greater certainty over the level of emission reductions. This is only superficially true. As far as domestic reductions are concerned it does no such thing: the bill allows firms to meet their obligations by offshore purchases. Second, now that the government is moving to an intensity-based approach there are no hard caps. Third, during the transition period, unlimited units are available at a price of \$25, so there is no fixed limit on emissions. Fourth, as noted, there is doubt as to whether a post-2012 agreement will contain Kyoto-type emission reduction obligations. Fifth, a tax can be adjusted at periodic intervals to achieve emission reduction goals (and indeed it

is likely that allocations under an ETS would be adjusted over time in similar ways).

- 5.3 The second argument put forward is that an ETS better enables New Zealand to link with international trading regimes. However, this ability is limited with the transitional price cap and any subsequent one. Moreover, it is premature to assume that a genuine international trading regime will develop. As the Minister for Climate Change Issues, Dr Nick Smith, has acknowledged, “The emissions trading scheme will be the first of any country outside of Europe.” The NZIER/Infometrics report noted that New Zealand could adopt a carbon tax even if Australia eventually adopts an ETS.
- 5.4 A third argument in the RIS is that an ETS can ensure New Zealand access to least cost abatement through access to the international market. Besides the uncertainty about the development of such a market, a post-2012 agreement could contain limits on the ability of countries to meet their commitments by offshore purchases, and it would be better to pursue the underlying idea (that trading may limit the costs imposed on the economy) by implementing a fixed tax. Moreover, the argument is doubtful: with an intensity-based scheme New Zealand may be unable to trade with Europe and possibly the United States as well.
- 5.5 Finally, the RIS maintains that an ETS would set New Zealand up well for future agreements and is the policy instrument of choice of our trading partners. This is debatable: the French government is proposing to apply a carbon tax (in addition to the EU ETS); other European governments (particularly in Scandinavia) and British Columbia apply taxes; and there are calls in the United States and Australia to apply taxes instead of cap-and-trade regimes. Moreover, a preference for an ETS is often political: many governments prefer to apply taxes in disguised ways rather than transparently. This is a poor reason for New Zealand to do likewise. It should also be noted that none of these arguments for an ETS addresses the central argument for a tax – that greater price certainty facilitates investment.

5.6 We have long been concerned about the weakness of official analysis on this point. The Departmental Report on the Emissions Trading Scheme Select Committee Review contained the statement (p50): “Officials do not know whether *more* economists favour a tax or an emissions trading scheme, but it is clear that many support a tax.” This is an astonishing statement of ignorance: anyone with a competent grasp of the literature would know it to be untrue. Former chairman of the US Council of Economic Advisors, Greg Mankiw, wrote earlier this year that “A carbon tax is the remedy for climate change that wins overwhelming support among economists and policy wonks.” We attach as Annex I a recent article by Robert Shapiro, an expert in the field, who writes, “Most US economists and many environmentalists, at least privately, no longer support [a cap-and-trade] approach, especially compared with the alternative of a refundable, carbon-based tax”.³ The article goes on to advance similar arguments for a tax to those which we have made. We note that the Green Party and ACT are also on record as favouring a tax. So too was the McLeod 2001 Tax Review which advised:

Under New Zealand conditions, and by comparison with the alternative of emissions trading by legal entities, a carbon tax combined with government international emissions trading (to cover residual excess emissions from non-forestry sectors) is considered to offer the prospect of more efficient outcomes at lower costs of monitoring and compliance.

³ Another recent commentary summarises the issue this way:

The choice of instruments is a topic which has been exhaustively researched in the literature, and two broad conclusions have been reached: that market-based mechanisms (tradable permits and carbon taxes) are generally better than command-and-control regulation; and between tradable permits and carbon taxes, the ranking depends upon the shapes of the costs and damages functions. Put simply, under uncertainty, it depends whether the policy-maker is more worried about getting the damage or the costs wrong. In the climate-change case, a marginal increase in emissions is unlikely to make much difference to global warming, but a marginal increase in costs in the short run, above the expected level, might have big economic effects on competitiveness and economic output. Thus there is a strong case for arguing that taxes are better than permits for carbon emissions - a point which Nordhaus has made forcibly (Nordhaus, 2008).

5.7 In view of the unconvincing argument in the bill's RIS, we reiterate our preference for an initial low (\$5-10/tonne) revenue-neutral carbon tax with any necessary exemptions for trade-exposed industries, combined with an equivalent subsidy for sinks (which would give foresters the same benefit as ETS credits at the same price) and with cuts to income tax. The 'infrastructure' required for a tax (measurement, reporting, auditing etc) is the same as for an ETS, and New Zealand could migrate later to an ETS if a liquid international trading market develops. This is the approach recommended by the Productivity Commission in Australia. The capped ETS now proposed in effect turns the scheme into a form of tax, but involves an expensive new collection mechanism. It is possible that administering either an ETS or a carbon tax would be challenging in the short term, in which case we would favour a simple tax on energy. A further point, discussed in section 8 below, is that a tax could be administered by the existing Inland Revenue Department, whereas no arrangements are currently in place to administer an ETS.

6. Forestry

6.1 We have long been concerned about the property rights aspects of climate change policies as they affect forestry. Forestry is a long-term investment. Over a 30-year rotation, forest owners can expect at least 10 New Zealand governments to come and go. If they cannot rely on stable policies that respect their property rights as owners, new investment will obviously be discouraged.

6.2 We reiterate our deep disquiet at the expropriation of value from investors in pre-1990 forests by the imposition of what amounts to a retrospective carbon tax on land use change. This has contributed to the collapse in new planting and may well have raised sovereign risk associated with investment in New Zealand. An aspect of our concern is the impact on the value of Maori assets arising from Treaty settlements. This could give rise to new Treaty claims.

- 6.3 We can see no logical reason for the formula of requiring the surrender of only one unit for two tonnes of emissions up to 2012, making the price in effect \$12.50, but keeping the official (bankable and tradable) price at \$25 on the ground that an official \$12.50 price might trigger another round of deforestation. This in effect introduces a dual price of carbon into the economy and will distort resource allocation. The whole point of a market-based instrument (an ETS or a tax) is to introduce a single carbon price into the economy so as to encourage least-cost abatement. The government was right to scrap the thermal generation ban which would have introduced another (in effect, infinite) carbon price. Now it is doing the same thing and effectively 'picking winners': deciding that discouraging deforestation is preferable to discouraging emissions reductions. We see no basis for this distorting and punitive measure. Our understanding is that Australia has no intention of imposing a similar penalty on forestry.
- 6.4 A further concern in respect of forestry is the possibility, revealed in a recently released Cabinet paper, that exporting of units may not be possible if a future link with the CPRS occurs, although units would be able to be sold in Australia. All this has the appearance of ad hoc and rushed policy making which would benefit from more thought and consultation.

7. Institutional arrangements

- 7.1 We have long expressed concern that little attention has been given to institutional arrangements for administering an ETS. Large sums of money will be involved, and there is obvious scope for favouritism and fraud, as EU experience and New Zealand's experience with import licensing demonstrates. Another large scam has recently come to light in the EU. If an ETS is adopted, it should be run by an independent regulator. The select committee supported this view and recommended that administrative planning be brought forward.
- 7.2 It appears that the government has accepted this argument but the Explanatory Note states only that "It is intended that certain functions relating to the assessment and processing of individual applications

for allocation will be transferred to an Environmental Protection Authority at some point after it is created. It is likely that other NZ ETS administrative functions will be transferred to that Environmental Protection Authority.” This very provisional state of affairs contrasts markedly with the state of planning in Australia, where an independent regulator has always been envisaged. To illustrate, we attach as Annex II the governance chapter of the RIS accompanying the CPRS bill. It is clear that detailed thinking has gone into governance arrangements and that such work has not been done in New Zealand, despite the fact that our ETS is scheduled to come into operation 6 months earlier. This reinforces our preference for adopting a carbon tax at least in the short term and for a later start date.

8. Allocation and timing issues

- 8.1 We think the government has listened to concerns expressed about the ETS that is currently in legislation and responded with sensible amendments. We are aware that other submitters are making detailed comments about allocation issues and believe they warrant consideration. Particular points of concern include the thresholds for allocation (what makes sense for Australia may not make sense for New Zealand with our average smaller size of firms) and the lack of any price cap after 2012. The latter problem is not necessarily solved by the 2011 review: companies will have to make long-lived investment decisions with no certainty as to the price path ahead of them after 2012. We think these issues need more consideration.
- 8.2 As a general point, we believe there may be numerous teething problems with an ETS (in respect of issues such as measurement and reporting) and we are not confident that officials have resolved them. This leads us to recommend a longer period of preparation and lower financial obligations (eg a price cap in the \$5-10 range) if an ETS is favoured, at least for the transitional period. The weak state of the economy is another reason for such an approach. A further consideration is that firms will need time to make and

implement investment decisions that will help reduce emissions, which of course is the purpose of the scheme.

- 8.3 We are also concerned about the provision in the bill that would apparently allow measures to achieve a '50 by 50' emissions reduction target to be implemented by regulation. There has been no analysis of the cost or achievability of this target. Moreover, an ETS is in effect a tax and taxes should only be imposed by parliament. We strongly recommend that this proposal be deleted.

9. Conclusion and recommendations

- 9.1 We believe climate change policy has moved in a sensible direction this year but a number of design features are still under-developed. Moreover, the recession has reduced New Zealand (and global) emissions more than any climate change measures would have done so the situation has not become worse with the elapse of time. Haste is still not needed: the risk of dangerous warming is a long-term issue. We think it would be prudent for the government to take some further time to ensure that its decisions are taken in the full knowledge of Copenhagen decisions about post-2012 arrangements and decisions by Australia. (There is a parallel with Canada: we understand the Canadian government will not decide on its position until the United States has done so.) The time could also be used to advance administrative preparations, whether for an ETS or a carbon tax.
- 9.2 We remain concerned about the possible economic impact of climate change measures. Even on a business-as-usual basis, Treasury analysis suggests New Zealand may be taking on a disproportionate burden in terms of its 2020 commitment. But the government's goal is not business-as-usual economic growth: it aims to substantially improve the economy's growth rate to match Australian per capita income levels by 2025. This will make achievement of emission reductions relative to 1990 levels much harder. Analysis of this scenario has not been carried out by officials but it should be. We doubt that the ETS as currently proposed would be consistent with the goal of much faster growth, in which case there is a risk that its

parameters will be tightened. This would further raise costs and create uncertainty for business planning and investment. Alternatively, New Zealand might fail again to meet its self-imposed obligations.

- 9.3 In our view it is unwise for environmental and other groups to press for a more stringent scheme. Low-income households, already under stress as a result of the recession and other increased government charges, are not in a position to bear significant costs. Voters would be likely to reject an over-reaching scheme sooner or later. Political consensus is more likely to form over time around a scheme which starts modestly. Adjustments can be made if justified in due course.
- 9.4 We see no need for the amended ETS to be enacted prior to the Copenhagen meeting – other countries, principally the United States, will probably have no such legislation in place, and the direction of New Zealand policy is well known. The argument for early legislation to increase business certainty is not strong either; it is more important for business that New Zealand ends up with a sound, durable climate change policy.
- 9.5 Overhanging all this is the apparent lack of consistency between the design of the ETS and the conditional emissions reduction targets (10-20 percent below 1990 levels by 2020) that the government is putting forward. The 2007 Ministry for the Environment publication, *The Framework for a New Zealand Emissions Trading Scheme*, reported that due to New Zealand's emission profile, an ETS would have very little impact on emissions levels and pointed out that:
- in the electricity sector, there would be only moderate emissions reductions in the short term regardless of the emissions price, and in the long term a carbon price would only keep emissions at their current level;
 - in the transport sector, fuel use is highly inelastic to increases in price in the short term, so emissions would only drop by a small percentage; and

- in the agriculture sector, emissions could only remain stable in the short term and only if production did not increase.

The revised ETS is likely to have a more modest impact on emissions than the 2007 proposal. What this suggests is that much more costly measures might need to be taken in an effort to meet the 2020 target or that New Zealand is likely to breach an international undertaking. Both scenarios are clearly to be avoided, and we consider the reduction target and the policy measures to achieve it need to be reviewed and reconciled in the light of the Copenhagen outcome.

9.6 If the bill is deferred as we suggest, it would be necessary to shift the planned entry date of 1 July 2010 of the liquid fossils fuels, stationary energy, and industrial processes sectors into the scheme. We suggest a date of 1 January 2011 subject to the Australian scheme entering into force on that date as is currently intended.

9.7 Accordingly we recommend as follows:

- (i) the bill should not proceed at least until the outcome of the Copenhagen meeting is known and the shape of final Australian decisions is clear. The entry date for the liquid fuels and SEIP sectors should be deferred in the meantime;
- (ii) the regulatory impact statement accompanying the bill should be reworked to provide a full assessment of benefits and costs as a basis for informed policy decisions. It would be most unfortunate, given the government's recent commitment to less and better regulation, if a bill based on what has been certified to be an inadequate RIS were allowed to proceed. The Government Statement on Regulation: Better Regulation, Less Regulation says the government will "Encourage New Zealanders to hold us to account where they believe we have regulated in a way that is inconsistent with the commitments in this statement." If a select committee of parliament will not help give effect to this

commitment in the case of a bill certified to be inadequate, what hope is there that it will be meaningful?;

- (iii) subject to the two preceding points, consideration should be given to a revenue-neutral carbon tax or energy tax, with an equivalent subsidy for sinks, as an initial climate change measure. If an ETS is adopted, there should be a price cap beyond the transitional period;
- (iv) if the bill proceeds, it should not go into effect until an independent regulator (whether the Environmental Protection Authority or some other agency) is in place to administer it. We favour a start date aligned with any Australian scheme; and
- (v) the provision allowing measures to achieve the '50 by 50' emissions target to be implemented by regulation should be deleted if it constitutes a delegated power to tax.

Case for a Carbon Tax to Control Climate Change (Part I)

By **Robert J. Shapiro** | Monday, August 10, 2009

Though the U.S. House has passed a climate change bill centered on a cap-and-trade program, many economists and environmentalists are skeptical of this approach. In the first of a two-part series, Robert Shapiro explains why a carbon tax would create more stable energy prices.

Finally, the United States is prepared to act on climate change.

The American people support significant action and believe it's an urgent matter, which is why the House of Representatives passed climate legislation in June 2009 and the Senate is preparing to consider it.

By definition, the carbon tax provides a known price for carbon which can be set at whatever level scientists believe will enable us to meet the necessary goal of reducing greenhouse gas emissions.

The current legislation, however, embodies a cap-and-trade approach to addressing greenhouse gases. Most economists and many environmentalists, at least privately, no longer support this approach, especially compared to the alternative of a refundable, carbon-based tax.

Their concerns were only heightened by the rampant horse-trading to win votes for the Waxman-Markey bill in the House, which substantially weakened its effective cap on emissions.

Whatever plan the U.S. Congress ultimately approves, with whatever flaws it contains, will become the U.S. response to climate change for a decade or more. That's why many environmental groups and businesses (again, at least privately) are giving further consideration to the alternative of carbon taxes.

Both approaches rely on higher prices for carbon-based fuels to encourage people and businesses to prefer less carbon-intensive forms of energy and technologies. They also spur companies to develop new technologies and less expensive ways of generating low-carbon or carbon-free energy.

A carbon-based tax does so directly by applying a levy based on the carbon content of the fuel. Cap-and-trade does it more indirectly, providing energy producers and distributors with limited numbers of permits to produce greenhouse gas emissions — that's the cap part — and then allowing trading in those permits to determine the price of the carbon contained in the energy.

While cap-and-trade and a carbon-based tax are both forms of usage fees for using carbon, their different approaches lead to different economic outcomes. Under cap-and-trade, the price of carbon depends on the relationship between energy demand and the supply of permits. But while the supply of permits in any year is fixed by the cap, the demand for energy shifts all the time.

So, when that demand increases unexpectedly — because the summer is hotter than predicted or the winter colder, or the economy is stronger than anticipated — the price of the permits will rise sharply.

The same kind of volatility occurs when demand shifts downward, because the summer is cooler than expected, the winter milder or the economy slower. In that case, the price of the permits would fall sharply. Economically, this introduces a new layer of price volatility in energy, and such additional domestic volatility would often amplify the price swings in international energy prices we already live with.

Such additional price swings are unequivocally bad for an economy. In fact, economists link the onset of many of the downturns of recent decades with steep energy price increases — including the onset of the current recession in late 2007.

This volatility is equally troubling environmentally: It means that cap-and-trade cannot provide a predictable price for carbon, which undermines the basic strategy of getting people to shift away from carbon-based fuels.

This drawback is even more important for businesses, considering the large investments they will make to redo their energy infrastructure or, critically, to develop new climate-friendly fuels and technologies. If they can't know or predict what the price of carbon will be, it becomes much harder to figure out whether large investments make economic sense — and so we would get less of those investments.

This volatility and the analysis based on it are not simply thought experiments. The prices for the permits in the U.S. acid rain program, America's only foray thus far into cap-and-trade, have moved up and down an average of 17% per month since the program began in the early 1990s. And in the first three years of the European Trading Scheme, its permit prices similarly moved up and down by an average of more than 20% per month.

Cap-and-trade is very complicated and little understood by the public, creating an ideal environment for horse-trading by special interests.

Cap-and-trade cannot provide a predictable price for carbon, which undermines the basic strategy of getting people to shift away from carbon-based fuels.

Most cap-and-trade advocates point to the prospect of linking future emissions trading programs in the United States and other countries to create a global system, but this would only increase the likelihood of even greater global volatility in energy prices.

The contrast to a carbon usage fee is clear: By definition, the carbon tax provides a known price for carbon which can be set at whatever level scientists believe will enable us to meet the necessary goal of reducing greenhouse gas emissions.

Supporters of cap-and-trade counter that the carbon tax approach lacks a cap, so if the summer is hotter or the winter colder than expected, emissions will increase with rising energy demand. That's correct — but every carbon tax proposal includes provisions to adjust the tax rate periodically to ensure that we stay on a path of sustainable emissions reductions.

The Waxman-Markey bill which passed the U.S. House limits the potential volatility of its permits and the energy prices that lie underneath them, but in the wrong way. It provides so many exceptions, exemptions and offsets that its cap would ensure very little emissions reductions for at least a decade.

For example, the greatest producers of greenhouse gases in the United States are large utilities, which use the cheapest and most carbon-intensive fuel, coal, to generate most of their electricity. Yet under the House-passed bill, electric utilities pay nothing for their permits, sharply reducing their incentives to reduce their emissions.

In fact, the bond ratings of large U.S. coal companies improved when the bill passed, as investors concluded that it would not threaten their future profits.

Why did the House give coal and many other greenhouse-gas emitting producers a free (or reduced-price) pass? One reason is that they could: Cap and trade is very complicated and little understood by the public, creating an ideal environment for horse-trading by special interests.

Members also know well that Americans hate rising energy prices, and only a small minority — here and everywhere else — would be willing to bear additional costs today to avoid larger costs down the road. To reduce most people's costs of addressing climate change, they sacrificed the program's potential environmental effectiveness.

With the House passing a climate program that's too weak to protect the climate, they will delay real action at potentially enormous costs for everyone.

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The Case for a Carbon Tax to Control Climate Change (Part II)

By **Robert J. Shapiro** | Tuesday, August 11, 2009

Though the U.S. House has passed a climate change bill centered on a cap-and-trade program, many economists and environmentalists are skeptical of this approach. In the second of a two-part series, Robert Shapiro warns of the consequences of introducing new cap-and-trade financial instruments into already volatile markets.

In contrast to cap-and-trade, carbon usage fees are relatively transparent, making it harder for greenhouse gas-producing interests to finagle sweetheart deals at the climate's expense.

Equally important: A carbon-based tax addresses people's resistance to bearing additional costs directly.

We found that a revenue-neutral carbon-based tax equal to \$50 per ton of CO₂ would reduce emissions over the next 20 years a little better than last year's Lieberman-Warner cap-and-trade plan bill — which was much stronger than the current, Waxman-Markey version. And it did so without reducing GDP or costing jobs.

The current financial crisis highlights another important difference between the two approaches. Cap-and-trade creates a trillion dollars or so in new financial instruments — the permits — that would be traded on financial markets. This spells trouble.

To begin, those permits would quickly become the focus of large-scale speculation, because speculators make their money off of price changes, and cap-and-trade inherently and inevitably produces high price volatility.

It is unlikely that the world will agree to a single global strategy for climate change, especially when such universal agreement eludes us in virtually every other area.

In most versions, the revenues are recycled as tax relief — for example, through cuts in the payroll tax or lump sum payments to households. In this way, the strategy can change the relative price of different forms of energy based on their effects on the climate, without making people poorer.

This refundable feature protects families, especially lower- and middle-income households, as well as the overall economy.

In theory, cap-and-trade could auction all of its permits — as President Obama urged — and return the proceeds to households as well. In practice, the Waxman-Markey bill gives away 85% of its permits, providing great windfalls for greenhouse-gas producers and failing to protect most households.

Moreover, a carbon tax can work at least as effectively to reduce emissions as any cap-and-trade program with teeth. In 2008, I completed a study through the U.S. Climate Task Force that used the National Energy Modeling System (NEMS) — the computer simulation used by the U.S. Energy Department to forecast energy markets and the economy — to test the effectiveness of carbon usage fees.

This market also would be very vulnerable to insider trading and manipulation, because every large utility and energy producer would become aware before anyone else of shifts in energy demand, which in turn will produce shifts in the price of the permits.

Perhaps that explains why many large energy companies with major trading operations in energy futures are strong supporters of cap-and-trade, along with Wall Street. Other large energy companies less involved in trading futures prefer a carbon-based tax approach.

The House bill makes such insider trading and manipulation illegal, although it would already be illegal under current securities law. After everything that has happened in the capital markets and the economy, aren't there serious doubts that we lack the capacity to effectively monitor markets with millions of complicated trades?

In any case, there is no conceivable rationale for deliberately creating a trillion dollars in new financial instruments. These would quickly produce derivatives and derivatives of those derivatives, and we now know the economic risks such markets can pose when their underlying asset is basic to the economy — like mortgages and energy — and subject to large price swings and bubbles.

Cap-and-trade's international prospects are also discouraging. While the Kyoto Protocols, our only international agreement on climate change, are based on cap-and-trade, they haven't produced actual greenhouse gas reductions.

The reason is a version of the same dynamic that neutralized the potential effectiveness of the House-passed legislation. In order to secure broad international support, the agreement formally exempted every developing nation and used various stratagems to provide an effective pass for most advanced countries.

A market for carbon permits would be very vulnerable to insider trading and manipulation.

Even so, many countries went even further for powerful domestic interests — Germany, for example, has exempted new coal-fired plants from its cap. The only countries that would have been forced to take more drastic action under Kyoto either withdrew (the United States and Australia) or reinterpreted their obligations to reduce them (Japan and Canada).

Furthermore, the large developing nations (including China, now the world's biggest greenhouse-gas emitter) reiterated this past month that they will never accept caps on their emissions.

At least in principle, carbon taxes should be more appealing to

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governments in places such as China, India and Brazil, since fast-growing developing nations all need substantial new revenues to help finance the enormous infrastructure and educational investments required for modernization.

In truth, it is unlikely that the world will agree to a single global strategy for climate change, especially when such universal agreement eludes us in virtually every other area. The best prospect is an agreement on national emission goals that allows each nation to determine how best to meet its goal.

As they do so, the advanced nations — which already are committed to reducing their emissions — should consider again the self-evident failure of Europe's cap-and-trade experiment, especially compared to the carbon-based taxes used across much of Scandinavia, which now has the world's lowest, per-capita greenhouse gas emissions.

Sweden, which currently holds the presidency of the EU, recently called on other EU countries to enact their own carbon taxes. It noted that since the tax was enacted in 1990, the country's carbon emissions have fallen 8% while its GDP has increased 48%. In France, President Sarkozy is also considering a carbon tax on fuel.

For more than a decade, cap-and-trade has been the policy embodiment of that public commitment to address climate change. It has served its purpose as a symbol — but now that we turn to the business of actually reducing emissions, cap-and-trade is no longer good enough.

The best option — and it's not even a close call — is the policy promoted by Al Gore in his Nobel lecture: A revenue-neutral carbon-based tax.