

The Chair
Cabinet Policy Committee

Annual Report on Climate Change Policy and Implementation.

Proposal

1. To report progress on the implementation of the government's climate change policy as required by CAB Min (02) 26/16 (7 October 2002) and POL Min (04) 10/3. This report covers the period since the last annual report (July 2005 to June 2006).

Executive summary

2. This report provides a summary of progress on the implementation of the climate change policy package over the last year and highlights changes to the institutional arrangements for the climate change team across the whole of government. It also provides an overview of New Zealand's national trends in greenhouse gas emissions based on the *2004 New Zealand Greenhouse Gas Inventory* and the most recent emissions and removals projections (Net Position Report) for the Kyoto Protocol first commitment period (2008 to 2012).
3. A full review of climate change policy was commissioned by Cabinet in mid-2005. It was completed in November 2005, and in December 2005 Cabinet decided not to proceed with the announced carbon tax and associated Negotiated Greenhouse Agreements. Officials are continuing, as directed [CAB Min (06) 18/8 refers], to continue developing the whole of government work programme for climate change covering communication and stakeholder engagement, a strategic framework, preparation for and adapting to climate change, forestry measures, transport measures, energy sector measures, agriculture and land use, development of a purchasing strategy for Kyoto compliant emission units, international engagement, alternatives to the carbon tax, cross-sector initiatives, and climate change research and technology investment priorities. These work programmes will be reporting back to Cabinet at specified dates over the next twelve months.
4. The focus of our international engagement over the last year has been to work within the United Nations Framework Convention on Climate Change (UNFCCC) process to help ensure that the outcomes of the Montreal Climate Change Conference in December 2005 were aligned with New Zealand's views.
5. The Intergovernmental Panel on Climate Change (including a number of scientists from New Zealand) is in the process of producing its 4th Assessment Report. A comprehensive summary of climate change science, impacts and adaptation, and mitigation options in this report is due to be completed in 2007.
6. From July through December 2005, officials continued to work with potentially affected parties on the design of the carbon tax and its implementation. Officials made substantial progress with implementing the amended policy for Negotiated Greenhouse Agreements.
7. The Ministry for the Environment continued ongoing monitoring and management of the 41 contracts for Projects to Reduce Emissions.

8. Development and implementation of New Zealand's emission unit registry system software is progressing well with completion expected as soon as possible following the passing of the Climate Change Response Amendment Bill.
9. A pilot scheme was established on 1 July 2005 to assist energy-intensive businesses to reduce greenhouse gas emissions through improved energy efficiency.
10. Nineteen territorial authorities and regional councils have now joined the Communities for Climate Change Protection programme, with 63 percent of the New Zealand population covered by participating councils.
11. Implementation of the Permanent Forest Sinks Initiative, which will provide an opportunity for landowners to establish permanent forests and gain fully tradable Kyoto Protocol compliant emission units, awaits passage of the Climate Change Response Amendment Bill and completion of the broader forestry work programme.
12. The *2004 New Zealand Greenhouse Gas Inventory* was completed and submitted by the 15 April 2006 deadline in line with the requirements of the UNFCCC.
13. New Zealand's total greenhouse gas emissions in 2004 equalled 74.6 million tonnes of CO₂-equivalent (Mt CO₂-e) and were 21.3 percent above the 1990 level. Total emissions fell 1.2 percent from 2003. This was primarily due to a reduction in the combustion of fossil fuels for electricity production compared to 2003 which was a 'dry' hydroelectricity generation year.
14. The May 2005 net position projection for the Kyoto Protocol first commitment period was updated to a deficit of 64.0 Mt CO₂-e in the Crown Accounts in December 2005. (Note: On 18 July 2006 I released the latest net position - a deficit of 41.2 million units).
15. All estimates provided in this report suggest that New Zealand's total greenhouse gas emissions are continuing to grow relative to the 1990 base year. It is projected that this trend will continue to grow over the Kyoto Protocol first commitment period.
16. *New Zealand's Fourth National Communication under the UNFCCC*, together with the *Report on the Global Climate Observing System* and the *Report on Demonstrable Progress under the Kyoto Protocol*, were submitted to the UNFCCC Secretariat in May 2006.

Background

17. New Zealand is a party to both the UNFCCC and its Kyoto Protocol. The UNFCCC has been ratified by 188 countries. Following Russian ratification of the Kyoto Protocol in November 2004, the Protocol entered into force on 15 February 2005.
18. The government's climate change policy package was approved in October 2002 and was announced at the time when New Zealand ratified the Kyoto Protocol. The measures built on a foundation of existing policies and strategies (the New Zealand Energy Efficiency and Conservation Strategy; the New Zealand Transport Strategy; the New Zealand Waste Strategy; the Growth and Innovation Framework; and the Sustainable Energy work programme within the Sustainable Development Programme of Action).

19. New Zealand has two greenhouse gas targets. One is an externally set target under the Kyoto Protocol, namely that by 2012 New Zealand will return its total net emissions to 1990 levels or take responsibility for any excess, and, an internally set goal, namely that New Zealand be set towards a permanent downward path for total gross emissions by 2012. In 2002, Cabinet agreed that there be annual reports to Cabinet Policy Committee setting out progress with existing policy, assessment of new information to date, and assessment of the relevance of the policy proposed. This latter goal is currently being reassessed in accordance with CAB Min (06) 18/8.

Achievements for the 2005/2006 fiscal year

International

20. The focus of our **international engagement** over the last year has been to work within the UNFCCC process to help ensure that the outcomes of the Montreal Climate Change Conference in December 2005 were aligned with New Zealand's views. The Montreal Climate Change Conference included the 11th Conference of the Parties to the UNFCCC and the 1st Meeting of the Parties to the Kyoto Protocol. This Conference adopted the rules for an operational Kyoto Protocol, agreed a framework for international cooperation on adaptation, and launched future - focussed agenda items under both the UNFCCC and the Kyoto Protocol.
21. It was clear at the May 2006 UNFCCC meetings in Bonn that discussions are at an early stage on future commitments and architecture. We have also continued to monitor, and be engaged in, other fora that are exploring options with regard to future climate change commitments, including on the treatment of forest sinks.
22. The **bilateral climate change partnerships** with the United States and Australia are ongoing, with further bilateral meetings to be held in August-September 2006. These partnerships indicate our willingness to continue to work with the United States and Australia even though neither of those countries has ratified the Kyoto Protocol. Most of the projects under the partnerships have a science and technology focus, but the partnerships are also used to advance policy objectives, particularly the Australia/NZ partnership.
23. New Zealand has continued to support the **Intergovernmental Panel on Climate Change** (IPCC). The IPCC has been producing the 4th Assessment Report, a comprehensive summary of climate change science, impacts and adaptation, and mitigation options, due for completion in 2007. A chapter specifically on the projected impacts on Australia and New Zealand is also incorporated. The Ministry for the Environment is co-funding the participation of New Zealand scientists in the writing and review of the 4th Assessment Report and has hosted (in Christchurch) an international meeting of report authors. New Zealand has continued to promote the **Global Climate Observing System**. This is an important ingredient in building capacity to deal with climate change effects in developing countries. Officials and scientists participated in two governance meetings of the **Global Earth Observing System of Systems**, a pluri-lateral initiative which amongst other things will supply crucial satellite information on land-use changes for New Zealand.

Ongoing work

24. Following confirmation of international requirements for the development of emission unit registries in December 2004, officials commenced work on the implementation of **New Zealand's emission unit registry** computer system. A provider was selected to develop software to implement New Zealand's registry

system. Development is progressing well, with completion expected as soon as possible following the passing of the Climate Change Response Amendment Bill. The system can not be made fully operational until finalisation of international systems, expected after April 2007.

25. Following a Cabinet decision in March 2005 [POL Min (05) 6/6 refers] on additional policy to assist **energy-intensive businesses** to reduce greenhouse gas emissions through improved energy efficiency, a pilot scheme was established on 1 July 2005. The purpose of the pilot scheme is to test the effectiveness of two policy measures - a grant scheme and demonstration projects. Training and education programmes aimed at businesses are scheduled to begin in 2006/07.
26. The Energy Efficiency and Conservation Authority (EECA) is implementing the pilot scheme in nine industries that have been identified as being energy intensive. EECA has actively marketed the programme with business and industry organisations. Contracts have been signed for demonstration projects in the plastics industry (injection moulding), laundry industry (heat recovery), fishing industry (trawl gear technology), and in the food processing industry (heat recovery). A further application has been received from the fishing industry and several other initiatives are being pursued.
27. The **Local Government work programme** is progressing well:
 - a) The '**Communities for Climate Protection**' programme was launched on 28 July 2004. It provides a framework via which councils can take action to reduce their corporate emissions and those within their community. Nineteen territorial authorities and regional councils have now joined the programme, with 63 percent of the New Zealand population covered by participating councils. Two councils have now reached milestone 3 of the programme and are working on developing a local action plan to achieve their emission reduction goals.
 - b) The '**adaptation**' programme continues to produce and disseminate a range of information materials on: the impacts of climate change; guidance as to how councils can prepare for these effects; and a series of checklists and other decision-making tools to help councils integrate consideration of climate change into regular processes and planning cycles.
 - c) The **Local Government New Zealand (LGNZ)** partnership, launched in April 2004, continues to assist the Government to communicate and consult with councils on climate change matters. It continues to be a valuable channel for communication and exchange of information.
 - d) LGNZ with funding assistance from the Sustainable Management Fund recently held four **Adaptation Workshops** for councils in centres around New Zealand. These workshops provided background and context to adaptation in New Zealand, as well as case studies, tools and resources to aid councils in making decisions about adaptation within their communities.
 - e) Information has also been prepared for local government on the Resource Management (Energy and Climate Change) Amendment Act 2004 – this can be found on the Quality Planning website (www.qualityplanning.org.nz).
28. The **Climate Change Response Amendment Bill** was reported back to the House on 28 July 2005 and has not yet received its Second Reading. It provides for entities other than the Crown (i.e. businesses and individuals) to hold accounts in New Zealand's emission unit registry and to trade in emission units. It also

provides for the accounting of two new types of emission units created by international decisions in 2003: temporary certified emission reduction units and long-term certified emission reduction units (from forest sink projects under the Kyoto Protocol's Clean Development Mechanism). Part two of the Bill will extend the regulation making powers of the Forests Act 1949 to enable the establishment of the Permanent Forest Sinks Initiative.

29. The **Pastoral Greenhouse Gas Research Consortium** (PGGRC) continues to pursue its research strategy to reduce emissions in agriculture under the Memorandum of Understanding with the Government. Steady progress has been made, although a “silver bullet” for reductions in methane emissions from ruminants remains elusive. The PGGRC had its research programme reviewed by a group of leading experts. Its research programme into ruminant methane reduction was considered “world class” and the most comprehensive in the world.
30. If the **Permanent Forest Sinks Initiative** proceeds, it may provide an opportunity for landowners to establish permanent forests and gain fully tradable Kyoto Protocol compliant emission units [POL Min (03) 10/6 refers]. The Indigenous Forestry Unit of the Ministry of Agriculture and Forestry will administer the scheme, and will continue to work with stakeholders and the Ministry for the Environment in the development of the scheme. Enactment of the scheme is dependent on the passing of the Climate Change Response Amendment Bill.
31. The use and emissions of sulphur hexafluoride (SF₆) are very small. These emissions are being addressed through a **Memorandum of Understanding relating to the management of emissions of SF₆ to the atmosphere**, signed by the Government and the major users in the electricity distribution industry.
32. From July through December 2005, officials continued to work with potentially affected parties on the design of the **carbon tax** and its implementation. Officials made substantial progress with implementing the amended policy for **Negotiated Greenhouse Agreements** approved by Cabinet in April 2005 [CAB Min (05) 14/10 refers]. By 1 November 2005, 29 firms had applied for a Negotiated Greenhouse Agreement, and additional firms had expressed interest. Two firms have Negotiated Greenhouse Agreements (New Zealand Refining Company and OceanaGold).
33. The **Projects to Reduce Emissions** programme, over the course of two tender rounds and early project activities, has resulted in the award of emission units to facilitate:
 - a) The commissioning of Meridian Energy Ltd's Te Apiti wind farm, and extensions to TrustPower Ltd's Tararua wind farm and Genesis Energy's Hau Nui wind farm, all of which are now generating renewable energy
 - b) The development of ten other wind farms, two co-generation projects, five bio-energy projects, five landfill gas projects, twelve small hydro/hydro expansion projects, and four geothermal energy projects
 - c) The forward sale of emission reduction units and verified emission reductions to offshore buyers.
34. The primary activity in relation to these projects to reduce emissions was the ongoing monitoring and management of the 41 contracts.
35. Proposals for future Negotiated Greenhouse Agreements and future Projects to Reduce Emissions were put on hold in December 2005 (including an agreement in principle on the terms of a Negotiated Greenhouse Agreement with New Zealand

Aluminium Smelters Ltd), following in-depth analysis by officials of the carbon tax regime as part of the Government's **review of climate change policies** being submitted to the Minister Responsible for Climate Change Issues (initiated in mid-2005 and completed in November 2005).

Policy review

36. The *Review of the Climate Change Policies 2005* concluded that some elements of the 2002 climate change policy package should be modified to better position New Zealand to respond to the longer-term challenges of climate change. A key outcome of the policy review was the announcement by the Government in December 2005 that the previously announced carbon tax would not proceed. Cabinet directed officials to develop a well coordinated suite of future work programmes, supported by strong senior-level input from the relevant departments and agencies on a number of areas [CAB Min (05) 20/10 refers].
37. Although Cabinet decided not to proceed with the announced carbon tax, Negotiated Greenhouse Agreements or Projects to Reduce Emissions regime, the work conducted by both officials and leading industries to date to implement this policy remains highly relevant. Officials will be able to apply the technical expertise gained thus far and leverage the strong working relationships between government and industry to design effective alternative policy measures.
38. The policy review assessed the performance of the Projects to Reduce Emissions initiative. It also developed the questions to be considered around whether Projects to Reduce Emissions should continue and, if so, in what form.
39. Following this review, Cabinet directed the Ministry for Environment to provide advice on how to achieve greater assurance that emissions reductions resulting from the Projects to Reduce Emissions programme will be greater than the emissions units given away to project owners under the programme [CBC Min (05) 20/10 refers]. Cabinet also requested that officials develop a work programme on the need for, and future shape of, cross-sectoral incentive programmes such as the Projects to Reduce Emissions programme. Responses to these requests were submitted to the Minister Responsible for Climate Change Issues in June 2006.

The way ahead

40. The Cabinet paper *Climate Change Policy: The Way Ahead*, tabled in Cabinet on 23 May 2006 [CAB Min (06) 18/8 refers] and announced on 4 July 2006, agreed that the Government's climate change focus be:
 - a) long term and strategic
 - b) on balancing durable efforts to reduce emissions with preparations for the impacts of a more variable climate
 - c) on engaging with and inspiring the wider public and business to energise their willing, effective and long term involvement
 - d) on international engagement that advances our national interests;
41. Officials have been directed to continue developing the whole of government work programme for climate change, reporting back to Cabinet as follows:
 - a) *Interim report back* – an interim report to outline progress in implementing the climate change work programmes, with a particular focus on priority areas.
 - b) *First stage* – reports on a draft strategic framework for climate change; a communication and stakeholder engagement programme (Minister

Responsible for Climate Change Issues); preparation for and adapting to climate change (Minister Responsible for Climate Change Issues); forestry measures (Minister of Forestry); transport measures (Minister of Transport); agriculture and land use (Minister of Agriculture); and development of a purchasing strategy for Kyoto compliant emission units (Minister of Finance).

- c) *Second stage* – reports on an international negotiating mandate in preparation for the intergovernmental climate change conference in November 2006 (Ministry of Foreign Affairs and Trade); finalised strategic framework (Minister Responsible for Climate Change Issues); consultation on a draft New Zealand Energy Strategy and replacement of the National Energy Efficiency and Conservation Strategy (Minister of Energy); further transport measures (Minister of Transport); and alternatives to the carbon tax (Minister Responsible for Climate Change Issues).
 - d) *Third stage* – Further reports to Cabinet for the work programme dealing with incentives to reduce emissions across as well as within specific sectors, plus further details on: alternatives to the carbon tax; updates on energy work programmes; and research and development.
42. With respect to the timelines for the above noted report backs, the Government has identified that stakeholder engagement in the development of the policy is important before decisions are made. While the timelines outlined in CAB Min (06) 18/8 remain for now, they may shift depending on circumstances around **engagement plans**.
43. Officials have developed plans for engagement on adaptation and the energy sector (through the New Zealand Energy Strategy, the replacement National Energy Efficiency Conservation Strategy and consideration of alternatives to the announced carbon tax).
44. On 4 July 2006, I released Government papers on energy and energy efficiency, and a report looking at the Government's direction on climate change policy.
45. Details of the work programmes are contained in Appendix 1 to this paper.

Institutional arrangements for climate change policy delivery

46. As directed by Cabinet, officials are proceeding with the whole of government work programme for climate change [CAB Min (06) 18/8 refers].
47. The Ministry for the Environment and the Department of Prime Minister and Cabinet continue to work closely with officials from The Treasury, the Ministry of Economic Development, the Ministry of Agriculture and Forestry, the Ministry of Foreign Affairs and Trade, the Ministry of Transport, EECA, Te Puni Kokiri and the Ministry of Research, Science and Technology at various levels.
48. The Ministry for the Environment, supported by the Department of Prime Minister and Cabinet, chair the Climate Change Strategic Advisory Group (made up of Deputy Chief Executive level officials) and the Climate Change Senior Officials Steering Group.
49. The Climate Change Strategic Advisory Group has two functions:
- a) Policy leadership – to shape policy advice to Ministers, resolve major policy differences wherever possible and ensure consistency across the work programme.

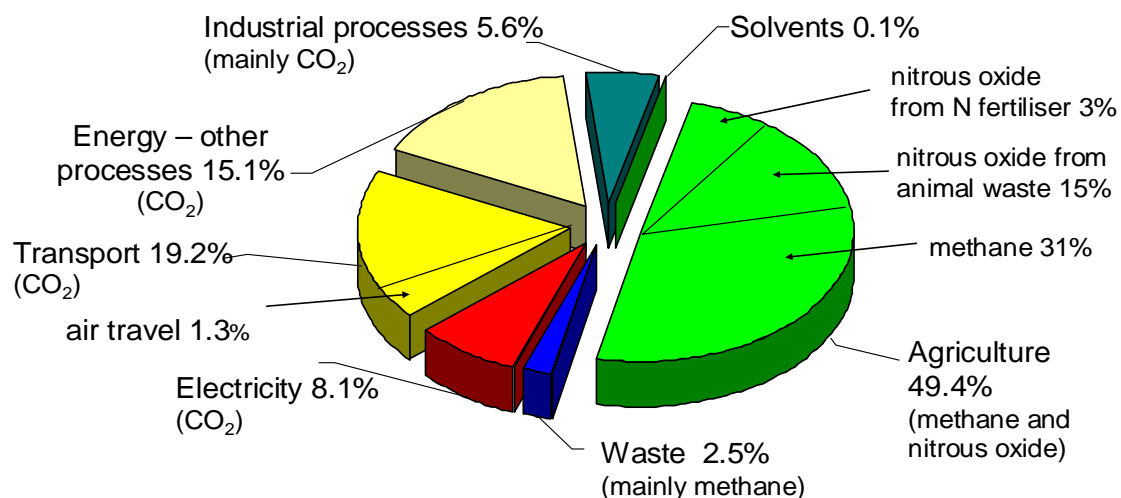
- b) Monitor and report on progress – to hold each department accountable for delivering the work programme and undertake strategic risk management, and collaborate to address any major planning capacity or capability issues. Information on this is fed from the Senior Officials Steering Group.
50. These groups of officials ensure the coordination of the whole of government approach to climate change, assisting in the development and review the climate change policy package, and provide appropriate recommendations and advice on climate change policy issues to the Climate Change Chief Executives Forum and Ministers.

Reporting and science

Greenhouse gas inventory under the UNFCCC

51. Every year a whole of government process led by the Ministry for the Environment produces the national greenhouse gas inventory. The Ministry for the Environment is responsible for overall development, compilation and submission of the inventory. Input is received from various sources, including the Ministry of Economic Development and the Ministry of Agriculture and Forestry.
52. The **2004 New Zealand Greenhouse Gas Inventory** was completed, and submitted by the 15 April 2006 deadline in line with the requirements of the UNFCCC. Consistent with agreed 'good practice' and continuous improvement in inventory reporting, the submission this year included improvements in accuracy, transparency and completeness. In particular, the 2004 inventory included a preliminary estimate for all of the land use categories for all years from 1990. The previous 2003 inventory had data from 1997 onwards and inventories before this had only been able to include planted forests. Once the New Zealand Carbon Accounting System is fully operational these preliminary estimates will be replaced with data from the system.
53. Development of New Zealand's national inventory system, including the carbon monitoring/accounting system, has continued this year. Since New Zealand reported its first greenhouse gas inventory there has been an ongoing programme of improvements to meet the increasingly comprehensive reporting requirements set by the UNFCCC, including reporting under the Kyoto Protocol.
54. New Zealand will have a full description of the national inventory system in the initial report for the Kyoto Protocol, which is due with the UNFCCC by 1 September 2006 [POL Min (05) 4/11 refers].
55. New Zealand's total greenhouse gas emissions in 2004 equalled 74.6 million tonnes of CO₂ equivalent (Mt CO₂-e) and were 21.3 percent above the 1990 level. Total emissions fell 1.2 percent from 2003. This was primarily due to a reduction in the combustion of fossil fuels for electricity production compared to 2003 which was a 'dry' hydroelectricity generation year.
56. The agriculture sector produced 36.9 Mt CO₂-e or 49.4 percent of total emissions in 2004. Emissions in this sector are now 14.8 percent or 4.8 Mt CO₂-e over the level in 1990. The energy sector produced 31.6 Mt CO₂-e or 42.4 percent of total emissions in 2004. Emissions from the energy sector are now 33.8 percent or 8 Mt CO₂-e above the 1990 level.
57. An overview of the significant categories in the 2004 greenhouse gas emissions profile is as follows:

NZ GHG emissions in 2004 - by sector (% of MtCO₂-e)



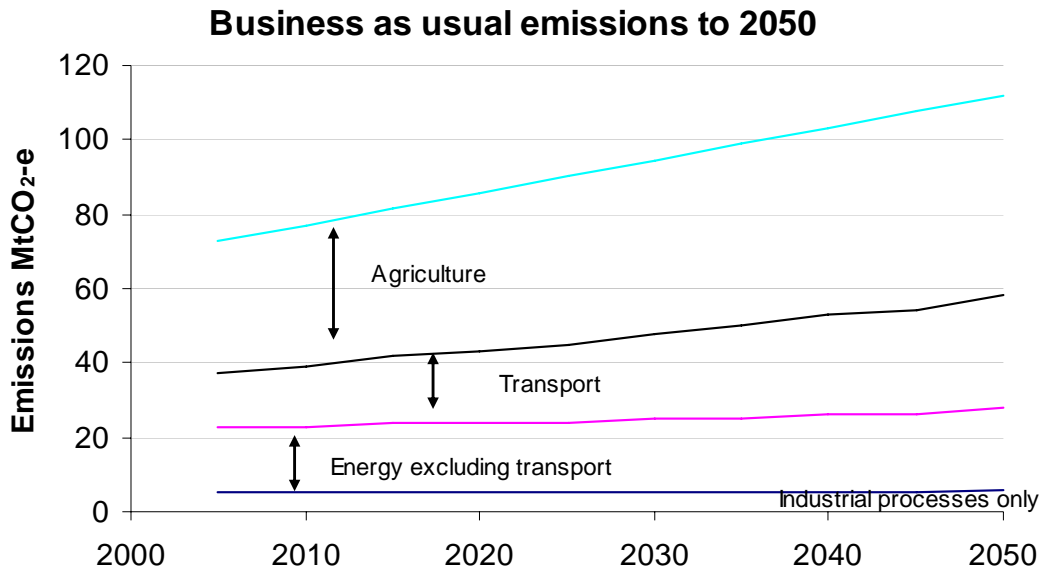
58. In 2004, New Zealand's greenhouse gases comprised of 46 percent carbon dioxide, 36 percent methane and 17 percent nitrous oxide. The sources of those greenhouse gases were primarily from the agricultural sector (methane and nitrous oxide) and the energy sector (mainly carbon dioxide). Together, emissions of hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride are less than 1 percent of the total.
59. The greenhouse gas inventory also tracks emissions and removals from the land use change and forestry sector. In 2004 New Zealand's planted forests were responsible for net removals of 24.5 Mt CO₂-e (or 32 percent) of all emissions. This figure includes both pre- and post-1990 planted forests. It is only the post-1990 forests that enter the accounting for New Zealand's projected net emissions in the Kyoto Protocol first commitment period (2008-2012).

Projected net position for the Kyoto Protocol

60. In May each year, a whole of government process led by the Ministry for the Environment produces a net position report for the Minister Responsible for Climate Change Issues. The report provides a projection of New Zealand's likely balance of emissions units during the first Kyoto commitment period.
61. The net position report is a compilation of sector projections from across government. Agricultural and forest sink projections are provided by the Ministry of Agriculture and Forestry. Energy and industrial processes projections are from the Ministry of Economic Development. Waste projections are from the Ministry for the Environment. The Ministry for the Environment combines the sector projections and reports the projected net position.
62. The May 2005 net position report projected that New Zealand would have a deficit of emissions units for first Kyoto commitment period. This contrasted with expectations in previous years that New Zealand would be in surplus. The Ministry for the Environment commissioned UK-based consulting firm AEA Technology to undertake an independent review of the May 2005 net position report [CAB Min (05) 38/5 refers].

63. AEA Technology's key finding was that "the methodologies employed to project emissions and sinks across the different sectors [are] generally sound and reasonable in their approach". The review noted the uncertainties inherent to all countries' projected greenhouse gas emissions, and that it is "not uncommon" for projections to change on re-analysis. The reviewers provided a number of suggestions to enhance the accuracy and robustness of future forecasts. They recognise that many of their recommendations build upon improvements already in train.
64. Many of the improvements recommended by AEA Technology have been incorporated into the 2006 net position projection. In particular, a cross-government steering group now ensures all sectoral projections are based on consistent assumptions, and relationships between sectors is accounted for. For example, the Ministry of Agriculture and Forestry dairy projections are now used in the Ministry of Economic Development's energy projections because the dairy industry is a significant energy consumer. Modelling enhancements to the Ministry of Economic Development's energy model and the Ministry of Agriculture and Forestry's agriculture models ensure the projections are more robust and the treatment of uncertainty has been improved. Further developments are likely to be made to the projection methodology on a continual improvement basis.
65. The projection of the net position will continue to change as projection models are refined, assumptions are updated and the Kyoto Protocol accounting rules are applied in practice.
66. The most significant source of uncertainty in the projected net position is attributable to the values used for forest sinks. The New Zealand Carbon Accounting System is being developed to meet the requirements of Kyoto Protocol accounting. The projections in this report are based on existing information sources. This information will be replaced by the New Zealand Carbon Accounting System when it is in operation. The projection could well be an under or overestimate of the actual size of New Zealand's sinks.
67. There is a range of 77.5 million units between the lower and upper emissions scenarios. This uncertainty reflects the difficulty in modelling the complex relationships of the New Zealand energy sector, projecting agricultural markets and animal productivity, and projecting removals from forest sinks prior to the New Zealand Carbon Accounting System becoming operational. The projected value of the net position will continue to change as projection models are further refined, assumptions are updated and the interpretation of the Kyoto accounting rules are applied in practice.
68. The May 2005 net position projection was updated to a deficit of 64.0 Mt CO₂-e in the Crown accounts in December 2005. This interim update reflected the Government's decision not to proceed with the carbon tax and updated information about landowner's deforestation intentions.
69. Officials have updated the projection of the net position for July 2006 and have presented this updated information to me. The current projection is for a deficit of 41.2 Mt CO₂-e. I released this figure on 18 July 2006. This downward adjustment in volume is expected to be incorporated in the Crown financial statements as at 30 June 2006, due to be published in September. The effect in dollar terms is yet to be determined and is affected by movements in price as well as volume.
70. All estimates provided in this report suggest that New Zealand's total greenhouse gas emissions are continuing to grow relative to the 1990 base year. It is projected

that this trend, under a business as usual scenario, will continue to grow (particularly in the transport and agricultural sectors) over the Kyoto Protocol first commitment period. This is illustrated as follows:



Source: MED 2006 net position mid case (most likely scenario), MAF

71. Finally, as a Party to the UNFCCC and the Kyoto Protocol, New Zealand is required to submit a number of progress reports to the UNFCCC Secretariat. Two of these reports, the *Report on Demonstrable Progress under the Kyoto Protocol* and the *Fourth National Communication* under the UNFCCC (together with the *Report on the Global Climate Observing System*) were submitted to the UNFCCC Secretariat in May 2006.
72. Other science activities include the Ministry for the Environment's **annual survey of climate change research investment in New Zealand**, which provides baseline information to monitor research trends and inform future decisions on science funding priorities.

Consultation

73. The Treasury, Ministry of Economic Development, Ministry of Agriculture and Forestry, Ministry of Foreign Affairs and Trade, Department of Prime Minister and Cabinet, Ministry of Transport, EECA, Te Puni Kokiri and Ministry of Research, Science and Technology have been consulted in the preparation of this paper.

Publicity

74. It is recommended that this paper be made publicly available on the Climate Change website hosted by the Ministry for the Environment as soon as Cabinet has considered this paper.

Recommendations

75. I recommend that Cabinet Policy Committee:

1. **Note** Cabinet agreed [CAB Min (02) 26/16] that:

there be annual reports to POL setting out progress with existing policy, assessment of new information to date, and assessment of the relevance of the policy proposed

2. **Note** the contents of this paper in meeting the requirements of CAB Min (02) 26/16;

3. **Note** that a set of reports back on a variety of work programmes will be tabled at Cabinet over the coming year as required by CAB Min (06) 18/8;

4. **Note** that officials were directed by CAB Min (06) 18/8 to continue developing the whole of government work programme for climate change; and

5. **Agree** that the Minister Responsible for Climate Change issues will publicly release this paper at an appropriate time, including Cabinet decisions once Cabinet has made a decision on this paper.

6. **Agree** that no further annual reports on climate change policy be required pursuant to CAB Min (02) 26/16

Hon David Parker

Minister Responsible for Climate Change Issues

Appendix 1: Climate Change whole of government work programme

A strategic framework for climate change

Lead agencies: Ministry for the Environment and the Department of Prime Minister and Cabinet

This work programme will develop a long-term, strategic framework for climate change. Elements will include the development of a broadly-supported internal goal/vision for New Zealand, objectives or milestones to track progress towards the goal, and more detail on a “balance sheet” (ie, how the merit of different policies will be assessed and help to coordinate the goals in each of the other work programmes).

Helping New Zealand prepare for and adapt to the impacts of climate change

Lead agency: Ministry for the Environment

One of the main priorities for this work programme is to engage with the community on the importance of preparing and planning for the impacts of a more variable climate. Another priority is to take a strategic approach – to focus on the impacts considered most likely to impact significantly at a regional, national or sectoral level, and the expected timing of such trends. This includes identifying actions to take in the short-term to minimise future costs and lost opportunities. Local government can play a key role in this area.

Combined energy sector work programmes

Lead agencies: Ministry of Economic Development and the Energy Efficiency and Conservation Authority

The combined energy sector work programmes are principally focused on the development of the New Zealand Energy Strategy and the replacement of the National Energy Efficiency and Conservation Strategy. Attention will be focused on optimising efficient use of energy, incentives for supply of energy from non-fossil sources, disincentives for fossil fuel electricity generation, a possible narrow carbon tax on electricity generation and energy research.

Alternative measures to the announced carbon tax

Lead agency: Ministry for the Environment

This work programme addresses alternative measures to the announced carbon tax, including consideration of emissions trading and new, possibly voluntary, arrangements to replace Negotiated Greenhouse Agreements. This work programme has strong links to the energy work programmes, as well as the analytical work supporting the strategic framework.

Transport

Lead agency: Ministry of Transport

This work includes the continuation and expansion of existing initiatives and more strategic, long-term initiatives. Existing initiatives include vehicle fuel consumption information, appropriate vehicle-emissions tests, improvement to the Vehicle Fleet Emissions Model, government fleet management and government procurement initiatives (Govt3), consultation on the Auckland Road Pricing Evaluation Study, and investigation and development of a biofuels sales obligation. Of the new initiatives, one of the priorities is to investigate import controls. The long-term priority is to develop proposals for the use of economic instruments to encourage individual behaviour change towards low-emission fuel and use of low-emission vehicles.

Report on cross-sector incentives

Lead agency: Ministry for the Environment

In addition to specific sectoral work programmes, incentives to reduce emissions can operate across sectors as well as within specific sectors. The Projects to Reduce Emissions programme was an effective example of this. This work programme will examine the value of incentive programmes and the type of programme that may be appropriate. Attention will be focused on emissions from industrial and commercial businesses (except large energy users and industrial emitters as considered elsewhere), agriculture (except ruminant methane), waste, and the household sector. This will form the basis for recommendations on the need for, and type of, possible interventions to reduce emissions. It is expected that a report back to Cabinet will cover this work, along with further details on alternatives to the carbon tax, updates on energy work programmes, and research and development.

Purchasing/obtaining Kyoto compliant units

Lead agency: The Treasury

This work programme will provide advice to the government on the costs and benefits of the Kyoto Protocol “Flexibility Mechanisms”, as well as possible approaches. These Mechanisms are designed to allow countries with Kyoto obligations to achieve them more cost effectively than would otherwise be possible. Put simply, they allow Kyoto member countries such as New Zealand to finance additional emission reductions in other countries, and claim the credit for them. The government has the option of using them to partly meet New Zealand’s 2008-2012 obligations.

Encouraging afforestation

Lead agency: Ministry of Agriculture and Forestry

The afforestation work programme will identify a suite of practical options for encouraging afforestation – the conversion of land into forests – and the generation of forest sinks. Analysis of these options against agreed criteria will culminate in a recommendation on a preferred option or options. The criteria will include such factors as effectiveness in improving sustainable land management, fiscal cost, economic efficiency, durability and consistency with other interventions and/or any overall climate change response strategy.

Managing deforestation

Lead agency: Ministry of Agriculture and Forestry

This work programme will identify practical options for managing deforestation. The options will be considered in the context of climate change, broader sustainable land-management objectives, and other government initiatives, such as the Sustainable Water Programme of Action. Deforestation is the permanent conversion of forests to agriculture or other activities. The work programme will deliver a preferred option, or options, for deforestation as well as a package of forestry initiatives incorporating the preferred measures. Industry and stakeholders will be consulted on the preferred package, and Cabinet will then make the final decision.

Land-use and links between forestry and agriculture policies

Lead agencies: Ministry of Agriculture and Forestry with support from the Ministry for the Environment

Under this work programme, the impacts of other policies on land-use – both within and outside the whole of government work programme – will be assessed. A key focus will be on identifying current land-use control measures and the scope for synergistic benefits, including reduced soil erosion, integrated water catchment management and enhanced biodiversity.

Treatment and reduction of agricultural emissions, including research

Lead agency: Ministry of Agriculture and Forestry

Agriculture continues to be a significant challenge in terms of policies to reduce emissions. The policy focus will be to develop leadership in the sector, find new technologies through research and encourage their wide adoption. Measures proposed to assist in this include: the development of a National Climate Change Action Plan for agriculture; looking at the adequacy of current research efforts for greenhouse gas measurement and mitigation technologies; investigation of the likely impacts of price-based measures on nitrogen use and technology uptake; voluntary measures such as greenhouse gas reporting; and demonstration of best-management practices to reduce emissions.

Research

Lead agencies: Various

Because of the diverse nature of research, the lead for this work programme is divided between the Ministries of Economic Development, Agriculture and Forestry, Environment, and Research, Science and Technology. The focus will be on identification and prioritisation of gaps in our current climate change research. It will be important to coordinate with work programmes covering climate change research for agriculture, land-use and energy. A general research report back to Cabinet will be subject to progress on policy development because research needs are policy dependent.

New Zealand's international interests

Lead agencies: Ministry of Foreign Affairs and Trade with support from the Ministry for the Environment and others

New Zealand's national interests need to be accounted for in the accelerating pace of intergovernmental discussions on actions to address climate change. New Zealand has special circumstances that differentiate it from other developed countries, such as the high relative level of agricultural emissions. New Zealand needs a strong, constant and coordinated presence at the negotiating table to ensure the post-2012 international climate change framework is acceptable. To inform this negotiating position, work is needed on developing a more detailed "New Zealand Inc." position on future action. Concerted international action by the world's largest emitters of greenhouse gases is essential for reducing the risk of climate variability for New Zealand and elsewhere.

Climate change communication and engagement programme

Lead agencies: Ministry for the Environment and the Department of Prime Minister and Cabinet

A comprehensive communication and stakeholder engagement work programme will be developed to ensure that sectors are well-informed and contributing positively and effectively to the progression of climate change policy and its implementation. The programme will also ensure that engagement with the community, business and interest groups is coordinated and appropriately targeted, and will be designed in consultation with involved departments and key stakeholders.