McGuinness Institute title: [CBC Sub (05) 20/10] Climate Change – Review of Policy and Next Steps

Chair

Cabinet Business Committee

Climate Change – Review of Policy and Next Steps

Executive summary

- 1. Climate change may be the most important environmental issue that the world faces. It requires a global response. The Kyoto Protocol was an important first step in a world wide response to climate change.
- 2. New Zealand remains bound by the Kyoto Protocol for the Protocol's first commitment period (2008-2012). Nothing in this paper changes that commitment.
- 3. New Zealand's greenhouse gas emissions have grown significantly more than was forecast since 2002 particularly in the energy, agriculture and transport sectors. New Zealand is projected to be in deficit for the first Kyoto commitment period (2008-2012), that is, actual emissions are expected to exceed allocated emissions. Latest information indicates that deforestation rates are also expected to be higher than previously forecast for the first Kyoto commitment period. Unless mitigating measures can be put in place, this additional deforestation will increase our expected Kyoto deficit.
- 4. A Review of Climate Change Policies ('the Review') was commissioned by government earlier this year and was submitted to the Minister Responsible for Climate Change Issues on 9 November 2005.
- 5. Key findings of the Review include that New Zealand, like a number of other countries, will not be able to meet its Kyoto Protocol commitments solely through domestic emission reductions.
- 6. As a result, the Review recommended that work should commence soon to consider strategies New Zealand might use to acquire emission units in the international market by using Kyoto mechanisms (which include outright purchase of emission units, and alternatives such as earning units in developing countries through use of the Clean Development Mechanism).
- 7. Another of the Review's key findings was that the current carbon tax model, with its associated Negotiated Greenhouse Agreements programme, is no longer a cost-effective platform for achieving emission reductions.

- 8. Several aspects of the Review require prompt decision-making by government:
 - the future of the carbon tax/Negotiated Greenhouse Agreement model;
 - whether to continue with the deforestation cap;
 - whether to continue with a third round of the Projects to Reduce Emissions programme;
 - whether to release publicly the *Review of Climate Change Policies* report; and
 - the work programme needed to develop climate change policy.
- 9. With regard to proceeding with the announced carbon tax as planned, four options are set out for consideration in paragraph 72. I seek Cabinet's guidance as to which of these options to adopt and publicly announce.
- 10. Whichever option is chosen, I am seeking Cabinet approval in principle to cease the Projects to Reduce Emissions programme now (although a replacement programme may still have value and be adopted in the future).
- 11. I am also seeking approval for further work to resolve a number of climate change policy questions that are highlighted by the Review. A new, well coordinated work programme will be necessary for the government to respond to the key findings of the Review.
- 12. I recommend that work programmes on climate change policy include, but are not limited to, the following work areas:
 - New Zealand's domestic climate change objectives;
 - alternative measures to the Negotiated Greenhouse Agreement/carbon tax model (such as taxes, regulation and emissions trading);
 - purchasing and other strategies for acquiring or earning Kyoto-compliant emission units;
 - options for domestic emissions trading;
 - forest sinks, including land-use changes;
 - energy production emissions and efficiency of energy use;
 - agricultural emissions and policies;
 - transport emissions and policies;
 - research and technology;
 - New Zealand's international interests in climate change; and
 - preparation and adaptation to the impacts of climate change.
- 13. I recommend that officials be directed to report back to their relevant Ministers by 3 March 2006, with detailed proposals for work programmes in each work area listed.
- 14. I further recommend that, as Minister Responsible for Climate Change Issues, I convene and chair before 13 March 2006 a meeting of a Ministerial Reference Group comprising the Ministers of Finance, Agriculture, Forestry, Energy, Transport, Environment, Economic Development, and the Minister Responsible for Climate Change Issues, to discuss these proposals and approve, in-principle, a whole-of-government work programme for climate change policy.
- 15. In addition, subject to discussion with the proposed Ministerial Reference Group, I intend to seek Cabinet approval for a proposed whole-of-government work programme for climate change policy by 3 April 2006.

16. There is public interest in both the Review and consequential policy changes. Public access to some of the findings of the Review report will aid officials and other interested parties as the work programme is developed, though could generate unhelpful publicity that might interrupt good decision making on matters still under consideration.

Purpose

- 17. The purpose of this paper is to:
 - provide **background** on the context of climate change and current policy (Part A paragraphs 18 to 27);
 - outline **key findings** of the *Review of Climate Change Policies* (the Review) (Part B paragraphs 28 to 50);
 - stimulate discussion on the **government's response to the Review** and obtain specific decisions on the future of the current carbon tax, the deforestation cap and the third round of the Projects to Reduce Emissions programme (Part C paragraphs 51 to 80);
 - identify, in broad terms, **future climate change work programmes** (Part D paragraphs 81 to 104); and
 - Obtain a decision on the **release of the Review** report (Part E paragraphs 105 to 110).

PART A:

Background: context of climate change and current policy

Context of climate change

18. The world's climate is changing. Climate change may be the most important environmental issue the world faces. The challenge in responding to the threat posed by climate change is made difficult by the time-lags involved. The effects of greenhouse gas emissions over the last 50 years will be felt in the decades ahead. Although actions taken in New Zealand will have only a minor impact on the total global atmosphere or the global climate, our total emissions (including livestock methane) are high in proportion to our population.

[withheld under OIA s6(a), s9(2)(j)]

- 19. Climate change requires a global response. The Kyoto Protocol was an important first step in a world wide response to climate change. It was appropriate then, and remains appropriate now, that as a small trading country New Zealand sign and ratify the Protocol. However, we now need to look longer-term, beyond the first Kyoto commitment period, 2008-2012 ("CP1") when considering our best course of action.
- 20. Climate change is a fast moving area of public policy. Since the climate change policy package was developed in the late 1990s and approved by Cabinet in 2002, the broader situation in which climate change policy operates, particularly as it relates to energy and forestry use, has changed considerably.

- 21. The New Zealand economy has grown strongly over the last five years. This has many benefits but one adverse consequence is that our greenhouse gas emissions have also grown particularly in the energy, agriculture and transport sectors. Our greenhouse gas emissions profile remains strongly influenced by agricultural emissions and forest sinks.¹
- 22. The latest (2008-2012) forecast of our emissions position in the Kyoto first commitment period, when binding commitments apply, predicts that New Zealand's emission will exceed our 1990 baseline emissions by 36 million tonnes.
- 23. New Zealand's climate is already changing. As a country heavily reliant on agriculture, horticulture, silviculture and tourism for its revenue, this is an important issue for New Zealand and one which potentially brings significant costs. Temperatures are predicted to increase, but the early climate change impacts are more likely to be mainly through increasing numbers of extreme weather events more frequent heat spells, droughts and storms for example. This will effect primary production (e.g. agriculture, horticulture and forestry) and infrastructure (e.g. roads, bridges and storm water systems). It is important that New Zealand responds and adapts to the inevitable effects of climate change (as well as playing its part in reducing greenhouse gas emissions). The costs of these impacts have not been assessed in full. This means that it is difficult for members of the public to weigh up the cost and benefits of alternative policies to mitigate rather than ignore these impacts. Nonetheless, there has been a significant shift towards public acceptance of climate change.

Current Climate Change Policy Settings

- 24. In 2002, the government agreed to a climate change policy package with the following key elements:
 - a carbon tax on energy, industrial, and transport emissions, capped at \$25 per tonne of carbon dioxide equivalent (CO₂e);
 - exemption of agricultural emissions from any broad based price measure during CP1;
 - Negotiated Greenhouse Agreements for "at risk" large emitters;
 - Projects to Reduce Emissions, which would provide Kyoto units to induce projects that generate additional emissions reductions in CP1;
 - industry and government funding of research in the agricultural sector; and
 - government retention of sink credits and associated liabilities from forestry, including the government meeting emissions liabilities for deforestation up to a defined cap of 21 million tonnes CO₂e.
- 25. This package of policies followed the so-called "foundation policies": including the National Energy Efficiency and Conservation Strategy, New Zealand Transport Strategy, New Zealand Waste Strategy, and the Growth and Innovation Framework.
- 26. New Zealand ratified the Kyoto Protocol in 2002. New Zealand is committed to reducing its net emissions to 1990 levels, on average, over the period 2008-

¹ New Zealand's total emissions are 75 million tones of carbon dioxide equivalent per annum. Of this, almost half (37Mt) is from agriculture (livestock and fertiliser emissions) and almost one fifth (14Mt) is from transport.

- 2012, or taking responsibility for any excess emissions by purchasing or generating Kyoto-compliant units. The nature of any international commitments beyond 2012 has yet to be negotiated.
- 27. In 2005 the government decided that the carbon tax should be initially set at \$15/tonne of CO₂e and come into effect on 1 April 2007.

Part B

Key findings of the Review of Climate Change Policies

- 28. A *Review of Climate Change Policies* was conducted by a cross-departmental team assembled by the Ministry for the Environment. Copies of the Review have been circulated to Ministers of the Cabinet Business Committee.
- 29. The government had previously signalled its intention to review climate change policy settings. In June 2005, following revised projections of New Zealand's greenhouse gas emissions during the Kyoto first commitment period, a full review was commissioned. The terms of reference for the Review were wide ranging, and sought advice on long-term options for climate change policy in New Zealand, in addition to recommendations as to how New Zealand should approach the more challenging than expected task of meeting its commitments under the Kyoto Protocol.
- 30. The Review noted that most countries in the world [withheld under OIA s6(a)] consider that climate change poses a serious risk and are taking action to manage that risk. It also noted that New Zealand was not alone in facing difficulties in reducing its greenhouse gas emissions.
- 31. The Review noted that New Zealand has two climate change objectives:
 - an externally set target under the Kyoto Protocol that by 2012 New Zealand will return its total net emissions to 1990 levels or take responsibility for any emissions in excess of 1990 levels, and
 - an internally set goal that New Zealand be set towards a permanent downward path for total gross emissions by 2012.
- 32. New Zealand is bound by the Kyoto Protocol for the first commitment period (CP1) (2008-2012). Nothing in the Review or this paper changes that commitment.
- 33. The Review concluded that the level of domestic reductions that can be achieved in a cost-effective manner is likely to be small relative to New Zealand's net emission position. Some gains can be expected in transport and energy efficiency and conservation (which will have other benefits in addition to reducing greenhouse gas emissions), but these are likely to be small relative to the total reductions needed to meet New Zealand's CP1 Kyoto commitment. The Review also found that the overall effects of a *sustained* higher level oil price may be more influential in reducing transport emissions than the current range of policies.
- 34. In regard to the forestry and agricultural sector, the Review found:
 - there was inequitable treatment of forestry under current policy vis-a-vis other sectors of the economy (such as agriculture);

- current policy does not send strong signals to disincentivise changing landuse away from forestry, and in fact may even incentivise landowners to take their land out of forestry now to convert to other land uses;
- alternatives to, or extensions to, existing policy could offer greater certainty and improve signals to encourage afforestation and reforestation, and discourage deforestation;
- the option of government retaining all the Kyoto benefits and liabilities and not imposing a deforestation cap was not recommended because Crown liabilities would be unlimited (albeit forest owners would have greater certainty);
- the option of devolving all carbon benefits and liabilities to forest owners was identified as requiring a fully functioning emissions trading scheme as a pre-condition;
- any policy changes relating to afforestation and deforestation should be implemented prior to the commencement of CP1 in order to maximise the benefits during this period and beyond;
- enhanced forestry planting potentially contributes to a range of other government work programmes, including bringing significant benefits in terms of soil conservation, flood control, water quality and biodiversity;
- cost-effective options to reduce greenhouse gas emissions from agriculture are currently limited and are likely to remain so, at least over the next decade; and
- while an agricultural research programme is underway, we may be underinvesting in this research.
- 35. Nonetheless, as with all sectors, there remain some potentially feasible measures to reduce agricultural emissions. These include controls on nitrogen fertilisers, which contribute materially to nitrous oxide emissions and have been increasing at a fast rate over the last decade, and/or direct incentives for the uptake of nitrogen-fixing technologies. The trend of increasing use of nitrogen fertilisers may be able to be moderated without undue adverse effect on farm output and would have other benefits in relation to water quality. An increased focus on research is also important to enable effective reductions of agricultural emissions in future.
- 36. Specific findings are outlined below in regard to:
 - New Zealand's domestic climate change objective;
 - the current carbon tax/Negotiated Greenhouse Agreement model;
 - the Projects to Reduce Emissions mechanism; and
 - the projected "Kyoto deficit".

Key Finding of the Review on New Zealand's Domestic Climate Change Objective

- 37. Paragraph 31 above notes that New Zealand has two climate change objectives: a Kyoto one and a domestic one.
- 38. The Review found New Zealand can meet its commitments under the Kyoto Protocol through a combination of the following broad approaches:
 - by reducing emissions through domestic action;

- by establishing additional forest sinks to offset emissions; and
- by buying credits through the Kyoto Flexibility mechanisms to offset emissions.
- 39. The Review concluded that it is unrealistic for New Zealand to achieve its internal target, namely gross emissions being set towards a permanent downward path by 2012 (i.e. total emissions decreasing rather than increasing). Whether, and when, after 2012 New Zealand can achieve a downward path in total emissions is less certain, but it is likely to remain difficult for some time unless:
 - significant reductions in economic growth are acceptable; or
 - New Zealand chooses to pay for emission reductions offshore (e.g. in developing countries) on a large scale and presents this as the equivalent of reducing its own domestic emissions by the same amount.

Key findings of the Review on the Carbon Tax/Negotiated Greenhouse Agreement model

- 40. The rationale for putting a carbon tax at the heart of the climate change policy package was to begin sending a price signal to all sectors of the economy to consider the cost of greenhouse gas emissions in investment decisions.
- 41. The Review noted that at the announced level of \$15/tonne of CO₂e, the carbon tax is expected to reduce our emissions in CPI by approximately 13 million tonnes CO₂e. This does not mean that the absence of a carbon tax will increase emissions by 13 million tonnes CO₂e because replacement policies could reasonably be expected to be at least partially effective in reducing emissions.
- 42. In light of the significantly revised emissions projections (both in total and by sector) the Review concluded that the current form of the carbon tax/Negotiated Greenhouse Agreement model is no longer a suitable platform for achieving domestic emissions reductions over the long term. The main reasons cited were:
 - a) Impact of tax on emission reductions

New Zealand's greenhouse gas emissions for CP1 have also grown faster and more significantly than expected at the time of the development of the climate change policy. This means that the carbon tax/Negotiated Greenhouse Agreement model is no longer sufficient to meet the challenge.

b) () Unequal incentives across the economy

The carbon tax exemptions applied to the agricultural sector and Negotiated Greenhouse Agreement firms would create unequal incentives across the economy to reduce emissions and would be a source of economic inefficiency.

Were this period of unequal incentives and Negotiated Greenhouse Agreement negotiations to last only for CP1, as envisaged when the climate change policy was developed, the cost would not be

7

² A reduction of 13 Mt is approximately 3 percent of New Zealand's total greenhouse gas emissions projected over CP1 (424 Mt).

particularly great. However, it is now clear that the transitional period (during which Negotiated Greenhouse Agreement firms and agriculture would be at risk if international greenhouse gas pricing were to be applied to their sectors) is likely to be considerably longer than CP1.

c) Limited gains from Negotiated Greenhouse Agreement firms

Since 2002, the Negotiated Greenhouse Agreement negotiation process has indicated that, generally, New Zealand's large emissions-intensive industries are relatively close to world's best practice in energy and emissions intensity (i.e. within 7%). This means that while Negotiated Greenhouse Agreements are likely to reinforce the ongoing trend to world's best practice, they are unlikely to significantly reduce emissions from Negotiated Greenhouse Agreement companies given that a Negotiated Greenhouse Agreement is based on the intensity of activity (i.e. greenhouse gas emissions per unit of product).

[withheld under OIA s6(a), s9(2)(j)]

e) Questionable sustainability over the long term

Establishing a price-based measure that is sustainable over the next 10 -15 years brings a number of advantages including: reinforcing the credibility of the price signal sent by the measure; improving regulatory and investment certainty; and avoiding the transition costs that are incurred each time the regime is changed. The Review concludes that the *current* carbon tax/Negotiated Greenhouse Agreement model, however, is unlikely to be sustainable over such a period and would need to be replaced by some other greenhouse gaspricing policy if a price-based measure was still desirable.

f) () Equity - where the costs fall

Agricultural methane and nitrous oxide emissions are exempt and Negotiated Greenhouse Agreement companies will be exempted for the bulk of their greenhouse gas emissions. This means a large proportion of New Zealand's emissions are not touched by the carbon tax. The main impact of the carbon tax will fall disproportionately on transportation, small business and private individuals who have only limited ability to avoid or reduce their emissions. Put another way, given the exemptions afforded to agricultural emissions and Negotiated Greenhouse Agreement firms the current carbon tax ends up largely

being a cost for individuals and small firms with only limited effect on their emissions.

- 43. A key finding of the Review is that broad "greenhouse pricing" (i.e. having a price on most greenhouse gas emissions including agricultural methane and nitrous oxide) would lead to cost-effective emission reductions. While the Review was critical of aspects of the current carbon tax model, it 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. Having said that, the Review also noted that there are practical difficulties with this and some sectors, including agriculture, will only have limited ability to respond to such a price measure for some years to come.
- 44. In terms of timing, the Review noted that if the government wishes to introduce a new price-based measure to address New Zealand's emissions, it would be preferable for an effective and sustainable regime to be established sooner, rather than to persevere with the announced carbon tax and associated Negotiated Greenhouse Agreement model. The Review also added that deferral of a decision on a greenhouse gas pricing instrument until the next parliamentary term will cause significant regulatory and investment uncertainty, and cost.
- 45. The Review recommended that government not develop a New Zealand emissions trading regime to apply in the period 2008-2012 (CP1), but should consider it for post 2012.

Key Findings of the Review on Projects to Reduce Emissions

46. The Projects to Reduce Emissions programme was designed to bring forward projects that generate additional emissions reductions in CP1 by providing incentives for the project in the form of Kyoto emissions units (carbon credits). Two Projects to Reduce Emissions tender rounds to call for eligible projects have been held to date, one in 2003 and the second in 2004. In all, 41 projects have been supported via the Projects to Reduce Emissions programme. The Review concluded that it is unclear whether the expected CP1 emission reductions resulting from the Projects to Reduce Emissions projects will actually exceed the emission units given away to project owners under the Projects to Reduce Emissions programme. That is to say, the Review assessed that the Projects to Reduce Emissions programme may in fact have produced little benefit to New Zealand's expected emissions position over CP1. The Review recommended that Projects to Reduce Emissions should not continue in its current form for a third round.

Key Findings of the Review on the Projected Deficit

47. Each year, the Ministry for the Environment reports projections of New Zealand's greenhouse gas emissions position over the 5 year CP1 period. In May 2005, for the first time, the revised forecast of the most likely scenario was that New Zealand would fall short of meeting its Kyoto Protocol target by approximately 36 million tonnes of carbon dioxide equivalent (CO₂e) (this figure included the expected reduction in emissions attributable to the announced carbon tax).

48. Projections are uncertain. Early information from work commissioned by the Ministry of Agriculture and Forestry indicates that deforestation is occurring at a significantly higher rate than currently forecast.

[withheld under OIA s9(2)(j)]

If the deforestation cap is retained and made operational (giving affect to current policy settings), then the Crown's liability for deforestation is limited to 21 million tonnes of carbon dioxide equivalent.

[withheld under OIA s9(2)(f)(iv), s9(2)(g)(i)]

- 49. The Review made it clear that neither the current carbon tax, nor any other mix of policies currently envisaged by officials that focus solely on domestic reduction of greenhouse gases, could "fix" the expected deficit in CP1. It assessed that employing domestic measures alone would have significant fiscal and economic costs and adversely affect the economy. The Review recommended meeting part of the deficit through use of the Kyoto Protocol 'flexibility mechanisms' (the Clean Development Mechanism and Joint Implementation)³, and through purchasing Kyoto units on the international market. Early work on a strategy to acquire Kyoto units (carbon credits) was suggested. The Review noted that, in practice, buying Kyoto units would involve paying for emission reductions in other (mainly developing) countries.
- 50. In regard to forestry planting, the Review considered that a new programme to offset New Zealand's Kyoto liability by large-scale new forest planting would not enable New Zealand to meet its CP1 Kyoto target because relatively little carbon would be sequestered while the trees are young. The benefits of planting now will mainly accrue beyond CP1. Such an approach should be seen as part of New Zealand's longer term response to climate change.

PART C

Government Response to the Review

- 51. Several aspects of the Review require prompt decision-making by government:
 - the future of the carbon tax/Negotiated Greenhouse Agreement model (decision one);
 - whether to continue with the deforestation cap (decision two);
 - whether to continue with a third round of the Projects to Reduce Emissions programme (decision three);

³ The Kyoto Clean Development Mechanism facilitates emission reduction projects (e.g. wind power, landfill gas capture, and hydro power) by developed country in developing countries. Joint Implementation facilitates investments by developed countries and economies in transition in emission reduction projects undertaken in other developed countries.

- whether to release publicly the *Review of Climate Change Policies*; and
- the work programme needed to develop climate change policy.
- 52. It is clear that a number of policy areas require further work in order to respond to the Review findings. These areas cross a range of Ministries and Ministerial responsibilities and a well co-ordinated collective response is therefore required. Decisions will include progressing existing work programmes and, in some cases, developing new programmes.

Decision 1: The current carbon tax/Negotiated Greenhouse Agreement model

Background to the carbon tax and exclusion of agricultural emissions from a tax

- 53. The government's climate change work programme commenced in the 1990s. Government subsequently commissioned the Tax Review 2001 (known as the "McLeod Review") which included comment on domestic greenhouse gas emissions and noted that "... a broad-based carbon tax, aligned to international prices and including the agricultural sector, merits consideration as New Zealand's central Kyoto measure for the first commitment period."
- 54. Following this finding, the government made a carbon tax central to the climate change policy package adopted in 2002. The principal rationale for the carbon tax was to introduce a price for carbon into the New Zealand economy. It was recognised that the tax would result in only modest reductions in emissions within the first commitment period of the Kyoto Protocol (2008 to 2012).
- 55. The government made a decision to exempt agricultural emissions (methane and nitrous oxide from animals and fertiliser use) from the carbon tax up until the end of the first commitment period, with no decision beyond 2012. There were three main reasons for this exemption. First, the government considered that unlike most of the rest of the economy, which could reduce their emissions by switching fuels and/or improve energy efficiency, there were no significant emission reduction technologies and the only way to reduce agricultural emissions was to reduce pastoral farming output.

[withheld under OIA s6(e)]

Thirdly, the

difficulty of measuring on-farm emissions (which would mean that the tax would not effectively stimulate increased efficiency at the farm level).

Negotiated Greenhouse Agreements

- 56. Negotiated Greenhouse Agreements exist to protect companies whose international competitiveness is at risk as a result of the carbon tax. A Negotiated Greenhouse Agreement is essentially a contract between the Crown and a company with large greenhouse gas emissions whereby the company is exempted from the carbon tax in return for reducing its emissions down to world's best standard levels. The Agreements are intimately tied to the carbon tax. As the model currently operates, if there were no carbon tax, there would be no need for Negotiated Greenhouse Agreements.
- 57. Two Negotiated Greenhouse Agreements have been concluded. One extends only to 2012 and, if it was not terminated by the Negotiated Greenhouse

Agreement firm, might require payments by the Crown (if the firm over-performed) or to the Crown (if the firm under-performed). The other Negotiated Greenhouse Agreement extends beyond 2012 and the government would need to consider what position to take regarding it in light of any decisions on the carbon tax.

58. It is possible that a number of firms who are presently negotiating Negotiated Greenhouse Agreements will seek to negotiate some form of "voluntary" greenhouse agreement with the government. There are both advantages and disadvantages in exploring this option.

Implications of any changes to the current carbon tax/Negotiated Greenhouse Agreement model

- 59. If the government does *not* continue with the current carbon tax/Negotiated Greenhouse Agreement regime, then obviously the implications of such an announcement need to be managed, and alternatives considered.
- 60. In considering alternative models, the Review set out advantages and disadvantages of a number of other "tax-based" options and the need for these to be further investigated, considering social and economic implications for New Zealand.
- 61. Regardless of whether there is a greenhouse gas tax or not, there is almost certainly going to be a gap between our allocated emissions under the Kyoto Protocol (for CPI) and our expected emissions. Therefore, a key consideration is the best balance between government expenditure in New Zealand to reduce emissions in CP1 and government purchasing of Kyoto-compliant emission units in the international market.
- 62. If a signal is given that the government is significantly delaying or abandoning the current carbon tax then implications include:
 - what broad options the government should propose instead: i.e. the purchase of emissions, domestic abatement measures and increasing forestry sinks;
 - concerns over what effect this will have on our Kyoto deficit in CP1 and the fiscal costs of meeting that deficit;
 - questions about what would replace the carbon tax as a national instrument
 to manage the greenhouse gas emissions from point sources subject to
 resource consents under the Resource Management Act. In 2004 the Act
 was amended so local consent authorities no longer consider emissions of
 greenhouse gases a national mechanism in the form of the current carbon
 tax was considered more appropriate;

[withheld under OIA s6(a)]

- regulatory and investment uncertainty.
- 63. In addition, decisions on the carbon tax have implications for forestry policy.

[withheld under OIA s9(2)(g)(i), s9(2)(f)(iv)]

[withheld under OIA s9(2)(g)(i), s9(2)(j)],

[withheld under OIA s9(2)(g)(i), s9(2)(f)(iv)]

Whether or not the carbon tax proceeds in its current form, it is likely that a more sophisticated policy response will be needed to secure real climate change benefits from the forestry sector.

Alternatives to the Negotiated Greenhouse Agreement /Carbon tax model

- 64. Alternatives to the current model include alternative pricing mechanisms, sectoral policies and regulatory measures. Some of these may have significant fiscal and economic costs. The Review also looked at alternative options for specific sectors, such as transport and energy, for reducing emissions and increasing sinks (forestry plantings). For example, I consider that it would be prudent for the government to explore possible policy options to encourage new electricity generation to be built using renewable, non-carbon fuel sources, or to discourage fossil fuel use.
- 65. If the government does not proceed with a carbon tax, the government will need to consider further measures, possibly under the Resource Management Act, that could effectively manage greenhouse gas emissions at the national level. To put this in context, the current Resource Management Act appeal to the Environment Court concerning the proposed conversion of the Marsden B power station to coal, at law, cannot consider greenhouse gas emission consequences.
- 66. Under present policy settings, the way is left open to move in time from the current carbon tax/Negotiated Greenhouse Agreement model to a domestic emissions trading regime. While decisions on the detail of the trading regime were intended to be subsequent to the introduction of the current carbon tax in 2007, it was anticipated that a domestic trading regime would send an additional signal to the market to reduce greenhouse gas emissions by limiting the total volume of emissions allowed.
- 67. Known as a 'cap-and trade' system, this model may still have benefits in the absence of a carbon tax, particularly as it is expected to provide market-driven and cost-effective reductions in greenhouse gas emissions. This model could also accommodate, if desired, a total allocation that decreased year-on-year, leading to real reductions in total domestic greenhouse gas emissions. The main difference between "cap and trade" systems and carbon tax based systems is that under cap and trade systems volume is capped and the market left to determine value, whereas under the carbon tax based models volume is uncapped but value is determined.
- 68. The New Zealand Business Council for Sustainable Development favoured this mechanism in its recent Climate Change Report. One potential down-side to such a mechanism, however, is that entrenching the value inherent in existing emissions (in the form of permits to pollute) to existing emitters could potentially lay the ground for later claims of inequitable treatment by those not

presently emitting (e.g. owners of undeveloped Maori land). It would be important to bear in mind the need for equitable treatment under the Treaty of Waitangi if further work is to be undertaken in this area. The allocation of fisheries quota in New Zealand is one model for mitigating this risk.

Announcements of any changes to the previously announced carbon tax

69. In making an announcement about the future of the carbon tax, the government needs to emphasise that it is looking at alternatives and that it still believes that putting the price of greenhouse gas emissions into the economy is an important objective in meeting New Zealand's climate change obligations in the medium to longer term. This is an important signal in itself which will, for example, guard against the risk of inappropriate investment in new coal-fired electricity generation. I recommend that whatever course of action we take regarding the current carbon tax, Cabinet direct officials to report back by 3 March 2006 on the work programmes required to respond to the findings of the Review. These work programmes are covered in more detail below.

Ways forward

- 70. Allowing New Zealand's emissions to continue to grow unchecked is neither responsible nor a cost-effective option in the long term. There are also a range of other environmental and economic benefits not relating to climate change to be gained from using energy more efficiently, using agricultural inputs more efficiently, developing a sustainable transport system and ensuring strength in the forestry sector. Even if the current carbon tax/Negotiated Greenhouse Agreement model does not proceed, in view of the government's commitment to meet New Zealand's Kyoto Protocol obligations, I am committed to assessing the relative merits of, and putting in place, alternative climate change policy measures, be they regulatory, price-based or other measures.
- 71. I propose that we should decide now on the future of the current carbon tax/Negotiated Greenhouse Agreement model to provide certainty and guide future policy work. As a minimum, I recommend that the government should announce that the carbon tax will not start at the previously announced date of 1 April 2007. I also recommend that the government confirm that the decision to exempt agricultural emissions (methane and nitrous oxide from livestock) from any broad based greenhouse gas tax until 2012 still stands.
- 72. There are four broad options for government when taking decisions on the future of the carbon tax, or any alternative to it:
 - 1. decide, and announce now, that the government will not introduce the *current* carbon tax model or any other broad-based greenhouse gas tax before the end of the first Kyoto commitment period (2012); (NB. This would not preclude putting in place a more narrowly based tax on large emitters if that was deemed appropriate);

OR

2. decide, and announce now, that the government will not introduce the *current carbon tax* model or any other *broad-based greenhouse gas tax* in this parliamentary term;

OR

3. decide, and announce now, that the government will not introduce the *current carbon tax* model, but that it will explore alternatives to the *current carbon tax* model with a decision in 2006 on whether to proceed with some alternative form of carbon tax (excluding livestock emissions) during this <u>parliamentary term</u>;

OR

- **4.** delay a final decision on the future of the *current carbon tax*, or any alternative to it, until early March 2006 while the government explores the relative merits of options in light of the Review.
- 73. Option 3 and 4 leave open the prospect of tax-based measures to be introduced during the present parliamentary term (excluding the possibility of such a tax applying to livestock emissions until after 2012). This could be the carbon tax in its present form (option 4) or some other variant (option 3). If any tax measure were introduced, the government would need to consider and make it clear whether or not the measure is likely to be extended in 2013 to apply to livestock methane and nitrous oxide.
- 74. All options leave open a decision by the government to introduce other regulatory or non-regulatory policy responses to control emissions or encourage forest sinks.

Decision 2: Deforestation Cap

75.

[withheld under OIA s9(2)(g)(i), s9(2)(j), s9(2)(f)(iv)]

76.

[withheld under OIA s9(2)(g)(i), s9(2)(j), s9(2)(f)(iv)]

77. [withheld under OIA s9(2)(g)(i), s9(2)(j), s9(2)(f)(iv)]

78. [withheld under OIA s9(2)(g)(i), s9(2)(j), s9(2)(f)(iv)]

Decision 3: Projects to Reduce Emissions Programme

- 79. The Review recommended (see paragraph 46 above) that the Projects to Reduce Emissions Programme should not continue in its current form for a third round because of doubts about its effectiveness. The government needs to make a decision on this promptly as there is public interest in a further round.
- 80. I propose that the third round of the Projects to Reduce Emissions programme not proceed and that an announcement to this effect be made.

PART D

Future climate change work programmes

- 81. The Review highlights the need for ongoing climate change work programmes. This work should reflect a well coordinated whole-of-government approach with specific responsibilities located with relevant departments.
- 82. There are several government agencies, and associated Ministers, with responsibilities for policy advice on, and implementation of, climate change policy, including: the Ministries of Agriculture and Forestry, Environment, Economic Development, Transport, Foreign Affairs, Research, Science and Technology, the Treasury, Te Puni Kokiri, the Department of the Prime Minister and Cabinet, New Zealand Customs, the Inland Revenue Department and the Energy Efficiency and Conservation Authority.
- 83. It is important that the shared responsibilities are given effect through the work programmes.
- 84. In addition to the need to look at alternative price-based measures, work programmes should include:
 - a range of sector-based or cross-sectoral policies and measures;
 - reviewing New Zealand's domestic climate change objectives; and
 - preparation for adaptation to the effects of climate change (including extreme weather events, frequency of drought, sea-level rise and

temperature variation). Improved assessment of the likely economic costs to key sectors of a changing climate is also needed.

85. Key areas for further work identified in the Review are covered below.

New Zealand's Domestic Climate Change Objectives

- 86. The Review concluded that New Zealand's current climate change internal target, namely 'that New Zealand be set towards a permanent downward path for total gross emissions by 2012' is no longer realistic. Therefore, the Review recommends that the government should signal now that this internal goal needs to be revisited and a revised objective will be articulated.
- 87. While further work is required on a domestic objective, I believe the following are important considerations:
 - we are part of the global initiative needed to address climate change so it is appropriate that New Zealand plays its part; and
 - a major focus should be reducing New Zealand's greenhouse gas emissions and optimising our use of forest sinks.
- 88. Formulating an appropriate domestic objective should form part of the immediate work programme.

Purchasing Emission Units

89. Purchasing emission units for the first Kyoto commitment period (2008-2012) will almost certainly be required. This effectively means New Zealand paying for emission reductions in other countries. The high cost of meeting our Kyoto obligations solely through domestic abatement or forest sinks means use of the Kyoto mechanisms (such as the Clean Development Mechanism) is a necessary and cost-effective part of complying with the Protocol. Consideration needs to be given to whether, when, and how, Kyoto units should be purchased on the international market including the full suite of options available. This will depend on a range of factors including: our exchange rate; the predicted price for carbon credits; and an assessment of the reliability of Kyoto mechanisms

[withheld under OIA s6(a), s9(2)(g)(i)]

90. One option to be investigated in relation to the Clean Development Mechanism (earning units for projects in developing countries) is whether we can leverage New Zealand's expertise and technology in renewable electricity generation or other sectors. Another issue to be considered is the likelihood of increasing ⁴sophistication in the international carbon market,

[withheld under OIA s9(2)(j)]

(Work to be led by The Treasury.)

Domestic Trading

91. Domestic emission trading schemes are a means of ensuring greenhouse gas emission reductions. The Review considered both domestic and international trading. It is too early to predict with any confidence how international emissions trading will evolve. The European Union Emissions Trading Scheme has only been operational only since 1 January 2005,

[withheld under OIA s6(a)]

(Work to be led by

Ministry for the Environment.)

Land-use and Forestry

- 92. Current policy settings are having a counter-productive effect, especially when non-forestry land uses (such as livestock production) are largely shielded from Kyoto liabilities. I believe it is important that policy encourages (or at the very least does not discourage) forestry plantings, particularly where this is beneficial for soil conservation, flood control, water quality and biodiversity. The Review highlighted that there are a number of issues to work through involving better understanding of likely deforestation rates and new planting. The links with increased emissions from agriculture following changed land-use are also critical. (Work to be led by Ministry of Agriculture and Forestry.)
- 93. Work programmes around deforestation could include:
 - completion of research into likely deforestation rates and locations to 2012 and beyond;
 - whether to operationalise the deforestation cap, and if so, options and implications of this;
 - whether to incentivise reforestation (reversion to indigenous forest or replanting), and/or disincentivise deforestation, and if so, how might this be done and at what cost and return,
 - options to deal with forested land yet to be returned to Maori under Treaty claim processes; and
 - links to any forest planting or other policies to address Kyoto Protocol liabilities.
- 94. Programmes to encourage forest planting include:
 - options to encourage afforestation (new tree planting or indigenous forest reversion), including timing, risks, costs and benefits; and
 - links to other land-use policies, such as addressing nitrification of
 waterways and controlling hill country erosion, and the effects such
 policies may have on deforestation rates and incentivising replanting.

Energy

95. Energy matters generally were highlighted in the Review, including production and the need to optimise efficient use of energy and utilise energy from nonfossil sources. Further work is required to consider alternatives to the carbon tax (with emphasis on industrial emitters and electricity generation) and ways to encourage a greater priority for investment in renewable energy over fossil fuels. The National Energy Strategy that the government has asked the Ministry of Economic Development to develop is also relevant to this. (Work to be led by the Ministry of Economic Development.)

Agriculture

- 96. Our strong agriculture base, its large contribution to our emissions profile and the commitment of government not to put a "tax" on these emissions prior to 2013 were discussed in the Review. Further work is required on options for mitigating agricultural emissions nitrous oxide and methane from livestock and fertiliser (work to be led by Ministry of Agriculture and Forestry.)
- 97. Work programmes requiring further analysis and consultation include:
 - the role and impact of price-based measures on the agricultural sector beyond CP1;
 - the adequacy of current research efforts and funding to develop technologies and approaches to reduce on-farm emissions and the extent to which New Zealand should use this investment to assert international leadership in this area of research as a significant part of our contribution to tackling global emissions;
 - approaches to encourage the uptake by farmers of emission reduction technologies including engagement at the farm level;
 - processes to ensure New Zealand can measure and capture the full benefit of these technologies in the national inventory;

[withheld under OIA s6(a), s9(2)(j)]

- links between agriculture and forestry policy options with catchment management, soil conservation, biodiversity, nitrification of waterways; and how these may affect land-use change.
- 98. Managing industry consultation and expectations will include:
 - analysis of how various policy options fit with other agricultural policy activities including management of water quality and soil erosion; and
 - options for engaging with the agricultural sector.

Transport

- 99. The most pressing need for the transport sector is to reduce the carbon intensity of transport, with a primary focus on reducing CO₂ emissions from the vehicle fleet. The Review indicated under-utilised opportunities, and also noted that many policies have additional health and safety benefits. In the absence of a carbon tax sending a price-signal for fossil-derived transport fuels, the need for alternative price incentives or disincentives for transport become more important. Although the announced carbon tax is not large enough to cause big behavioural changes, the tax was expected to start to signal the relative cost of CO₂ emissions in fuel use across different transport modes and uses. While recent fuel price rises have been more substantial than the effect of the carbon tax, other mechanisms to encourage more fuel efficient vehicles (or discourage less efficient vehicles, need to be considered. (Work to be led by Ministry of Transport.)
- 100. Work programmes, signalled in the Review, which are expected to have mitigation benefits and could be progressed (regardless of decisions on the carbon tax/Negotiated Greenhouse Agreement package) include:

- transferring a proportion of the rates contribution to roading costs and a proportion of road related Accident Compensation Corporation charges across to fuel excise and the Road User Charge;
- creating incentives for the purchase of vehicles with high fuel economy/low CO₂ emissions through price differentials on ownership (including consideration of incentives for business purchases).
- the production and promotion of vehicle fuel economy information, including at point-of-sale of new and used vehicles;
- evaluating a mandatory sales target for biofuels above 2 Peta Joules per annum and the need for prioritisation of research effort into biofuels;
- a leadership role for government when it purchases vehicles;
- targeting drivers of heavy fleets for information and training;
- programmes for vehicle emissions controls and fleet entry requirements which also have other benefits including safety and local air quality; and
- ongoing financial support for travel-demand initiatives and public transport, including providing alternatives to private ears.
- 101. The first two work programmes are new. The others build on existing programmes.

Research and Technology

102. The need for *research and technology investment priorities* was emphasised in the Review. Particular emphasis is given to agricultural practices, energy production and use, and the general need for an environment that incentivises appropriate research and uptake of new technology. The Ministry of Economic Development and the Ministry of Research, Science and Technology are currently in the process of preparing a report back on energy research priorities [CBC Min (05) 8/9], including technologies, under the Sustainable Development Programme of Action on Energy. Further work on climate change research and technologies should not duplicate existing work. (Research work led by Ministry for the Environment with the Ministry of Research, Science and Technology.)

Cross-sectoral programmes

103. Options for cross-sectoral programmes exist to reduce greenhouse gas emissions, including those administered by Energy Efficiency and Conservation Authority. An example might be a successor to the Projects to Reduce Emissions programme. (Work to be led by the Ministry for the Environment.)

International work programme

104. As the global community enters into negotiations to establish a post-2012 regime for emissions reductions commitments, there is a need to ramp up the resources dedicated to ensuring that New Zealand's international interests in climate change are protected and advanced.

[withheld under OIA s6(a), s9(2)(j)]

(Work to be led by the Ministry of

Foreign Affairs and Trade.)

PART E

Release of the Review

- 105. There is public interest in the Review.
- 106. The Review provided a detailed picture of many of the options and tradeoffs that New Zealand faces in responding to the challenge of reducing greenhouse gas emissions. It could be used to inform the public debate on climate change policy. On the other hand some parts of the Review could be used unhelpfully to generate negative publicity about climate change that might interrupt good decision making on matters still under consideration.
- 107. Consultation by the Review Team with departments and other stakeholders was constrained by the short timeframe set for the Review.
- 108. I consider that it would be useful for the government to have stakeholder reactions to the key findings of the Review incorporated into officials' advice as they prepare the future work programme, although this could be done through officials discussing key findings of the Review with stakeholders but not publicly releasing the Report until a later stage.
- 109. The options for release of the Review are to:

EITHER

1. publicly release the report now

OR

2. not publicly release the Review in any form now

OR

- 3. not publicly release the Review now; but authorise officials to discuss the key findings of the Review with stakeholders and interested parties and as part of their work to 3 March 2006.
- 110. If Cabinet decides to announce now that the proposed carbon tax will not proceed during this term of Parliament (i.e. option 1, 2, or 3 from paragraph 72), then I believe we should release the Review now. If Cabinet decides to delay making a final decision until March 2006 (option 4), then publication of the Review could be delayed until that time.

Consultation

111. The Treasury, Te Puni Kokiri, the Ministry of Economic Development, the Ministry of Agriculture and Forestry, the Ministry of Foreign Affairs and Trade, the Department of Prime Minister and Cabinet, the Ministry of Transport, the Ministry for Research Science and Technology, the Inland Revenue Department and the Energy Efficiency and Conservation Authority were consulted.

Financial implications

112. The following table sets out the estimated operating balance impact to 2008/09 of deferring the carbon tax to 2013.

Operating Balance Impact of Deferring Carbon <i>Tax to 2013</i>				
	2005/06	2006/07	2007/08	2008/09
Carbon tax deferral - revenue foregone		88.6	347.3	343.6
Additional Kyoto liability (13 Mt over CP1) to				
finance at \$NZ 8.50 per tonne**	111.150			

^{**} this conservatively assumes that new policies do not reduce emissions, and may be an optimistic view of the per tonne cost.

113. The following table sets out the estimated operating balance impact of deferring the carbon tax by 12 months, from 1 April 2007 to 1 April 2008.

Operating Balance Impact of Deferring Carbon Tax				
for 12 months			\wedge	
	2005/06	2006/07	2007/08	2008/09
			(7)	>
Carbon tax deferral - revenue foregone		88.6	258.7	0.0
		/ /		
Additional Kyoto liability (13 Mt over CP1) to finance at \$NZ 8.50 per tonne	5.532		\vee	

114. Given the recent revision to the projections of deforestation, the Ministry of Agriculture and Forestry's best estimate of deforestation under current policy settings is now 21 million tonnes carbon dioxide equivalent over 2008-12, which equates to an increase in the Kyoto liability of \$125.538 million. This reestimation represents a forecasting change, and will be recognized as a revaluation of the Kyoto liability in the December Crown Financial Statements.

[withheld under OIA s9(2)(g)(i), s9(2)(j)],

Human rights

116. There are no inconsistencies between the proposals in this paper and the Human Rights Act 1993.

Legislative implications

- 117. No legislation is required to implement the recommendations of this paper.
- 118. If Cabinet makes a decision that the current carbon tax model will not proceed (the first three options of recommendation 16), planned legislation to implement the tax will no longer be required.

Regulatory impact and compliance cost statement

119. No statutory regulations are proposed. No regulatory or compliance issues arise from the proposals.

Gender implications

120. There are no gender implications arising from the proposals.

Publicity

121. Following consideration of the proposals by Cabinet, I will issues a statement on decisions made as appropriate.

Recommendations

122. I recommend that the Cabinet Business Committee recommend that Cabinet:

Background

- note that in June 2005 the government commissioned a Review of Climate Change Policies (the Review);
- 2 note that New Zealand has two greenhouse gas targets:
 - 2.1 an externally set target under the Kyoto Protocol, namely that by 2012 New Zealand would return its total net emissions to 1990 levels or take responsibility for any emissions in excess of 1990 levels,
 - 2.2 an internally set goal, namely that New Zealand be set towards a permanent downward path for total gross emissions by 2012;
- note that it is estimated that New Zealand will be in net deficit of 36 million tonnes of carbon dioxide equivalent in the first Kyoto commitment period (2008-2012) it was previously estimated that New Zealand would be in surplus;
- 4 note that New Zealand is bound by the Kyoto Protocol for the first commitment period and that nothing in this paper changes that commitment;
- note that the Review indicates that most countries that emit large quantities of greenhouse gases [withheld under OIA s6(a)] consider that climate change poses a serious risk and are taking action to manage both their emissions and the effects of climate change;

Findings of the Review of Climate Change Policies

- note that the report *Review of Climate Change Policies* (the Review Report) was submitted to the Minister Responsible for Climate Change Issues on 9 November 2005, and that its key findings were:
 - 6.1 the government should consider formulating an alternative internal climate change goal for New Zealand as its current internal goal that by

- 2012 New Zealand's total gross emissions will be set towards a permanent downward path is no longer realistic;
- 6.2 the level of domestic reductions that can be achieved in a cost effective manner is likely to be small relative to New Zealand's net emission position:
 - 6.2.1 some small and incremental gains can be made in transport and energy efficiency and conservation (that will have other non-CO₂ benefits);
 - 6.2.2 the overall effects of a sustained, higher oil price may be more influential in reducing transport emissions than the current range of policies;
- 6.3 to meet the projected Kyoto Protocol first commitment period (CP1) deficit entirely through domestic emission reductions will cost the economy more than a combination of domestic reductions and purchasing some units on the international market;
- 6.4 work should commence quickly to determine potential buying strategies for New Zealand in the international carbon market;
- 6.5 a new programme of large-scale new forest planting would not enable New Zealand to meet its Kyoto CP1 target because relatively little carbon would be sequestered in the CP1 period (2008-2012):
 - 6.5.1 the benefits of planting now will mainly accrue in future commitment periods,
 - 6.5.2 such plantings would also potentially have significant benefits in terms of soil conservation, flood control, water quality and biodiversity;

6.6 for forestry:

- 6.6.1 the current policy package does not send appropriate climate change signals to land managers regarding the benefits and costs of land-use change;
- 6.6.2 the option for government to retain all Kyoto benefits and liabilities and not impose a deforestation cap was not recommended;
- 6.6.3 a number of options for climate change land-use policy were identified but further analysis of these was required;
- 6.7 circumstances have changed since 2002 and the current carbon tax/Negotiated Greenhouse Agreement model is no longer a suitable platform over the longer term for achieving domestic emission reductions;
- 6.8 the government should not develop a New Zealand emissions trading scheme to apply in the period 2008-2012, but should consider it for post 2012;
- 6.9 the third round of the Projects to Reduce Emissions programme should not proceed:

- 6.10 to be successful the Projects to Reduce Emissions programme should deliver greater emission reductions during the CP1 period than the emission units allocated to the projects, and the Review Report concluded that this outcome is uncertain:
- 6.11 on agriculture, cost-effective emission reduction options are currently limited and are likely to remain so, at least over the next decade:
 - 6.11.1 the price measures that appear to be most feasible and practical during the CP1 period are a tax or other controls on nitrogen fertilisers and/or incentives for the uptake of technologies to reduce emissions;
 - 6.11.2 the current research effort is considered sub-optimal and investment in research is important to enable effective emission reductions in the future;

Further Forestry Information

7

[withheld under OIA s9(2)(j), s9(2)(g)(i), s9(2)(f)(iv)

8

[withheld under OIA s9(2)(f)(iv), s9(2)(j)]

New Zealand's Climate Change Objectives

note that New Zealand will meet its obligation under the Kyoto Protocol, namely that by 2012 New Zealand would return its total net emissions to 1990 levels or take responsibility for any emissions in excess of 1990 levels;

Carbon tax/Negotiated Greenhouse Agreement package

- note that the package of a carbon tax and Negotiated Greenhouse Agreements is central to New Zealand's current climate change policy (note that the current carbon tax is expected to reduce emissions by approximately 13 million tonnes of carbon dioxide equivalent during the first commitment period (2008-2012), but that in its absence a proportion of that reduction could be achieved through alternative policy measures);
- note that due to the time required to undertake the Review in 2005, it is not practicable, from a timing perspective, that the announced carbon tax could be implemented by the scheduled start date of 1 April 2007;
- note that the Review Report concluded that emissions reductions cannot be achieved at the lowest cost if Negotiated Greenhouse Agreements, and the exemption for livestock methane and nitrous oxide from a greenhouse gas tax, were extended well beyond 2012;

- note that the Review Report concluded that the carbon tax and associated Negotiated Greenhouse Agreements is unlikely to be sustainable over the medium term and would need to be replaced by some other policy package;
- agree to announce that the carbon tax will not start at the previously announced date of 1 April 2007;
- 15 confirm agricultural emissions (methane and nitrous oxide from livestock) remain exempt from any broad based greenhouse gas tax until 2012;

16 EITHER

agree and publicly announce that the government will not introduce the current carbon tax model or any other broad-based greenhouse gas tax before the end of the first Kyoto commitment period (2012); (NB. This would not preclude putting in place a more narrowly based tax on large emitters if that was deemed appropriate);

OR

16.2 agree and publicly announce that the government will not introduce the current carbon tax model or any other broad based greenhouse gas tax in this parliamentary term;

OR

16.3 agree and publicly announce that the government will not introduce the current carbon tax model but that it will explore alternatives to the current carbon tax model with a decision in 2006 on whether to proceed with some alternative form of carbon tax (excluding livestock emissions) during this parliamentary term;

OR

- 16.4 agree and publicly announce that a final decision on the future of the current carbon tax, or any alternative to it, is delayed until early March 2006 while the government explores the relative merits of options in light of the Review Report;
- 17 **EITHER** (if one of 16.1, 16.2 or 16.3 is agreed)
 - 17.1 agree to the establishment of a new other expense to be incurred by the Crown "Kyoto Protocol Forecast Liability" in Vote Climate Change and Energy Efficiency;
 - 17.2 approve the following change to appropriations to increase the provision for New Zealand's liability under the Kyoto Protocol, with a corresponding impact on the operating balance:

	\$m – increase/(decrease)				
Vote Climate Change and Energy Efficiency	2005/06	2006/07	2007/08	2008/09	2009/10 & outyears
Other expenses to be incurred by the Crown:					
Kyoto Protocol – Forecast Liability	111.150	-	-	-	-

17.3 note that the removal of the carbon tax will have the following impact on the operating balance:

	\$m – increase/(decrease)				
	2005/06	2006/07	2007/08	2008/09	2009/10 & outyears
Carbon tax deferral - revenue foregone	1	88.600	347.300	343.600	343.600

OR (*if 16.4 is agreed*)

- 17.4 agree to the establishment of a new other expense to be incurred by the Crown "Kyoto Protocol Forecast Liability" in Vote Climate Change and Energy Efficiency;
- 17.5 approve the following change to appropriations to increase the provision for New Zealand's liability under the Kyoto Protocol, with a corresponding impact on the operating balance:

		\$m -	- increase/(decrease)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Vote Climate Change and Energy Efficiency	2005/06	2006/07	2007/08 2008/09	2009/10 & outyears	
Other expenses to be incurred by the Crown: Kyoto Protocol – Forecast Liability	5.532		-	-	

17.6 note that the deferral of the carbon tax by one year implicit in recommendation 16.4 will have the following impact on the operating balance:

	\$m – increase/(decrease)				
2005/06	2006/07	2007/08	2008/09	2009/10 & outyears	
Carbon tax deferral					
- revenue foregone	88.600	258.700	-	-	

- note that, if the government chooses to retain the option of some form of carbon tax in this parliamentary term (either option 16.3 or 16.4), I will report to a Ministerial Reference Group on Climate Change by early March 2006 on the relative merits of various models for pricing carbon into the economy;
- note that a decision to not proceed with the current carbon tax will require transition arrangements for Negotiated Greenhouse Agreements (which exist to protect companies whose competitiveness is at risk as a result of the tax);
- note that the figures used in this paper reflect the carbon price that has been used to date in the estimation of New Zealand's Kyoto liability, and an exchange rate of \$US/\$NZ 0.7020, which was the exchange rate prevailing at the end of November 2005;

Forestry and the Deforestation Cap

21

22

[withheld under OIA s9(2)(f)(iv), s9(2)(g)(i), s9(2)(j)],



OR

22.4.4 agree and publicly announce that no final decision on the future of the current deforestation cap, or any alternative to it, is required now, and the future of the cap will be considered alongside alternative measures as part of the 3 March 2006 report back on climate change work programmes;

22.4.5 agree to authorise the Minister of Forestry to announce that the government will explore alternative measures [withheld under OIA s9(2)(j)]

OR

- 22.4.6 agree and publicly announce that the current forest policy in respect of deforestation will be maintained;
- 22.4.7 direct officials to include in the report back of 3 March 2006 a description of the work programme required to make the deforestation cap operational;

23 If 16.3 OR 16.4 IS AGREED

- 23.1 agree to defer decisions on the deforestation cap until other decisions on the future of the current carbon tax or some alternative form of carbon tax are made:
- note that all options at recommendation 16 leave it open for the government to introduce other regulatory or non-regulatory policy responses to control emissions or encourage forest sinks;

Financial implications

agree that any changes to appropriations for 2005/06 be included in the 2005/06 Supplementary Estimates and that, in the interim, these expenses be met from Imprest Supply;

Projects to Reduce Emissions programme

agree, and announce that, that the third round of the Projects to Reduce Emissions programme will not proceed;

Future work programmes

- 27 note that advice on, and implementation of, climate change policies is the responsibility of a number of government agencies and their associated Ministers the Ministries of Agriculture and Forestry, Environment, Economic Development, Transport, Foreign Affairs, Research, Science and Technology, the Treasury, Te Puni Kokiri, the Department of the Prime Minister and Cabinet, New Zealand Customs, the Inland Revenue Department and the Energy Efficiency and Conservation Authority.
- note that, regardless of decisions on the carbon tax, the Review Report proposed new work programmes to respond to an expected "Kyoto deficit", including a package of enhanced domestic emission reduction measures and a strategy for acquiring emission units to cover the CP1 deficit.

- 29 note that a well co-ordinated suite of future work programmes is required to provide further analysis to inform government decisions, in light of the Review Report, including in the following areas:
 - 29.1 revisiting New Zealand's internally set goal that "New Zealand be set towards a permanent downward path for total gross emissions by 2012" (Minister Responsible for Climate Change Issues);
 - 29.2 work on alternative measures to the announced carbon tax, including consideration of emissions trading and new, possibly voluntary, arrangements to replace Negotiated Greenhouse Agreements (Minister Responsible for Climate Change Issues);
 - 29.3 purchasing and other strategies for acquiring emission units for the first Kyoto commitment period (2008-2012) from appropriate sources including projects under the Kyoto Clean Development Mechanism and Joint Implementation, including the option of projects that would leverage the export of New Zealand's expertise and technology (Minister of Finance);
 - 29.4 work on forestry policy options for managing deforestation and encouraging afforestation (new tree planting) and reforestation (reversion to indigenous forest or replanting) (Minister of Forestry);
 - 29.5 land-use and the links between forestry and agriculture policies (Minister of Agriculture and Forestry);
 - 29.6 incentives for renewable energy or disincentives for fossil fuel based electricity generation (Minister of Energy);
 - 29.7 opportunities to reduce energy emissions generally, including through development of the National Energy Strategy and energy research and priorities (Minister of Energy);
 - 29.8 review of the National Energy Efficiency and Conservation Strategy (Minister of Energy);
 - 29.9 treatment and reduction of agricultural emissions including research (Minister of Agriculture);
 - 29.10 incentives or disincentives for purchase and use of transport modes and vehicle efficiency (Minister of Transport);
 - 29.11 appropriate research and technology investment priorities, excluding agriculture and energy (Minister Responsible for Climate Change Issues);
 - 29.12 the need for, and future shape of, cross-sectoral incentive programmes such as the Projects to Reduce Emissions programme (Minister Responsible for Climate Change Issues);
 - 29.13 continuation of work to ensure that New Zealand's international interests in climate change are protected and advanced (Minister of Foreign Affairs):
 - 29.14 an extension of existing work to help New Zealand prepare for and adapt to the impacts of climate change (Minister Responsible for Climate Change Issues);

- direct officials to report back to their relevant Ministers by 3 March 2006 with detailed proposals for climate change work programmes in each work area listed in recommendation 29;
- agree that the Minister Responsible for Climate Change Issues convene and chair before 13 March 2006 a meeting of a Ministerial Reference Group comprising the Ministers of Finance, Agriculture, Forestry, Energy, Transport, Environment, Economic Development and the Minister Responsible for Climate Change Issues to discuss proposals and approve, in-principle, a well coordinated whole-of-government work programme for climate change policy;
- agree that the Minister Responsible for Climate Change Issues on behalf of the Ministerial Reference Group, will seek Cabinet approval for a whole-of-government work programme for climate change policy by 3 April 2006;



Review Report

- note that the Review Report (produced by a cross-departmental team assembled by the Ministry for the Environment) provides a comprehensive picture of the options and tradeoffs that New Zealand faces in responding to the challenge of reducing greenhouse gas emissions;
- 34 **note** that public and business response to the Review Report's key findings would assist officials in prioritising and finalising their future work programmes;
- 35 EITHER
 - 35.1 agree to publicly release the report *Review of Climate Change Policies* now;

OR

35.2 agree not to publicly release the report - Review of Climate Change Policies – in any form now;

OR

35.3 authorise officials to discuss the Review Report's key findings with stakeholders and interested parties.

Hon David Parker

Minister Responsible for Climate Change Issues