Office of the Associate Minister of Transport
Office of the Minister of Transport
Office of the Minister Responsible for Climate Change Issues

Chair
Cabinet Business Committee

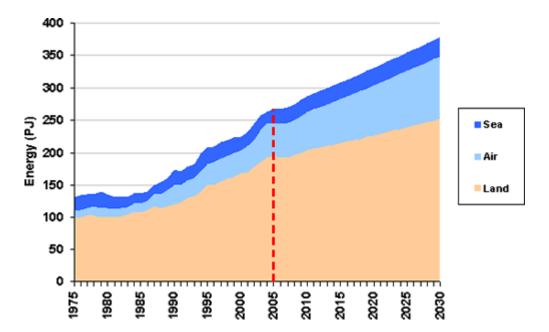
# Climate Change Policy: Overview of Progress Towards Reducing Transport CO<sub>2</sub> Emissions

#### **Proposal**

- This paper summarises existing climate change initiatives to reduce greenhouse gas emissions in the transport sector and seeks Cabinet agreement for areas of further work, in particular the development of a New Zealand Vehicle Fleet Strategy. The paper also identifies a number of other transport initiatives, that while not motivated by climate change drivers, deliver climate change benefits.
- This paper is the first of two transport-related papers. It accompanies a companion paper "Climate Change Policy: Options for Controlling Vehicle Entry Fuel Economy Standards".
   Both papers respond to Cabinet's direction for officials to provide further analysis on reducing greenhouse gas emissions in the transport sector [CAB Min (05) 20/10 and CAB Min (06) 18/8 refer].

#### **Executive summary**

- 3. The paper discusses how transport sector initiatives can help government achieve its climate change objectives of reducing greenhouse gas emissions. It provides the context for ongoing work, and future report backs on specific transport policy initiatives, as identified in CAB Min (06) 18/8. The focus of discussion in this paper, as with its companion paper, is the light vehicle fleet.
- 4. The transport sector relies on fossil fuels in the form of petroleum products, mainly petrol and diesel. As a result, the sector is a significant contributor to greenhouse gas emissions and hence a focus for climate change policies. This is particularly so given that technological solutions to reduce emissions are available in the transport sector, more than other sectors of the economy (for example, agriculture). Greenhouse gas emissions from transport are predominantly in the form of carbon dioxide, the quantity of which is in direct proportion to the quantity of fossil fuel consumed.
- 5. Around 86% of New Zealand's oil consumption is used in the transport sector. Over the next 25 years the forecast under "business as usual" models, with current policy settings, is for national transport energy use (and related carbon dioxide emissions) to grow by about 1.4% per year (approximately 35% to 2030), as shown in the graph below from the 2006 New Zealand Energy Outlook, with road transport accounting for about three-quarters of this demand growth.



- 6. Reducing transport emissions will therefore require a concerted effort, including doing what we are doing more efficiently (such as increasing the fuel efficiency of the vehicle fleet), encouraging modal shift (for example, through public transport and walking to school programmes), and removing barriers to and promoting new fuels and technologies (for example, biofuels and vehicles fuelled by electric batteries).
- 7. Reducing emissions from transport can be seen in the wider context of the government's economic transformation agenda. This includes maintaining mobility for people and goods, and effective delivery of transport services, both of which remain important for social interactions, economic growth, and general quality of life. Economic transformation includes the objectives of decoupling fossil fuel use (and greenhouse gas emissions) from economic growth. Work underway in transport contributes directly to the economic transformation themes of "world class infrastructure" and "environmental sustainability" [CAB min (06) 31/3 refers].
- 8. Significant benefits accrue from actions that reduce the use of fossil fuels in the transport sector. These are wider than simply climate change benefits. Less reliance on fossil fuels can lead to healthier, less congested urban areas and create more energy-efficient systems. Running vehicles more efficiently and reducing fuel consumption saves New Zealanders money. Reducing fuel consumption and developing local sources of biofuels makes New Zealand more resilient to international oil price fluctuations and potentially strengthens local economies as alternative energy sources develop. In part, because of the wide range of cobenefits, transport initiatives to reduce greenhouse gas emissions make good sense for New Zealand to pursue.
- 9. One way of achieving these expected benefits is to focus on changing present transport behaviours. This includes, for instance, the vehicles we buy, the fuels we use and form of travel we use, and in the medium-term, where we choose to live and work. Information on the options available and the consequences of choices can drive behaviour change. More importantly, behavioural change can be facilitated through the provision of alternatives such as public transport and more fuel-efficient vehicles. Progress to drive behaviour change has been made with the launch of the *Fuel\$aver* website which allows purchasers to compare fuel consumption for some new and used vehicles, and a commitment to develop mandatory vehicle point-of-sale fuel economy information. Ongoing work on school travel plans has

- also highlighted that programmes are most successful where they are relevant to local circumstances and backed up with support.
- 10. There are a number of important linkages in transport, for example between air quality, safety, congestion, energy security objectives and the efficiency of the vehicle fleet. Climate change objectives for transport and energy are under consideration at present through the New Zealand Energy Strategy. Decisions in climate change on the use of pricing mechanisms to influence appropriate transport behaviour must be consistent with any future pricing mechanisms for managing greenhouse emissions, should New Zealand decide to move in this direction.
- 11. A priority for further action, recognising the contribution of the vehicle fleet with respect to New Zealand's energy use and consequential greenhouse gas emissions, is to develop a New Zealand vehicle fleet strategy.

#### **Background**

- 12. New Zealand's transport system reflects its small population which is distributed over two main islands with a combined length of 2,000 kilometres. A significant amount of trade occurs through shipping and air transport, building on early port settlements. Our towns generally developed alongside motorised transport, allowing for greater distances between home and destinations. The transport system underpins the country's economic prosperity by enabling the movement of people and goods and providing connections to international markets in the world economy. However, the negative impacts of transport on environmental and human health are increasing.
- 13. New Zealand has one of the highest rates of car ownership in the world. The rate of car ownership per capita in New Zealand has increased from 220 cars per 1,000 people in 1961 to currently around 627 cars per 1,000 people.<sup>1</sup> The cars have also tended to get "bigger", as measured by engine size.
- 14. New Zealand roads carry about 37 billion vehicle kilometres of traffic every year. The movement of freight, in particular, is driven by a healthy economy. Freight movements and associated fuel use increase with GDP growth. Transport usage measured by Road User Charges is growing at about 1.4% for each 1% growth in GDP.<sup>2</sup> In comparison, real GDP in other countries is growing at a faster rate than heavy freight kilometres.
- 15. The national rail network totals approximately 4,000 kilometres. Urban rail networks exist in Wellington and Auckland and provide approximately 15 million passenger trips annually, of which approximately 10 million trips are in Wellington and 5 million in Auckland.<sup>3 4</sup>
- 16. The majority of New Zealand's exports are shipped by sea (over 99 % by volume) with the majority of this carried by about 30 overseas shipping companies operating out of 13 commercial ports.
- 17. While the maritime sector dominates New Zealand's exports and imports; virtually all passenger travel to and from New Zealand is by air. There were 4,287,702 passenger

<sup>&</sup>lt;sup>1</sup> Dravitzki, V Lester, T., Walton, D. (2006). Transport Trends in New Zealand 1960-2005 Proceedings of the Canadian Transport, Research Forum in Quebec, May 30th, 2006 and Stats NZ and Motor Vehicle Registration Statistics.

<sup>&</sup>lt;sup>2</sup> Projection of New Zealand's Freight Growth by 2020 (TERNZ 2006)

<sup>&</sup>lt;sup>3</sup> ONTRACK Brief to the Minister of Transport in May 2006.

<sup>&</sup>lt;sup>4</sup> Trans Metro in Wellington attributes a 7% rise in patronage over 2006 to increased fuel prices.

arrivals into New Zealand in the year ended June 2006, an increase of 32 percent since the year ended March 2001. Of the total arrivals, 56 percent consisted of overseas visitors and 44 percent returning New Zealand residents. This growth has contributed to a tourism industry that is now supporting nearly one in ten New Zealand jobs. The impact tourism has on New Zealand's transport infrastructure and services should not be underestimated.

- 18. The New Zealand Energy Outlook to 2030 estimates that 86% of New Zealand's oil consumption is now in the transport sector and road transport made up 87% of that total (2004). Transport energy use has grown rapidly over the past three decades with land transport dominating. In 2004, road transport was identified as having a major influence on the trend in New Zealand's greenhouse gas emissions in the key category trend analysis (New Zealand's Greenhouse Gas Inventory 1990-2004). Air transport has also grown rapidly.
- 19. Over the next 25 years the forecast under "business as usual" models with current policy settings is for national transport energy use to grow by about 35%, with road transport accounting for about three-quarters of this demand growth. The transport sector is anticipated to have the largest energy demand and the largest growth in absolute terms. CO<sub>2</sub> emissions are expected to increase similarly. There is a direct, linear relationship between fossil fuel consumed and CO<sub>2</sub> emissions.
- 20. There are uncertainties, however, driven largely by future oil prices. In the latest report on the Balance of Projected Emissions (Ministry for the Environment June 2006) projections of "most likely" transport sector emissions during the first commitment period of the Kyoto Protocol (2008-12) have been reduced by an average of 0.55Mt/yr CO<sub>2</sub> compared with December 2005 projections, primarily driven by expectations of continued high oil prices. The report notes that the increase in the assumed oil price in the June 2006 report, compared with oil prices assumed in the May 2005 report, is the equivalent of a carbon charge of about \$150/t CO<sub>2</sub>.
- 21. Price increases to date have already elicited behavioural responses, with transport fuel use having declined by 0.8% for the period 2004-05.<sup>6</sup> This is likely to be due mainly to people economising on their driving trips and distances, as recent shifts in vehicle purchasing behaviour will not yet be evident in total fuel consumed.<sup>7</sup> Data from the Motor Vehicle Registry indicates a swing in 2006 to smaller, more fuel efficient vehicles, including motorcycles.

## **Transport, Economic Transformation and Climate Change**

- 22. Transport is important for economic transformation and our quality of life. There are a number of environmental and public health consequences that result from meeting our access, service and mobility needs. The challenge is to reduce our CO<sub>2</sub> emissions from fossil fuels while continuing to improve the quality of life of New Zealanders and facilitating economic growth.
- 23. With this in mind there are significant co-benefits to reducing our reliance on fossil fuels and reducing CO<sub>2</sub> emissions including:

<sup>&</sup>lt;sup>5</sup> Emissions from transport totalled 14.3Mt CO<sub>2</sub> equivalent in 2004 and had increased during this time by 5.5Mt CO<sub>2</sub> equivalent (61.6%) from the 8.9Mt CO<sub>2</sub> equivalent emitted in 1990.

<sup>&</sup>lt;sup>6</sup> Ministry of Economic Development New Zealand Energy Greenhouse Gas Emissions 1990 – 2005 (June 2006)

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- a) improving oil security through reducing transport reliance on imported fossil fuels;
- b) reduced fuel costs if vehicles are more fuel efficient;
- c) facilitating economic and regional development opportunities by developing and employing technology to facilitate economic transformation, particularly in fuels, logistics, and consumer behaviour:
- d) improving the surrounding environment by reducing harmful emissions;
- e) supporting changes in societal behaviour that benefit health, for example supporting objectives for reducing obesity and encouraging programmes such as 'Push/Play'; and
- f) improving New Zealand's environmental image at home and off-shore.
- 24. In order to facilitate reductions of CO<sub>2</sub> emissions from the transport sector, a range of policy interventions can be used to form the foundations for long-term sustainable economic and social transformation. These transport policy building blocks work towards economic and social transformation by:
  - a) moving towards the real costs of transport being recognised and borne by the user;
  - b) encouraging development and uptake of alternative fuels such as biofuels and electricity (the latter in the form of battery technology);
  - c) improving the quality of the vehicle fleet through developing appropriate consumer labelling, controls at the point of entry into the fleet, incentivising the purchase of fuel efficient vehicles and early retirement of vehicles past their useful or economic life;<sup>8</sup>
  - d) encouraging integrated transport and land-use development through improved urban design that reduces congestion and single-occupancy vehicle travel;
  - e) advancing government leadership in its own transport purchasing and use policies; and
  - f) improving the quality of data collected to enable effective monitoring.
- 25. At a strategic level, reducing greenhouse gas emissions from transport requires lowering the energy demand required to meet our current and future transport needs that is making the way people and goods are transported more energy efficient and increasing the use of alternative energy sources.
- 26. Enhanced passenger transport patronage in urban areas can provide a significant reduction in fuel consumption and greenhouse gas emissions. The fuel required to transport each bus patron is around a third of that used in private cars.

## Summary of Policy Initiatives Delivering Climate Change Benefits (directly or indirectly)

- 27. Since the review of climate change policy in 2005, a number of transport measures have been initiated to assist in the reductions of transport CO<sub>2</sub> emissions and positively change the behaviour of transport users. While not all measures have been driven primarily by climate change policy needs, all deliver reductions in greenhouse gas emissions. The measures can be grouped as follows:
  - a) pricing of transport activities and fuels;

<sup>&</sup>lt;sup>8</sup> This is especially important in some urban areas where the levels of particulate emissions are at or near maximum permitted levels. Reducing harmful emissions, a co-benefit of reducing fuel use, has known environmental and economic benefits.

- b) networks and transport infrastructure (covering all modes);
- c) travel behaviour change/ Travel Demand Management;
- d) energy sources (including fuels);
- e) vehicle efficiency.

#### A) Pricing of transport activities and fuels

- 28. The Ministry of Transport is currently scoping economic initiatives to incentivise appropriate behaviours around purchase and use of vehicles for a positive climate change effect. The initiatives under consideration pursue two avenues for reducing road transport CO<sub>2</sub> emissions:
  - a) opportunities to transfer some levies (such as Accident Compensation Corporation) currently collected and redistribute them across Fuel Excise Duty and Road User Charges rates so that on a revenue-neutral basis fixed costs decrease with a commensurate increase in the variable cost of using vehicles; and
  - b) incentivising the purchase of fuel efficient vehicles through registration/relicensing fees and/or subsidies, or additional charges on new and used vehicles entering the fleet.
- 29. Work on the Auckland Road Pricing Evaluation study in 2005 found that road pricing (directly charging for road use) in Auckland to control congestion could also reduce CO<sub>2</sub> emissions by up to one per cent of the total national transport CO<sub>2</sub> emissions. Ministers are currently considering public submissions on road pricing in Auckland.

## B) Networks and transport infrastructure (covering all modes)

- 30. Government's economic transformation agenda identifies a number of inter-connected themes that can assist in transforming the New Zealand economy [CAB Min (06) 7/22 refers]. One of those themes, 'world class infrastructure' is linked closely with the other agenda themes, namely growing globally competitive firms, establishing Auckland as an internationally competitive city and environmental sustainability (which includes climate change). World class infrastructure is considered an enabler of growth and the theme emphasises the importance of the services that infrastructure provides rather than just the inputs (such as capital assets). Efficient infrastructure services can improve productivity and provide opportunities for agglomeration so firms and cities can maximise their potential, as well as contribute to further CO<sub>2</sub> reductions.
- 31. It should be noted that use-related funding for roading is necessary for an optimal network. However, to ensure gains in CO<sub>2</sub> emission reductions, appropriate pricing regimes are also an important means to encourage changes to the transport fleet.
- 32. In addition to roading infrastructure investment, Government has also committed in the 2006/07 financial year, \$301 million to funding public transport and re-purchased the nation's rail tracks<sup>10</sup>. Additionally, the Crown funds ONTRACK directly through a commitment of \$600

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<sup>&</sup>lt;sup>9</sup> These initiatives will be reported back to Cabinet in November 2006.

<sup>&</sup>lt;sup>10</sup> The 2006/07 National Land Transport Programme has allocated \$136 million to passenger transport community services, \$5.24 million to social services and \$159.77 million to passenger transport infrastructure. Included in this amount is a commitment of \$66.83 million for continuation of the Northern Busway in Auckland. The allocation for passenger transport services increased by 16% compared with 2005/06.

million over the next four years for renewal and upgrading of the Auckland rail network 'below track' infrastructure. These initiatives are part of the national transport infrastructure development. Increases in funding for passenger transport, along with improvements to the way passenger transport is funded, have increased passenger transport patronage. Between 1999/2000 and 2005/06 it is estimated that passenger boardings increased by 68% in Christchurch, by 43% in Auckland and by 23% in Wellington, with an estimated 49 million car trips being replaced.<sup>11</sup>

33. Auckland developed a new Regional Land Transport Strategy in late 2005. This strategy recognises that the level of public transport in Auckland is only half that of comparable cities such as Perth, Western Australia; Portland, Oregon or Calgary, Alberta. The new Auckland strategy proposes to double public transport patronage over the next ten years, and whilst the primary motivation for this increase is reducing traffic congestion, it will also reduce private car fuel consumption by an estimated 52 million litres of fuel per year by 2016. The affordability of this strategy is currently the subject of the Auckland Transport Strategic Alignment project, but there is already general agreement that the policy direction is broadly appropriate.

#### C) Travel Behaviour Change / Travel Demand Management

- 34. The Ministry of Transport is currently initiating work which will help articulate more clearly to the New Zealand transport sector how Travel Behaviour Change initiatives can be progressed in the wider context of Travel Demand Management initiatives. This will require the Ministry to find ways to actively coordinate activities across the transport sector and indeed wider government, for example the Ministries of Health, Education, and Social Development.
- 35. The Ministry is currently working with a number of non-transport government agencies in the development of access and mobility policy, including the Ministries of Health, Education and Housing, the Energy Efficiency and Conservation Authority, and the Office for Disability Issues. Initiatives such as the Walking School Buses and the Auckland School Travel Plan programme (managed by the Auckland Regional Transport Authority) have been successful in getting cost effective changes in behaviour with safety, health and climate change benefits. <sup>12</sup>
- 36. Other energy reduction co-benefits can come from the New Zealand Police vehicle-speed enforcement (for safety management), and also driving behaviour that avoids rapid deceleration and acceleration. Fuel consumption increases dramatically past 100km per hour. Speed management programmes have reduced the average open road speed from 104 km/h to 97 km/h.

<sup>&</sup>lt;sup>11</sup> For example, the Auckland Regional Transport Authority estimate the replacement of 28.8 million car trips in 2005. Assumptions of 10km trip length and 10litre/100km fuel economy gives CO<sub>2</sub> reduction in the order of 0.1Mtonnes.

<sup>&</sup>lt;sup>12</sup> It is estimated that 98,000 litres of fuel (230 tonnes of CO<sub>2</sub>) will be saved in the Auckland region by the walking school programme over 2006. The School Travel Plan programme was established as a two year pilot project with \$1.5 million of central government funding through the Auckland Sustainable Cities Programme. By mid 2006 100 schools had joined the programme and 23% of the region's school enrolment is involved.

<sup>&</sup>lt;sup>13</sup> Energy Efficiency and Conservation Authority (2001) Econodrive

## D) Energy sources (including fuels)

- 37. The Government has recently considered the release of a discussion document for public consultation on the proposed biofuels sales obligation. The proposed policy for the biofuels sales obligation requires that any firm which first purchases, or obtains petrol or diesel from a New Zealand manufacturer or by importation must also sell biofuels. The proposed obligation levels start at 0.25% in year one (2008) and increases to 2.25% in steps by year four (2011): 2.25% amounts to approximately 5 petajoules or around 140-200 million litres<sup>14</sup>. These levels may be revised following consultation and in any event do not preclude voluntary sales of biofuels above the obligation. Measures such as the existing excise duty relief for ethanol may assist in this. Levels beyond 2012 are subject to a review of the implementation of the obligation in 2010. Biofuels that can be used to meet the obligation are those that directly replace petrol and diesel.
- 38. The introduction of the biofuels sales obligation represents an opportunity to reduce CO2 emissions of up to 1.027 million tonnes of CO<sub>2</sub> between 2008 and 2012. At a carbon price<sup>1</sup> of \$15.92 per tonne CO<sub>2</sub> this represents \$16.4 million that would be saved by the Government in respect of its Kyoto Protocol commitments. While the sales obligation sets a minimum percentage, it could be expected that level of biofuels will be higher than mandated once the infrastructure and legislative framework are in place.
- 39. Energy sources generally for transport will be considered as part of the development of a New Zealand Energy Strategy. This will include looking at long-term opportunities around use of electricity for transport as well as more immediate opportunities for biofuels. A report back on the draft strategy is scheduled for October 2006.

## E) Vehicle efficiency

- 40. Govt<sup>3</sup> is a Ministry for the Environment led, 'walk the talk' programme that encourages government agencies to demonstrate leadership in improving the sustainability of their activities across the following areas;<sup>16</sup>
  - a) procurement of office consumables and equipment;
  - b) waste minimisation and recycling;
  - c) transport; and

d) buildings.

- 41. The Ministry for the Environment and the Ministry of Transport are working to achieve reductions in both fuel consumption and greenhouse gas emissions through the implementation of workplace travel plans and improved fleet procurement and management practices.
- 42. Following initial research that identified scope to improve the fuel economy and reduce emissions from government vehicle fleets, a project has been jointly developed by the Ministry of Transport and the Ministry for the Environment based upon offering all Govt<sup>3</sup>

<sup>&</sup>lt;sup>14</sup> This range reflects the different calorific values of the target being met entirely from bioethanol through to entirely from biodiesel.

<sup>&</sup>lt;sup>15</sup> This figure has been provided by The Treasury and represents the updated price of carbon which will be included in the Crown accounts as part of the 2006 September Fiscal Update.

<sup>&</sup>lt;sup>16</sup> Govt³ is an Ministry for the Environment led programme aimed at encouraging 47 government agencies to improve the environmental, social and economic sustainability of their activities.

- signatories with fleets of over 50 vehicles the opportunity to have a free fleet check audit undertaken. This project is due for completion by June 2007.
- 43. Land Transport New Zealand is collecting fuel consumption figures for light vehicles entering the fleet. In May 2006 the Ministry of Transport publicised this information through the launch of the *Fuel\$aver* website. The site allows purchasers to compare the fuel consumption of new or used Japanese vehicle models, and calculate vehicle fuel costs. The Energy Efficiency and Conservation Authority has allocated \$200,000 to a promotional campaign around the *Fuel\$aver* website for the 2006-2007 year.
- 44. The Energy Efficiency and Conservation Authority is developing a mandatory point-of-sale fuel consumption labelling scheme for light vehicles. The scheme intends to cover both new and used vehicle sales so that as many fleet entrants as possible are included. There is currently imperfect information on fuel economy, as information is not gathered for used Japanese vehicles manufactured prior to 2000, and information for Japanese used vehicles and new vehicles has so far proven non-compatible. The Authority has indicated that it may resolve issues around the limited and inconsistent information and that a labelling scheme could be in place by 1 August 2007.

## Linkages with the New Zealand Energy Strategy and pricing mechanisms

- 45. The transport response to climate change is linked to a range of other departmental work programmes. These include the New Zealand Energy Strategy and the National Energy Efficiency and Conservation Strategy. The objectives of reducing emissions, improving security of supply, and cost effectiveness cannot be achieved unless these cross government policies align to promote sensible short-term action and avoid poor decisions on long-term investments.
- 46. In order to secure durable, ongoing CO<sub>2</sub> reductions, a longer-term strategic approach is required. For transport, this is being developed through the New Zealand Energy Strategy. The Energy Strategy, of which use of transport energy is an important part, takes a longer-term approach to reducing transport energy demand and looking at supply options. A report back, led by the Ministry of Economic Development, is scheduled for October 2006.
- 47. Decisions on longer-term climate change policies are likely to influence long term CO<sub>2</sub> reductions in the transport sector. As noted in the paper "Climate Change Policy: Overview and Strategic Direction", a critical assumption for climate change policy is that New Zealand needs to prepare for a probable long-term (post-2012) international environment in which a price applies to, or a cost is attached to, greenhouse gas emissions. If the Government chooses to introduce a price for emissions into the economy for the period post-2012 (for example through an emissions trading regime), this will impact on future policy development in transport. The use of pricing mechanisms to influence appropriate transport behaviour needs to be consistent with any future broad pricing mechanisms in the New Zealand economy for managing greenhouse gas emissions.

#### The vehicle fleet: multiple objectives

48. Discussion on climate change highlights the opportunity to improve the quality and efficiency of the New Zealand vehicle fleet, and to diversify the energy sources utilised. In order to achieve long term, durable CO<sub>2</sub> emission reductions, it is important to consider the whole vehicle life cycle – from first registration, through to disposal – as well as the mix and quality of vehicles in the fleet. Quicker adoption of new vehicle technology occurs when fleet

turnover times shorten, and new technology brings with it air quality and safety benefits. In order to optimise the different policy outcomes, it is recommended that individual policy interventions be developed within the context of a broader 'vehicle fleet strategy'. This need to consider multiple objectives is embedded in the New Zealand Transport Strategy which includes objectives around safety, access and mobility, public health, environmental sustainability and economic development. Consideration of the benefits of a fleet strategy is recommended.

#### Consultation

49. The following agencies were consulted in relation to this paper: the Ministry for the Environment, Treasury, the Ministry of Economic Development, the Ministry of Agriculture and Forestry, the Ministry of Foreign Affairs and Trade, the Ministry of Transport, the Ministry of Research, Science and Technology, Te Puni K\u00f6kiri, and the Energy Efficiency and Conservation Authority. The Department of Prime Minister and Cabinet has been informed.

#### Financial implications

50. This paper has no financial implications.

#### **Human rights implications**

51. This paper has no human rights implications.

#### Legislative implications

52. There are no legislative implications of decisions sought by this paper.

#### Regulatory impact and business compliance cost statement

53. There is no impact and business compliance cost statement required by this paper.

## **Gender implications**

54. This paper has no gender implications.

## Disability perspective

55. This paper does not require a disability perspective

#### **Publicity**

56. There is no publicity planned for this paper although it does form part of a set of wider climate change policy papers, for which publicity may be sought. As there is a high level of interest in climate change policy matters, we propose that this paper be publicly released with appropriate withholdings.

#### Recommendations

We recommend that the Committee:

- 1. **Note** that the paper "Overview of Progress Towards Reducing Transport CO<sub>2</sub> Emissions" responds to Cabinet's direction to provide further analysis on options to reduce greenhouse gas emissions in the transport sector; [CAB Min (06) 18/8 refers];
- 2. **Note** that while the transport sector continues to rely on fossil fuels in the form of petroleum products it remains a significant contributor to New Zealand's greenhouse gas emissions and hence a focus for climate change policies;
- 3. **Note** that transport utilises 86% of New Zealand's oil consumption, with road transport making up 87% of that total;
- 4. **Note** that over the next 25 years the forecast under "business as usual" models, with current policy settings, is for national transport energy use and greenhouse gas emissions to grow by about 35%, with road transport accounting for about three-quarters of this demand growth;
- 5. **Note** that transport energy use is expected to have the largest energy demand and the largest energy demand growth in absolute terms compared to other sectors by 2030;
- 6. Note that a number of existing transport initiatives, such as travel demand management and travel planning initiatives, support for public transport, development of fuel economy labelling at point-of-sale, the recently announced visual exhaust emissions test, work towards a biofuels sales obligation, and programmes to encourage leadership in fuel economy in the public sector deliver greenhouse gas emissions reductions benefits, and that these initiatives will be pursued;
- 7. **Note** that technological solutions and behaviour change can substantially reduce emissions in the transport sector more readily than in some other sectors of the economy such as agriculture;
- 8. **Note** that measures that reduce greenhouse gas emissions from the transport sector deliver significant co-benefits in terms of enhanced air quality, health, safety, energy security, cost savings and resilience to international oil price fluctuations;
- Note that measures to reduce greenhouse gas emissions from the transport sector can increase the supply and demand for fuel-efficient vehicles, and improve the efficiency of vehicle use;
- 10. **Note** that progress to influence demand for more fuel-efficient vehicles has been made with the launch of the *Fuel\$aver* website which allows purchasers to compare fuel consumption for some new and used vehicles;
- 11. **Note** that reducing emissions from transport requires awareness of the wider context of economic transformation and for transport this means understanding the relationship between air quality, safety, congestion, energy security objectives and the quality of the vehicle fleet:
- 12. **Note** that the New Zealand Energy Strategy provides an opportunity to develop a longer term strategic approach for transport energy, which brings together climate change and energy security objectives;

- 13. **Note** that Cabinet is considering a variety of climate change policy initiatives as identified in CAB Min (06) 18/8, and this includes the specific transport initiative covered in the accompanying paper "Climate Change Policy: Options for Controlling Vehicle Entry Fuel Economy Standards";
- 14. Note that the Ministry of Transport is to report back to Cabinet in November 2006 with options for transport policy initiatives that use pricing mechanisms to reduce greenhouse gas emissions;
- 15. **Note** that the Ministry of Transport is to report back to Cabinet in November 2006 on options to reduce harmful emissions standards, including restricting vehicle age at point of import;
- 16. Direct officials to report back to Cabinet in November with analysis of the extent to which existing transport initiatives and policy measures under consideration could reduce greenhouse gas emissions from business-as-usual levels, for the period 2008-2012 and beyond;
- 17. **Note** that a Vehicle Strategy can bring together vehicle safety, air quality and greenhouse gas emissions initiatives under a coherent framework to aid long-term policy planning for the New Zealand vehicle fleet;
- 18. **Agree** that the Ministry of Transport develop a Vehicle Fleet Strategy to better assess how climate change benefits can be delivered alongside initiatives delivered under the New Zealand Transport Strategy and establish criteria to assess the relative priority of those initiatives:
- 19. **Agree** that the proposed Vehicle Fleet Strategy should take account of the evolving climate change policies [CAB Min (06) 18/8 refers] in addition to the strategic direction set by the New Zealand Energy Strategy;
- 20. **Direct** officials to report back to Cabinet in March 2007 with a proposed Vehicle Fleet Strategy;
- 21. Agree to the public release of this report by Ministers, with appropriate withholdings.

Hon Judith Tizard **Associate Minister of Transport** 

Hon Annette King
Minister of Transport

Hon David Parker

Minister Responsible for Climate Change Issues