

The Chair  
Cabinet Business Committee

## **Climate Change Policy: Options for Controlling Vehicle Entry – Fuel Economy Standards**

### **Proposal**

1. This paper outlines options to reduce greenhouse gas emissions from the transport sector through measures to improve the fuel efficiency of vehicles entering New Zealand. It looks specifically at options to regulate for minimum thresholds for fuel economy for both new and used vehicles when they first enter the New Zealand fleet.
2. Four policy options for fuel economy standards are discussed in this paper, following international best practice. We propose that no further work be done on the option of a minimum energy performance standard applying per vehicle; and that officials work with industry to present options for a sales-weighted standard and report back in November 2006. An age restriction is also considered in the paper and will be reported back to Cabinet in November under the harmful emissions programme. To assist a range of policy initiatives, it is recommended that immediate consideration be given to the mandatory collection of vehicle fuel consumption data.
3. This paper is the second of two transport-related papers. It accompanies a companion paper *“Climate Change Policy: Overview of Progress towards Reducing CO<sub>2</sub> Emissions”*. Both papers respond to Cabinet’s direction for officials to provide further analysis on options to reduce greenhouse gas emissions in the transport sector [CAB Min (05) 20/10 and CAB Min (06) 18/8 refer].

### **Executive summary**

4. New Zealand is a technology taker with respect to its vehicle fleet, and is directly influenced by technological improvements in other countries. Unlike for safety standards, there are currently limited controls or incentives affecting the uptake of fuel-efficient vehicle technology into the New Zealand fleet. Introducing fuel economy standards based on international best practice is thought to be one way of improving both the quality of the New Zealand fleet and providing CO<sub>2</sub> reductions.
5. The policy interventions for fuel economy controls outlined in this paper establish a means to work with the motor industry to improve the fuel economy of vehicles over time, and provide a foundation from which other policy interventions can be built to ensure durable, long-term CO<sub>2</sub> reductions.
6. Present market dynamics along with existing policies and initiatives such as the 2006 Vehicle Emissions Rule, the recently launched *FuelSaver* website, mandatory vehicle labelling, and the proposed biofuels mandatory sales obligation are mechanisms that

should be leveraged to provide short-term, least cost CO<sub>2</sub> reductions.<sup>1</sup> The effect of these interventions has yet to be felt.

7. In developing fuel economy standards for new and used vehicles entering the fleet for the first time, officials have identified four options for consideration:
  - a) setting minimum fuel economy standards per vehicle (a vehicle equivalent to a minimum energy performance standard which applies to some appliances);
  - b) establishing average sales-weighted standards for vehicles entering the fleet;
  - c) putting in place an age restriction on used imports; and
  - d) the mandatory collection of fuel economy information for all light vehicles entering the fleet.
8. Minimum energy performance standards focus on prohibiting vehicles with poor fuel economy from entering the fleet. Research shows that a relatively small proportion of the overall fleet is likely to be affected with limited impact on reducing CO<sub>2</sub> emissions during the first commitment period of the Kyoto Protocol (2008 – 2012). Minimum energy performance standards have not been the preferred approach in other jurisdictions and it is concluded that a minimum energy performance standard would not be an appropriate, nor effective mechanism for improving fleet fuel efficiency. It is recommended that no further work be undertaken.
9. A New Zealand sales-weighted standard would seek to incentivise improvement across the fleet as a whole as all new entrants into the fleet, both new and used imported vehicles, would contribute to achieving the standard. The setting of a target may have value as a strategic goal for the transport sector. Sales-weighted targets are used in Japan for fuel economy, and in the European Union through CO<sub>2</sub> emissions rates.
10. If a sales-weighted standard was further considered, the practicalities of implementing any such standard would need to be carefully worked through with industry. Issues such as agreements with the vehicle importing industry, penalties for non-compliance, public information and education, and incentives would need to be developed. Officials recommend further work is carried out with industry to determine what those practicalities might be and whether or not they are surmountable.
11. In regard to an age restriction, there is a clear relationship between vehicle age, its related engine technology, and the level of harmful exhaust emissions. Given the significant benefits of restricting vehicles with older technology types, the programmed report-back to Cabinet in November 2006 on the use of harmful emissions standards will include consideration of an age restriction at point of import [EDC Min (06) 13/9 refers].
12. Underpinning any plausible policy intervention is the need for accurate and timely information. Since January 2005, Land Transport New Zealand has been collecting fuel economy information of new and used vehicles manufactured from 2000 onwards. This has been done through section 7(1)(e) of the Transport (Vehicle and Driver Registration and Licensing) Act 1986, through an amended “Application for Registration” form.
13. Information currently collected does not include those imported vehicles manufactured before 2000. In order to have a comprehensive understanding of the fuel economy of the New Zealand light vehicle fleet, and provide a platform for other policy initiatives, the fuel economy of all vehicles imported must be collected. This legislation is intended for the supply of non technical information for registration purposes, and is unable to prescribe

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<sup>1</sup> The companion paper “Climate Change Policy: Overview of Transport Contributions to Reducing CO<sub>2</sub> Emissions” outlines a wide range of initiatives including significant investment in Auckland infrastructure and public transport – all of which will contribute to reduced CO<sub>2</sub> emissions.

detailed requirements around fuel consumption information. So far, however, this provision has enabled capture of information suitable to monitor the fuel economy of vehicles entering the fleet, and for listing fuel economy information on the *FuelSaver* website.

14. In order to enact incentives which may impose a higher compliance cost (such as labelling or fuel economy standards), or may reduce whole-of-life vehicle ownership costs, legislation for collection of information needs a greater level of robustness, transparency, and technical detail. The Motor Industry Association has also expressed dissatisfaction at the inability to cite New Zealand legislation, which creates difficulties in obtaining information from manufacturers' head offices overseas.
15. This information will enable better monitoring and reporting of fuel efficiency, support the CO<sub>2</sub> modelling work by the Ministry of Economic Development and underpin the mandatory vehicle labelling programme committed to by the Energy Efficiency and Conservation Authority. A consequence of this action is likely to be that there will be a decrease in the importation of vehicles manufactured prior to 2000.
16. It is recommended that the policy focus for improving vehicle fuel economy of vehicles entering the fleet proceed as follows should be:
  - a) proceed immediately with developing a mechanism to require all vehicles entering the fleet to have comparable fuel economy information from a recognised source;
  - b) improve the current information systems to enable real-time monitoring and reporting of current market trends and vehicle fuel economy outcomes;
  - c) work with the motor industry to present options for a regulated sales-weighted standard and report back in November 2006.

## **Background**

17. Including the programmes and initiatives outlined in the companion paper (Climate Change Policy: Overview of Progress Towards Reducing Transport CO<sub>2</sub> Emissions), a range of targeted incremental policy initiatives is needed to form the foundations for long term durable reductions from transport derived CO<sub>2</sub> emissions. This paper considers one such initiative.
18. The 2005 Review of Climate Change Policies indicated there were no obvious single "big win", low cost CO<sub>2</sub> emissions reduction opportunities from the transport sector in the short-term, but suggested a number of initiatives where important incremental gains could be made over the long term. As a first step, policies that could influence the future of the light vehicle fleet were considered, reflecting the large contribution that they make to emissions.
19. Vehicle CO<sub>2</sub> emission rates are directly related to the amount of fuel used by vehicles. Therefore, improvement in the technical efficiency of a vehicle (or fuel economy) is an important component of the overall effort to reduce CO<sub>2</sub> emissions from transport.
20. Policy initiatives that will be reported to Cabinet under the climate change transport work programme in 2006/07 include [CAB Min (06) 18/8 refers]:
  - a) options for vehicle import controls for fuel economy standards; and
  - b) options for economic instruments to incentivise individual behaviour change towards low emission fuel and vehicle use; progress developing a fleet operators' commitment programme (including driver training); and opportunities for offset schemes (planting trees to offset transport carbon dioxide emissions).

21. The focus of this paper is on the first of these report backs. The discussion in this paper needs to be considered within the broader context outlined in the companion paper *"Climate Change Policy: Overview of Progress towards Reducing CO<sub>2</sub> Emissions"*.

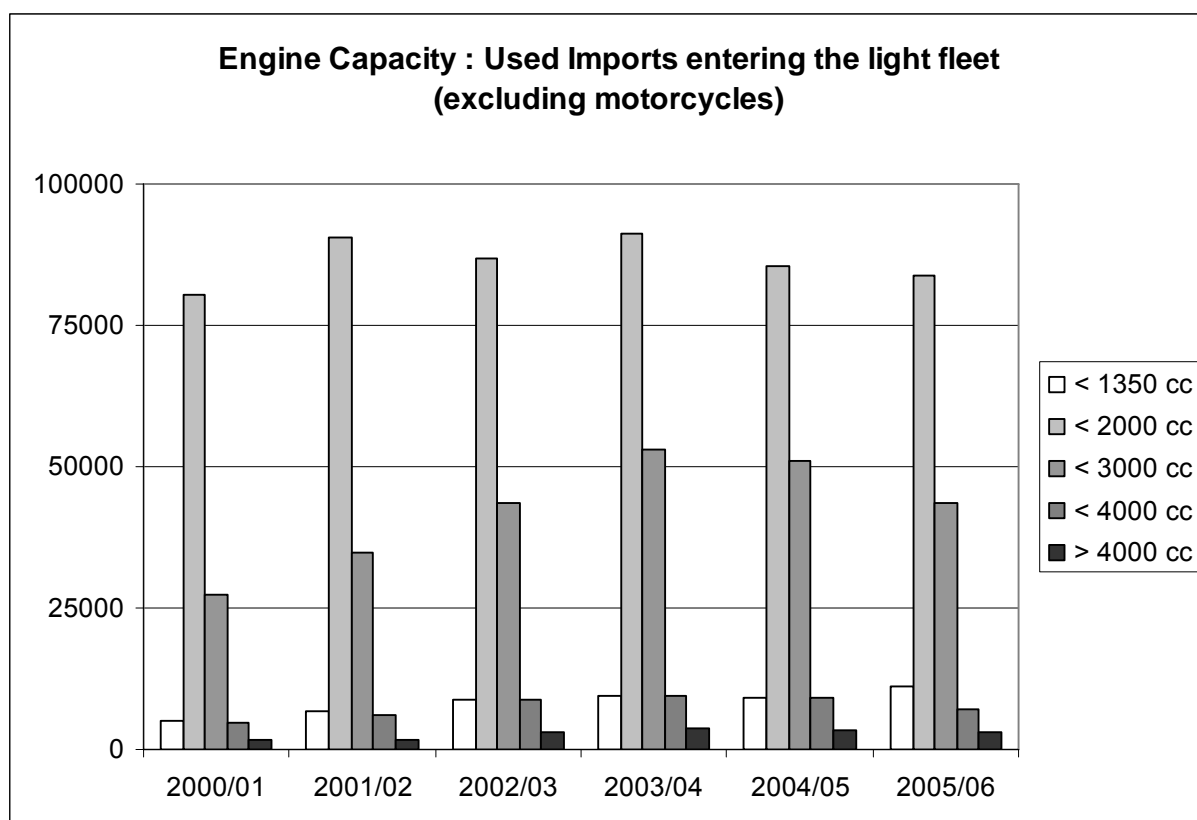
## **Fuel economy controls in other countries**

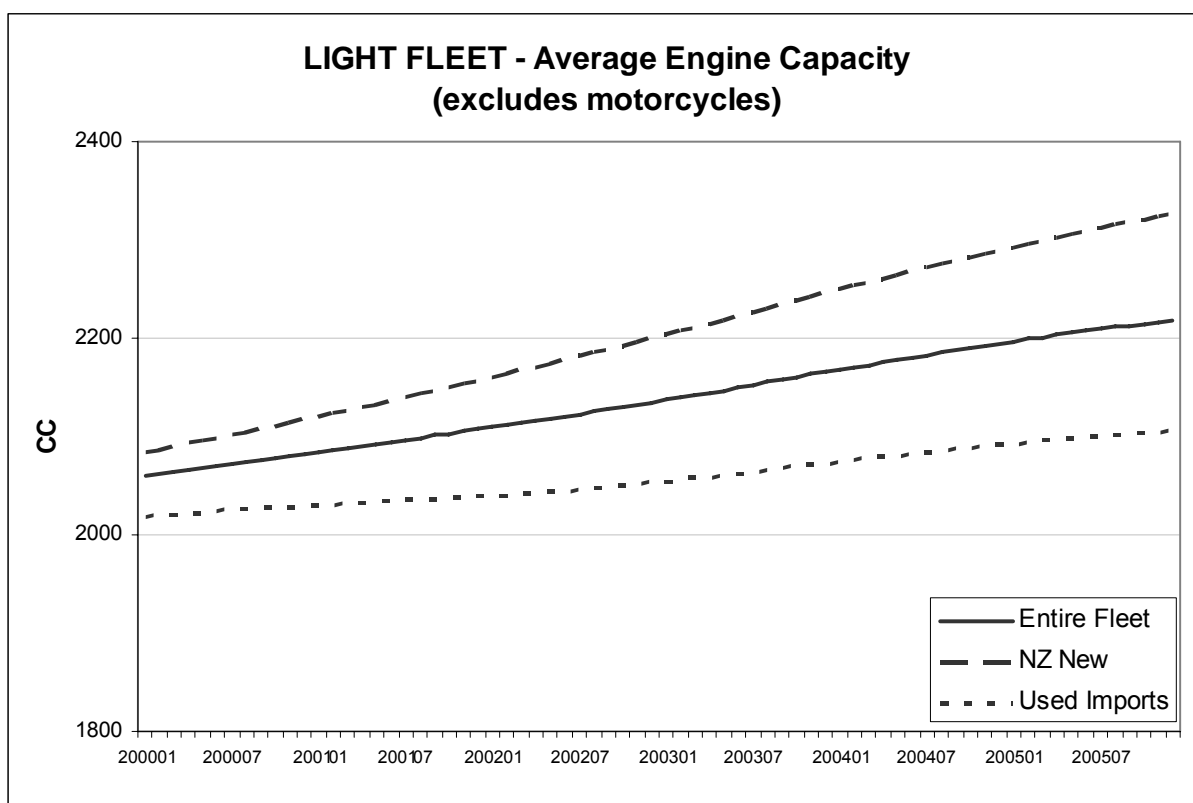
22. Policies or controls to improve vehicle fuel economy are mostly found in countries where there is a vehicle manufacturing base. A common approach is the establishment of target "sales-weighted" fuel economy averages. A sales-weighted average is designed to achieve an overall average fuel economy outcome, but allows vehicle manufacturers flexibility in terms of the range of vehicles they can produce and the relative fuel economy of each.
23. In the United States, the Corporate Average Fuel Economy standard sets a sales-weighted average for the whole fleet, with penalty payments for non-compliance by vehicle manufacturers. In Japan, sales-weighted class targets are specified for 2010, with a vehicle class defined by weight. Manufacturers then have the ability to meet class targets by a mix of higher and lower efficiency vehicles, and with some ability to earn credits which can be carried over into subsequent years. Korea has recently set class-weighted targets based on engine size. In the European Union the target is specified as an all-vehicle average CO<sub>2</sub> emission rate.
24. In Australia a voluntary national average fuel consumption target was established in 2003 of 6.8 l/100km for petrol passenger cars by 2010. Further negotiations were to occur to align the target with new test procedures for measuring and reporting fuel consumption and CO<sub>2</sub> emissions in accordance with the Australian standard ADR 81/01. Targets for other light vehicles including Sport Utility Vehicles were also to be set. These negotiations have yet to be finalised.
25. Progress toward improving fuel economy has been significant, particularly in Japan and the European Union. The Japanese target is the equivalent of a 22.8% improvement in fuel economy from 1995 - 2010, averaged across the size classes. Most major Japanese vehicle manufacturers are currently reporting compliance or near compliance with the 2010 target levels.
26. From 1995 – 2008 the European Union has targeted a 25% reduction in 13 years. Achievement by 2003 was 11.9%. The European route to date has relied heavily on increasing fuel economy and reducing CO<sub>2</sub> emissions through diesel technology, with over 50% of new cars sold now being diesel fuelled.
27. The exception to these approaches is China and Taiwan. These jurisdictions have introduced phased-in mandatory minimum fuel economy standards for all new vehicles. In China the standard is specified by vehicle weight class, with variations to account for fuel types and vehicle transmission options.

## **Vehicle fuel economy in New Zealand**

28. New Zealand is a technology taker with respect to its vehicle fleet. In 2005, 230,000 cars were imported of which 152,000 (66%) were ex-overseas registered cars (averaging about 8 years old), and 78,000 (34%) were new. In June 2005 the total number of registered cars in the fleet was 2,220,000, with the registered fleet numbers having increased by about 70,000 in that year. That suggests an average retention time in the fleet of about 15 years – probably nearer 20 years for a vehicle purchased new, and typically 10-15 years for a used import.

29. The extent to which we can improve the core fuel economy of the fleet depends on 1) the rates of improvement occurring overseas from the manufacturing jurisdictions from which we source our vehicles 2) the choice and suitable quality of vehicles made available in New Zealand, and 3) the buying patterns and vehicle replacement choices made by consumers.
30. In assessing the points above, it should be noted that New Zealand's primary source of vehicles is Japan, with Korea, Australia and the European Union being the main secondary sources. Over the last decade therefore, based on the standards established in those jurisdictions, the overall technical fuel efficiency of the vehicles imported into New Zealand has potentially been on a pathway of improvement. However, potential improvements have been negated by the increasing size and weight of vehicles in the fleet, as noted by the two graphs below.





31. Other measures such as the Frontal Impact Rule have also been perceived as creating incentives for larger mass vehicles. However the effect of the Frontal Impact Rule on people's buying patterns is not clear. Evidence suggests that the trend in larger Sport Utility Vehicles (SUV's) imported into New Zealand is a trend similarly experienced internationally. A breakdown of vehicles registered as Class MC (predominantly Sport Utility Vehicles) shows an increase in New Zealand new Sport Utility Vehicles rising from 26 % in January 2003 to 81% in June 2006<sup>2</sup>.
32. Second, vehicle suppliers offer a wide range of vehicle options for sale in New Zealand. The recent advent of low sulphur diesel has overcome a barrier that had previously prevented a number of high efficiency diesel car options being sold.
33. Third, until recently lower fuel prices and the availability of cheaper used imports encouraged drivers to buy larger cars and Sports Utility Vehicles (included in the Motor Vehicle Registry under 'cars'). There are also quite large variations in fuel economy between vehicles of similar size and class, and with low fuel prices, relative vehicle fuel economy was not a high priority for many vehicle purchasers. As noted in the companion paper *"Climate Change Policy: Overview of Progress towards Reducing CO2 Emissions"*, there are signs of changing purchasing patterns under the pressure of higher oil prices. There are also initiatives presently under development such as vehicle fuel economy labelling which offer further scope to influence buyer behaviour by focusing on fuel economy and improved discernment by purchasers of differences in fuel economy.

<sup>2</sup> There is a common misperception that all SUV's are Class MC, however, this is not the case. Some vehicles colloquially defined to be SUV's, such as Ford Explorer, Ford Escape, RAV4's, and Kia come in two wheel drive options and therefore these models are not Class MC, and they are required to meet the same requirements as general passenger cars. For the application of transport legislation, New Zealand does not categorise SUV as a vehicle class and therefore it does not apply specific standards to SUV's.

## Options for Controlling Vehicle Entry – Fuel Economy Standards

34. Four options have been examined:

- setting minimum fuel economy standards per vehicle imported (a vehicle equivalent to a minimum energy performance standard which applies to some appliances);
- establishing average sales-weighted standards for vehicles entering the fleet; and
- putting in place an age restriction on used imports; and
- the mandatory collection of fuel economy information for all light vehicles entering the fleet.

35. These options can work either individually or as packages and are not mutually exclusive. In addition, work is underway to consider the use of economic instruments and pricing mechanisms to incentivise individual behaviour around vehicle choices and reduce greenhouse gas emissions. This is the subject of a report back in November 2006.

36. In looking at the fuel economy standards set by the European Union and Japan, it is possible to estimate the savings from the technological gains of vehicles coming into New Zealand from those jurisdictions. The graph below (Fuel Economy Rates) shows that if New Zealand was to regulate a weighted standard that tracked along a similar line, there is an estimated fuel economy gain of 12% by 2020. Table 2 shows the percentage savings and associated value of these estimated reductions.<sup>3</sup>

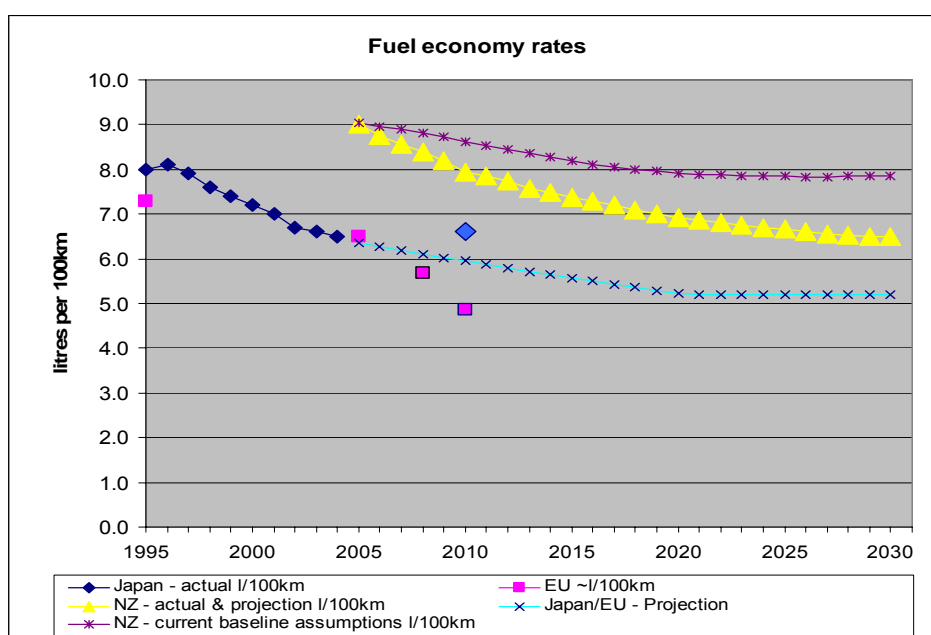


Table 1: Estimated CO<sub>2</sub> emissions reductions from sales weighted standard that tracks standards in other jurisdictions

	Five year time periods			
	2008-12	2013-17	2018-22	2023-27
Fleet fuel savings %	4%	7%	11%	12%
CO2 emissions (Mt)	1.3	2.4	4.0	4.5
Value at \$15.92/t (\$m)	\$21m	\$39m	\$63m	\$72m

<sup>3</sup> A number of simplifying assumptions have been made in presenting this information including an assumption of no 'takeback' of fuel economy savings, or of 'class creep' where technological efficiencies enable consumers to shift to a larger vehicle while maintaining existing fuel economy rates.

## **A) Minimum Fuel Economy Standards**

37. The main benefit of establishing a minimum fuel economy standard is to ensure that 'poor performers' are excluded from entering fleet – it sets a bottom line of achievement. However, in considering this option for New Zealand a number of issues have been encountered as follows:
38. **Data quality** – there are currently major gaps in the database for pre-2000 used imported vehicles which would pose challenges around the robustness of a regulation that sought to exclude these vehicles from entry.
39. **Vehicle/engine size differentiation** – minimum fuel economy standards would require some form of size and/or class differentiation between vehicles. Overseas there are at least three ways in which vehicle size is recognised, with use of vehicle weight and engine size being the most common, and there would be complications determining the most appropriate for New Zealand.
40. **Prohibitions under a minimum fuel economy standard** – a minimum fuel economy standard would restrict consumer choice, with the more stringent the standard the greater the number of vehicles affected. A preliminary analysis undertaken suggests a number of high profile brands and makes (of new vehicles) might be excluded even with a fairly non-aggressive standard. While these vehicles may have relatively high fuel consumption, many also have desirable features such as high levels of safety. Prohibiting such vehicles may have some undesirable downsides.
41. **Waivers and concessions** – various waivers and concessions are likely to be required. In so doing, care needs to be taken that the rules and processes do not become cumbersome and subjective. Care also needs to be taken that rules and processes are set in such a way as to avoid perverse policy outcomes. For example, it is possible that importers of vehicles might ensure they are not 'caught' by the minimum thresholds by choosing to import vehicles which just qualify for the next class up, leading to increased vehicle size over time.
42. **Minimum fuel economy standards and incentivising ongoing improvement** – in assessing consumer and importer behaviour under a minimum fuel economy standard-type rule, a significant concern is that it would likely have the effect of just focusing on a small proportion of the overall imports (and some of the focus would be on how to avoid the rule), rather than providing an incentive to improve the fuel economy of all vehicles entering the fleet.
43. **CO<sub>2</sub> impact** – preliminary calculations suggest a very modest level of CO<sub>2</sub> savings during the first Kyoto commitment period (2008-12 incl.). Partly this is because any policy focused on new fleet entrants takes many years to have full effect. However, longer term savings cannot be confidently predicted because it is highly likely that over time many high fuel consumption vehicles would have been withdrawn anyway simply through product replacement cycles and market pressures.
44. Overall, it is concluded that a minimum fuel economy standard would not be an appropriate, or a particularly effective, mechanism for improving fleet fuel economy. It is recommended that no further work be undertaken.

## **B) Fleet Sales-Weighted Standard**

45. Of the two options for a fuel economy standard, this option offers the most benefit with least cost. It also presents an opportunity to constructively work with industry.



46. The main benefits of a fleet sales-weighted approach are that the incentive to improve fuel consumption is spread across all vehicles (because all contribute to achieving the standard(s)), flexibility is provided to the industry to respond in customer-focused and innovative ways, and choices continue to be provided for consumers. The main considerations of such an approach are as follows:
47. **Establishing the standard** - setting an appropriate regulated standard for New Zealand may need to reflect changes over time in the global vehicle fleet. As a general rule, imported vehicles show improved fuel efficiency over time; the range of more fuel efficient vehicle options is expanding, and consumers are now showing some change in their buying patterns. Some of the gains a standard might be expected to achieve may occur naturally through the market.
48. **Industry agreement** - New Zealand's dual vehicle import stream (new and used) has created a very different industry structure for each stream. New imports are primarily focused through the Motor Industry Association which has around 32 members. In contrast, there are currently 3,200 registered licences for car importers/sales, of whom around 1,800 are significant dealers.<sup>4</sup> Given this diversity, the ability to bring all streams into an integrated and consistent approach will be challenging.
49. **Achieving compliance** – establishing a regulation that requires the vehicle industry to achieve a sales-weighted fleet average standard will require consultation with the vehicle importing industry, the development of including penalties for non-compliance, and public information and education.
50. **CO<sub>2</sub> impact** – it is difficult at this stage to differentiate between CO<sub>2</sub> reductions via a regulated standard compared with what might happen under market forces and the impact of measures already in progress (such as vehicle labelling). If the target was set to achieve a similar rate of improvement to that occurring overseas (i.e. about 1.5-2.0% per annum net improvement in new vehicles entering the fleet), the overall reduction in CO<sub>2</sub> emissions in the first Kyoto commitment period is estimated at 0.3-0.4Mt or 2.5 % of total transport emissions<sup>5</sup>, which represents a value of CO<sub>2</sub> emissions reductions of approximately \$5-6million. However, it must also be appreciated that the main benefit of establishing a standard/target tends to be longer term, and beyond just the Kyoto Protocol's first commitment period.
51. Overall, it is concluded that establishing a fleet sales-weighted standard would have strategic benefit. In order to achieve this and to be able to monitor progress, current information gaps need to first be addressed. (Note, it is recommended below that a means be established to enable the capture of fuel economy data for all vehicles entering the fleet). In addition, a workstream to establish an appropriate standard and to work with industry to determine appropriate forms of achievement and compliance mechanisms is recommended.
52. Given the strategic benefit of a fleet sales-weighted standard, and opportunities "lock-in" fuel economy gains, we therefore recommend officials continue working with industry and develop options for a regulated sales-weighted average for report back in November 2006.

### **C) Age Restriction on Used Imports**

53. Restricting the age of used imports entering the fleet has been widely promoted by the Motor Industry Association as being a simple mechanism that will enable the efficient

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<sup>4</sup> pers. com Motor Trade Association

<sup>5</sup> Noting that total transport emissions in 2004 were 14.1Mt CO<sub>2</sub>

transfer of improved vehicle technology from other jurisdictions into the New Zealand fleet, consistently over time. There are significant benefits for air quality, safety and public health of restricting vehicles with older technology types.

54. Without further analysis, officials cannot recommend an age restriction on used imports entering the fleet be considered solely for the purposes of controlling fuel economy. A report to Cabinet by end of November 2006 on investigations into harmful emissions standards will include consideration of an age restriction on imported vehicles [ EDC Min (06) 13/9 refers].

#### **D) The Mandatory Collection of Fuel Economy Information**

55. Mandatory collection of fuel economy information has two policy outcomes. Firstly, data collection allows for establishment of trends and assessment of policy interventions. Secondly, there would be a default restriction on vehicles entering the fleet that cannot provide the required data.
56. Since January 2005, Land Transport New Zealand have been collecting fuel economy information of new and used vehicles manufactured from 2000 onwards. This has been done through section 7(1)(e) of the Transport (Vehicle and Driver Registration and Licensing) Act 1986, through an amended "Application for Registration" form.
57. Information currently collected does not include those imported vehicles manufactured before 2000. In order to have a comprehensive understanding of the fuel economy of the New Zealand light vehicle fleet, and provide a platform for other policy initiatives, the fuel economy of all vehicles imported must be collected. So far, however, this provision has enabled capture of information suitable to monitor the fuel economy of vehicles entering the fleet, and for listing fuel economy information on the *FuelSaver* website.
58. The difficulty is that the present legislation is intended for the supply of non-technical information for registration purposes, and is unable to prescribe detailed requirements around fuel consumption information. It is therefore recommended a more robust mechanism be developed.
59. This information will also enable real time monitoring and reporting of fuel efficiency, support the CO<sub>2</sub> modelling work by the Ministry of Economic Development and underpin the mandatory vehicle labelling programme that has been committed to by the Energy Efficiency and Conservation Authority.
60. The collection of fuel economy information is one of the 'building block' initiatives that will enable future policy interventions to reduce CO<sub>2</sub> emissions, and it is recommended that officials develop a rule, or equivalent, to require the mandatory collection of fuel economy data.

#### **Automotive Industry Comment**

61. Ministry of Transport officials have sought feedback with automotive industry representatives on the minimum fuel economy standard per vehicle and sales-weighted options for improving imported vehicle fuel economy.<sup>6</sup>

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<sup>6</sup> The Ministry of Transport held a workshop for industry representatives on 18 August 2006. Industry representatives included: Gordon Shaw (JEVIC), Mike Noon (AA), Nick Hill (MTA), Trevor Burling (MTA), David Vinsen (IMVDA), Perry Kerr (MIA), John Leighton (President MIA), Mark Rounthwaite (Toyota).

62. The industry representatives considered any form of regulation for fuel economy to be unnecessary given the prevailing market forces. Instead, the industry representatives considered that educating and informing the consumer were the most effective mechanisms to achieve the desired policy outcomes. For instance, they referred to opportunities for 'locking in' the current benefits through public awareness campaigns, building on the existing information on the *Fuel\$aver* website and the vehicle emissions 'Choke the Smoke' campaign.
63. Industry representatives did, however, agree on the need to develop a land transport rule that captured fuel economy data from all vehicles entering the fleet. Officials perceive that there is an opportunity to develop the policies further on these issues, in part through gaining a better understanding of the practicality issues referred to by the industry.
64. Some industry representatives, for example Motor Industry Association (MIA), have expressed support for age restrictions. They perceive this as a simple and effective measure. Conversely restrictions are not widely supported by industry representatives whose business primarily focuses on the importation of second-hand vehicles.
65. The automotive industry agreed to work closely with officials to develop transport climate change policies, building on the stakeholder engagement work already being undertaken by the Ministry of Transport. It was agreed future consultation would be encompassed around broader environmental objectives, with workshops combining discussions on fuel efficiency, age restriction, biofuels, mandatory vehicle labelling, and the development of standards to control harmful exhaust emissions.

## **Conclusions and recommended approach**

66. Current market conditions have been effective in providing some CO<sub>2</sub> reductions outside of government intervention. The vehicle import industry is reporting a significant shift in consumer purchasing patterns towards smaller, more fuel efficient vehicles. This is supported by information from the 2006 Motor Vehicle Registry. These reductions have been driven primarily by the increasing fuel prices and not by the need to greenhouse gas emissions. A disadvantage in relying on the market in this way is the volatility of the fuel price and uncertainty over its future price path. Moreover, if the fuel price remains stable at current levels, consumer behaviour is likely to absorb the costs over time through other household budget adjustments. The expected effect of relying solely on market forces is diminishing fuel efficiency returns, and this strengthens the case for regulatory intervention of some kind to achieve the policy objectives to reduce emissions.
67. While the precise net CO<sub>2</sub> gains from minimum standards for fuel efficiency at the point of import are not known, the case to take action in this area to improve the fuel efficiency of the vehicle fleet is strengthened by the wider benefits gained in the areas of air quality, costs saving and safety. All options outlined in this paper are expected to provide some gains in the short-term and develop important building blocks for ongoing improvements in fuel efficiency over the New Zealand vehicle fleet. In addition, given the very nature of the vehicle fleet, in which change is expected to occur incrementally over time, a longer-term perspective is both required and underpins a strong case for early action now.
68. A priority at this stage is improving data collection and increasing monitoring of the fleet to a high level of quality and timeliness. The capture of fuel economy data from all vehicles entering the New Zealand fleet underpins any policy intervention in this area, including mandatory vehicle labelling.

## **Consultation**

69. 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 Kōkiri, and the Energy Efficiency and Conservation Authority. The Department of Prime Minister and Cabinet was informed.

## **Financial implications**

70. There will be financial implications of developing a regulatory mechanism to ensure the collection of fuel economy information for all vehicles entering the fleet. Officials propose that the costings of any mandatory collection of fuel economy information are assessed within the transport initiatives for climate change to be considered as part of the Economic Transformation theme for 07/08 Budget.

## **Human rights implications**

71. This paper has no human rights implications.

## **Legislative implications**

72. This paper requires a statutory instrument for the mandatory collection of fuel economy information.

## **Regulatory impact and business compliance cost statement**

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

## **Gender implications**

74. This paper has no gender implications.

## **Disability perspective**

75. This paper does not require a disability perspective

## **Publicity**

76. There is no publicity planned for this specific paper although it does form part of the wider climate change publicity and consultation strategy and there is a high level of interest in climate change policy matters. It is proposed that this paper be publicly released with appropriate withholdings.

## **Recommendations**

77. It is recommended the Committee:

1. **Note** that this paper is a companion paper to the "*Climate Change Policy: Overview of Progress towards Reducing CO<sub>2</sub> Emissions*" and is part of a wider group of initiatives that directly and indirectly reduce transport CO<sub>2</sub> emissions;
2. **Note** that New Zealand is a technology taker with respect to its vehicle fleet, and is influenced by technological improvements in other countries;

3. **Note** that measures to reduce greenhouse gas emissions from the transport sector deliver significant co-benefits in terms of enhanced air quality, health, energy security, cost savings and resilience to international oil price fluctuations
4. **Note** that policy interventions for fuel economy outlined in this paper establish a means to work with the motor industry to improve the fuel economy of vehicles over time and as such provide a foundation from which other policy interventions can be built to ensure durable, long-term CO<sub>2</sub> reductions;
5. **Agree** that no further work should be done at present on the option of minimum fuel economy standards per vehicle;
6. **Direct** officials to work with industry to present options for a regulated sales-weighted standard and report back in November 2006;
7. **Note** that in view of the significant benefits in restricting vehicles with older technology types, the programmed report-back to Cabinet in November 2006 on the use of harmful emissions standards will include consideration of an age restriction [EDC Min (06) 13/9 refers].;
8. **Direct** officials to consider the appropriate means, which may require a rule, to enable the mandatory collection of fuel economy information for vehicles entering the fleet;
9. **Agree** that this mechanism be developed in such a way as to accommodate the reported differences in fuel economy between new and used vehicles entering the New Zealand fleet;
10. **Direct** officials to report back on costings, to introduce mandatory collection of fuel economy information, as part of the transport initiatives for climate change to be considered as part of the Economic Transformation theme for 07/08 Budget; and
11. **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**