Chair Cabinet Economic Development Committee

Encouraging the uptake of transport biofuels

Proposal

 This paper proposes that the Government commit to encouraging the uptake of biofuels in New Zealand and notes that a mandatory biofuels sales target is the preferred policy approach for doing so, subject to further policy investigations. It further proposes that new transport fuels legislation is necessary in order to, among other things, make regulations to set quality specifications for biofuels as well as to impose mandatory sales targets.

Executive summary

- 2. Despite having an indicative target under the National Energy Efficiency and Conservation Strategy (NEECS) for the uptake of transport biofuels since 2002, and a number of government initiatives to encourage voluntary uptake, there are no transport biofuels being used in commercial quantities in New Zealand. No biodiesel is produced commercially at present but feedstocks are available in sufficient quantities to exceed the NEECS target. Sufficient ethanol is available locally to replace 0.2 to 0.3 % of petrol.
- 3. The key factors affecting the uptake of biofuels are the risk of vehicle damage, the varying real price of oil, which makes investment planning uncertain, and the fact that the externalities of mineral diesel are not accounted for, so that the price of biofuel appears high compared with conventional diesel.
- 4. The risk of vehicle damage (real or perceived) is seen as the key barrier to the introduction of ethanol at levels above 3%. However, oil companies have indicated that levels below 5% are unlikely to be economic. The Energy Efficiency and Conservation Authority (EECA) continues to work with the motor vehicle industry in order to resolve this issue. The Ministry of Transport has undertaken a preliminary analysis to identify the potentially vulnerable section of the New Zealand fleet. Further analysis will be required to quantify this risk and propose risk mitigation measures.
- 5. Mandatory targets are proposed in order to create a certain market for biofuels. The preferred option is mandatory sales targets, where a certain percentage of annual transport fuels sales would be replaced with biofuel. This option would give fuel suppliers the ability to minimise their costs by giving them the flexibility to choose what type of biofuel to use, at what level and in which locations. A blend target (where every litre sold must contain a set percentage of biofuel) is seen as too rigid.
- 6. For biodiesel, there is a risk that if potential investors are not given a strong signal of government commitment to biofuels and intention to ensure there is a market, we could lose the opportunity to establish a local supply industry, or lose finished product to Australia which has attractive excise concessions for biodiesel.
- 7. The selection of mandatory sales targets as the preferred option has been informed by a report to the Minister of Energy in December 2004 on an economic analysis of target options, and consultation with key stakeholders in March 2005.

- 8. New, comprehensive transport fuels legislation is required in order to be able to control the quality of, not only petroleum fuels, but also transport biofuels and any future non-petroleum transport fuels, and to establish biofuels incentives and targets. This legislation will be progressed by the Ministry of Economic Development (MED) and be enacted by December 2007.
- 9. The recommendation to agree in principle to a mandatory biofuels sales target is subject to further analysis of the costs, benefits, risk, and implementation issues. The MOT will set up an industry consultation group to advise on policy options and implementation issues.
- 10. The Minister of Transport will make a formal announcement of the government's commitment in principle to encouraging the uptake of transport biofuels by developing and introducing a mandatory sales target on biofuels.

Background

- 11. The EECA biofuels work programme first arose through the NEECS released in September 2001. The development of a renewables industry was a measure listed under the Energy Supply Programme Action Plan and the investigation of opportunities for transport biofuels was one of the actions listed.
- 12. The Renewable Energy Target in the NEECS included an indicative target of 2 petajoule (PJ) by 2012 for the transport sector in order to signal the longer-term pathway required. The target is equivalent to about 1 percent of current transport energy use. It was set at this low level because of the lack of an established biofuels industry. This should be regarded as a minimum, given Government's commitment to the Kyoto Protocol and the fact that the demise of Project Aqua (which was expected to contribute 5 to 10 PJ to the renewables target) puts additional pressure on other sectors to increase the use of renewable energy.
- 13. The New Zealand Transport Strategy (NZTS) makes reference to the NEECS transport objectives, including increasing the use of low energy transport options, within the context of environmental sustainability. The Climate Change Policy Package has the NEECS and the NZTS as foundation policies. The discussion document Sustainable Energy: Creating a Sustainable Energy System, released in November 2004, also recognised the importance of transport biofuels.

Transport biofuels in New Zealand

- 14. Transport biofuels are manufactured from plant or animal material. Ethanol is made from starchy material such as plant or dairy processing waste, whereas biodiesel is made from vegetable oil or animal fats. The two main types of biofuel likely to be available in New Zealand are ethanol from whey (for blending with petrol), and biodiesel made from tallow or waste cooking oil.
- 15. Current domestic production of fuel grade ethanol would provide 0.2 to 0.3% of petrol consumption. Using additional dairy-sourced feedstock (lactose) would give about a 40% increase. Further supplies would require importing ethanol or attracting significant investors to produce ethanol from other by-products or waste. EECA is currently investigating other New Zealand waste sources of ethanol and likely production costs.
- 16. Biofuels have a range of benefits, in particular reduction in greenhouse gas emissions from the transport sector, and air quality and health benefits and reduced impacts on aquatic environments from biodiesel use. Biofuels stocks can be counted towards International Energy Agency 90-day oil stock requirements. The benefits are discussed in more detail later in this paper.

- 17. Current commercial production of biodiesel is effectively zero. With currently available feedstock and significant investment in plant (estimated as \$40 million per plant), it would be possible to replace 5% of diesel with biodiesel, assuming that three medium sized plants each producing 40,000 tonnes per annum (or equivalent) were built.
- 18. A 1% target across petrol and diesel would require a medium sized biodiesel plant, or significant biofuel imports. Expansion of local ethanol production would be slower as ethanol production from most other local feedstocks would be more expensive than imported ethanol.
- 19. In order to encourage the production and use of transport biofuels the government has undertaken a number of initiatives:
 - an indicative voluntary renewable transport fuel target has been established;
 - the Petroleum Products Specifications Regulations were amended in 2002 to allow up to 10% ethanol to be blended with petrol, although there is no specific provision for biodiesel blends;
 - EECA obtained Environmental Risk Management Authority (ERMA) approvals for ethanol-petrol blends;
 - the excise-free status of denatured fuel ethanol has been clarified; and
 - voluntary ethanol and biodiesel specifications, including appropriate labelling, have been developed and information provided to key stakeholders.

Problem statement

- 20. Despite having a 2 PJ indicative renewable transport fuel target since 2002, the government taking active steps to pave the way for the introduction, and the current high price of oil making biofuels cost competitive in the short term, there are still no transport biofuels being used in commercial quantities in New Zealand. In order to meet or exceed the indicative 2PJ target from locally sourced biofuels there will be a need for commercial biodiesel production and/or a considerable expansion in ethanol production. Market forces alone are not achieving this target.
- 21. There are a variety of factors affecting the uptake of biofuels, these are:
 - **Risk of vehicle damage**: Some vehicle manufacturers' representatives are reluctant to accept more than 3% ethanol in second hand vehicles imported from Japan, on the basis that this is the regulated level in Japan. On the other hand, fuel companies are not interested in ethanol blends below 5% because they are not seen as economic. They are waiting for a clear signal from Japanese manufacturers that 5% ethanol is acceptable. A preliminary assessment of the risks of vehicle damage is provided later in this paper. Further work is required to assess the probable real costs associated with vehicle issues.
 - Varying real price of oil. Fluctuating oil prices make it difficult to justify long term investment in biofuels. Although the high price of oil at present makes biofuels competitive, investment decisions for new facilities/expansions will also need to take account of possible future oil price decreases so investment is unlikely.
 - Externalities of mineral diesel are not accounted for. In the existing system, some environmental and social costs associated with mineral fuels are not fully accounted for in their pricing, and as a result, the price of biodiesel (and to a lesser extent ethanol) appears high relative to the price of diesel (and petrol). There is no feasible way to reflect the environmental benefits (other than via the carbon charge) from using biofuels, especially biodiesel.

Policy options

- 22. Given the range of factors affecting the uptake of biofuels in New Zealand, it follows that an array of responses will be needed to address the problem.
- 23. In respect of the risk of vehicle damage, officials are undertaking further work to assess the risks of biofuels to the New Zealand fleet. This is discussed later in this paper. EECA is actively working with the Motor Industry Association to try and address the concerns expressed by some vehicle manufacturers regarding the risk of vehicle damage from ethanol.
- 24. In terms of the varying price of oil, this is obviously, beyond the sphere of policy influence. However, it is not assisted by the lack of certainty regarding a biofuels market in New Zealand. In my view, an appropriate policy intervention would be to create certainty for biofuels producers and oil companies and this could be achieved by way of a mandatory biofuels target. This is discussed in detail below.
- 25. Other policy measures could be utilised to address the fact that historically biofuels have been more expensive than mineral fuels, and future prices are uncertain. Possible measures include subsidies and preferential tax treatment. If a mandatory biofuels target approach is pursued the price differential would no longer act as a barrier and financial incentives would not be necessary, However, consumers would be required to absorb any price differential between mineral fuels and biofuels in the absence of policy intervention. Officials will be undertaking further work on whether this is an appropriate way forward.

Mandatory targets

- 26. Mandatory biofuels targets can take a range of forms, the most feasible being blending targets or a sales target. A mandatory blending target would require every litre of conventional fuel to comprise a specified percentage of biofuels, be it biodiesel or ethanol. Different blending target levels can also be used but practical upper limits to biofuel blends in transport fuel for retail sale are 10% for ethanol and 5% for biodiesel (no limit has been set at this stage but this is the standard international limit). A blending target is, however, relatively inflexible regarding implementation. It would apply to all of the relevant conventional fuel sold (petrol or diesel) and therefore has a nation-wide impact. It would also apply at all times making it difficult to adjust to variable supply constraints. As well, it would affect all consumers (petrol or diesel) and therefore prevents the targeting of consumer groups that are least responsive to price changes, or which could benefit most from biofuel use.
- 27. A mandatory sales target would require a specified percentage of total transport fuel sales to consist of biofuels. Different biofuel blends can also be used and different target levels. The major advantage of this approach, however, is the flexibility it provides for oil companies to implement the target in a least cost and efficient manner such as targeting consumers who are least responsive to price changes. It also helps mitigate supply side issues as firms can vary their use of biofuel blends based on variable supply constraints.
- 28. Within these approaches, a specific biofuel target can be used, such as a biodiesel target or an ethanol target. However, a broader biofuels sales target is more desirable as it provides flexibility for oil companies to elect which biofuel to use, the blend level to use and where to use it, which enables them to protect their core market.

Policy investigations

- 29. In December 2004, the MED, submitted a report to me, prepared through the Biofuels Officials Group⁻¹ on mandatory biofuels targets. This report, drawing on an analysis prepared by NZIER, advised that a mandatory biofuels sales target would be a preferable way forward relative to a mandatory blending target or a biodiesel- or ethanol-specific target (be it a blending or sales target). MED advised that a mandatory sales target would provide companies with flexibility to pursue least cost options and to take account of base blending fuel variations, any seasonality of biofuel supply and climatic conditions for both ethanol and biodiesel. However, MED advised that NZIER's analysis was based on assumptions of oil companies' choices and that in order to understand the full merits of either the mandatory blending or sales target, further discussions with relevant industry groups would be needed.
- 30. Accordingly, in March 2005, I sent a letter to oil companies, biofuels producers and raw material suppliers, motor vehicle industry groups and transport users groups. As a general comment, all submitters were supportive of the concept of biofuels. Many pointed out that while the contribution would be small, biofuels should form an essential part of future transport energy scenarios.
- 31. Opinions varied on both whether a sales or blend target is preferable and whether a general biofuels target or biodiesel or ethanol specific target is preferable:
 - oil companies preferred a sales target for biofuels generally rather than for individual fuels, as it provides greater flexibility to vary product ranges regionally, take account of seasonal variation in raw materials supply, provide consumers with choices and target urban fleets. The oil refinery and the independent retailer would find a blend target easier to ensure consistency of product and manage infrastructure. All groups saw problems with being required to provide national coverage;
 - biodiesel producers favoured a product-specific blend target, whereas the ethanol producer favours a biofuels sales target;
 - motor vehicle industry groups expressed reluctance to accept mandatory targets/ethanol above 3% in the absence of good information on how this might affect the New Zealand fleet. A blend target is seen as preferable to a sales target;
 - a blend target was supported by the heavy transport industry, however the Automobile Association opposed a blend target as it removes consumer choice and they fear that additional fuel costs will fall on consumers;
 - public transport operators are cautious about a target, they would prefer the consumer choice arising from a sales target, and would prefer to use biofuels in urban services rather than long distance. Federated Farmers will not support a mandatory target until more is known about the costs, benefits, and opportunities for local industry.

Further work

32. Following these investigations, I am of the view that the mandatory biofuels sales target approach has merit. Further work is needed to firm up the target levels and timeframes and to consider issues of risk and liability. Wide public consultation is also needed. I propose that Cabinet agree in principle to encouraging the uptake of transport biofuels by developing and introducing a mandatory sales target on biofuels, subject to further policy investigations undertaken by officials. Estimated timeframes for progressing this work as part of a biofuels work programme are provided in Appendix 1.

¹ The Biofuels Officials Group is an informal group comprised of representatives from EECA, the Ministries of Agriculture and Forestry, Consumer Affairs, Economic Development, Environment and Transport, the Treasury, New Zealand Customs, Land Transport New Zealand, Investment NZ and Transit New Zealand.

33. In addition, further work is needed regarding a regulatory framework for biofuels, including the mechanism to implement a mandatory biofuels target. However, an appropriate regulatory vehicle that can be used for this purpose does not presently exist. Legal advice from Crown Law concluded that the Ministry of Energy Abolition Act (that currently contains the regulatory making power to prescribe specifications for petroleum products) cannot be used to regulate biofuels including imposing mandatory biofuels sales targets as well as mandatory quality specifications for biofuels or mineral fuel-biofuel blends. Therefore, new legislation would be needed. In my view, a broader legislative framework for transport fuels (currently provided for under the Ministry of Energy Abolition Act) and any other future transport fuels. It is therefore proposed that a new Act is developed that enables the quality and form of both renewable and non-renewable transport fuels to be regulated. Estimated timeframes for this work are provided in Appendix 1.

Financial incentives

- 34. EECA commissioned NZIER to advise on potential financial incentive options to support the uptake of biofuels in New Zealand, including regional incentives, direct subsidies and preferential tax treatment. The impact and effectiveness of each option was assessed along with implementation and enforcement issues. The basic costs and benefits of each were compared to business as usual as a way of providing a comparison with the mandatory target options. NZIER did not identify any incentives which, when used alone, were as effective as the mandatory targets for achieving the 2 PJ biofuels target in the NEECS. Non-target incentives had limited potential for being used in parallel with mandatory targets.
- 35. This issue has not yet been explored by officials and will need further discussion and investigation, particularly in conjunction with work on mandatory targets to assess options for addressing any price increases and whether these are likely to affect businesses or lower income groups, It is proposed that officials, led by MOT, undertake this work in accordance with the work programme contained in Appendix 1.
- 36. Officials have considered whether funding for the development of biofuel plants could be achieved through the Projects to Reduce Emissions (PRE) programme. Two serious tenders for biofuels plants to the PRE programme have previously been unsuccessful. At that time, even with the value of the emissions units, these projects were not economic. Whilst the PRE programme is currently under review, initial advice is that it is unlikely that the PRE programme alone would be sufficient to attract a biofuels investor.

Assessment of biofuels benefits

- 37. An important part of the work programme leading to mandatory targets will be the assessment of the costs and benefits of any policy proposals for mandatory targets or other incentives.
- 38. Estimate of greenhouse gas emissions reductions: Within the New Zealand climate change policy framework, biodiesel is deemed to be carbon neutral and ethanol close to carbon neutral. As a result, the use of either fuel reduces the emission of carbon dioxide in direct proportion to the amount of fuel used. The economic value of this reduction is determined by the cost placed on a tonne of carbon emitted. At \$15 per tonne this equates to approximately 4 cents per litre of fuel used.
- 39. Air quality and health: The primary benefit from an improvement in air quality is reduced emissions-related health costs. This varies by fuel, and the region in which it is used. For ethanol there is no significant benefit in terms of emission reduction when averaged across

the whole country. For biodiesel, the national weighted emission benefit is estimated to be 1.9 cents per litre nationally and 3.5 cents per litre in Auckland (based on a comparison with 50ppm diesel).

- 40. **Sensitive aquatic and marine environments:** Biodiesel has advantages in sensitive environments because it is readily biodegradable and not toxic.
- 41. **Contribution to security of supply:** Transport in New Zealand is almost 100% dependent on imported oil, and biofuels currently provide the only practical liquid fuel alternative. The extent to which biofuels can reduce dependence on petroleum imports and vulnerability to external disruptions will be marginal at a 3-5% fuel sales target. Biofuels can be counted towards International Energy Agency 90-day oil stocks requirements which will assist New Zealand meet its obligations. A levy of up to 1 cent per litre has been proposed to provide additional oil storage to meet the IEA requirements.
- 42. **Other benefits:** The development of a biofuels industry provides opportunities for regional development and utilisation of untapped wastes and by-products. It also provides an opportunity to raise the profile of renewable fuels and raise public awareness of the need to move to a sustainable energy pathway. EECA commissioned a public opinion survey on biofuels, which found that:
 - public awareness of biofuels is low, but approval is high once the concept is explained;
 - endorsement and information needs to be from a trusted source e.g. mechanics or the Automobile Association, not Government or oil companies;
 - price is the biggest consideration affecting people's purchasing decision.

Assessment of biofuels risks

43. The main potential effects of ethanol blends are metal corrosion, reduction in hardness and tensile strength of rubber, swelling of rubber and plastic, and reduction in durability and elasticity of plastic. The MOT is undertaking an assessment of the risk (real and perceived) to the New Zealand fleet of ethanol blended petrol. The whole fleet is represented by the large oval in figure 1, and within this MOT has estimated the population of potentially susceptible vehicles for which there is no manufacturer confirmation of ethanol compatibility (medium oval). The next step is to attempt to identify the vehicle types within this group which are likely to develop a problem (small oval), and the likely severity of the problems (ranging from rough running on first fill to seal replacement, hose replacement, or as a worst case, vehicle fires).



Figure 1: Vulnerability of the New Zealand fleet to effects from the use of ethanol petrol blends (not to scale)

- 44. The New Zealand fleet was profiled according to age and probable country of origin or manufacture. Preliminary assessment² indicates potentially between 3% and 60% of passenger cars could be susceptible to damage from ethanol blends, depending on the assumptions made. Further investigation will be required to better assess the extent of risk, i.e. the likelihood of damage actually occurring in the susceptible group, and the consequences (extent of damage).
- 45. Further analysis on the preferred option will be undertaken to assess risks in terms of:
 - firming up the assessment of the "at risk" vehicle population;
 - assessing the different kinds of risk within this group, the likelihood of damage occurring and the consequences (extent of damage and flow on effects);
 - assessing who the "at-risk" groups are. For example, if older vehicles are affected, the lower socio-economic groups could be disproportionately affected;
 - assessing causality: identifying methods to isolate the cause of any technical faults and attribute them solely to biofuel, as opposed to problems which would have occurred anyway;
 - options for mitigating the risk, for example by identifying at risk vehicle types, encouraging
 owners to have these vehicles assessed and undertake repairs, and providing information
 to the public about the use of ethanol blends.
- 46. If a mandatory target approach is pursued, there could be liability issues for the Crown, particularly given the potential risk to some vehicles from ethanol. Assuming Ministers are comfortable with this approach, officials will undertake further work on an assessment of liability to the Crown and fiscal implications that may arise. This will be assessed in conjunction with other policies such as those aimed at improving vehicle emissions and policies to clean up the worst vehicles in the fleet. The analysis will focus on:
 - how damages would be calculated and how attribution of damage would be determined (i.e establish causality);

² The population of potentially susceptible vehicles was identified by looking at the risk to vehicle components made from metal, plastics and rubbers from ethanol petrol blends. The study looked at the materials compatibility requirements for vehicles of various ages, and statements from manufacturers, for vehicles manufactured in the USA, Canada, Australia, India, and Japan. These countries allow the use of up to 10% blends, except India (5%) and Japan (3%).

• where the risk should lie, and whether there is a risk of claims against the Crown.

Biodiesel

- 47. The risk that the use of biodiesel blends could lead to engine damage is slight. There is a small risk that use of biodiesel blends could lead to accelerated engine maintenance, or affect the fuel system. However these risks are being managed by production of a voluntary New Zealand Standard establishing quality specifications for biodiesel. This standard, based on European and North American specifications provides for a 5% biodiesel blend (B5) for retail sale to meet the New Zealand specifications for mineral diesel (Petroleum Product Specifications Regulations 2002). This is a different approach to Europe but for vehicles operating on blends meeting this standard should provide an equivalent level of assurance of satisfactory operation. European engine manufactures have endorsed B5 manufactured to European biodiesel specifications, blended with diesel produced to the European standard. North American engine manufacturers have also endorsed B5 on a similar basis with reference to ASTM (American Society for Testing and Materials) standards. It is difficult to be certain that Japanese vehicle manufacturers will take comfort from biodiesel being made to a New Zealand standard, simply because the Japanese experience with biodiesel is limited. However, the committee has seen indications that at least some Japanese auto manufacturers will find biodiesel consistent with the European specification acceptable.
- 48. The Standards New Zealand Committee developing the standard for biodiesel have carefully designed the standard to minimise the risks resulting from the use of biodiesel blended or at 100%. The committee comprises technical representatives of the oil industry (as experts in fuel generally and potential suppliers of biodiesel blends), as well as the biodiesel industry, motor vehicle industry, policy and monitoring agencies. The standard will be published mid-2005 and will be voluntary until such time as it can be picked up under the umbrella of comprehensive legislation regulating the quality of transport fuels. In the meantime, officials will monitor overseas developments and work with biodiesel producers and the oil industry to identify any emerging issues and promote adherence with the standards. The oil industry will be very concerned to protect their company reputations.

Other risks

Risks for biodiesel raw materials security of supply

49. The availability of New Zealand tallow for biodiesel production is limited, especially of the grades most economically attractive as biodiesel feedstock. Tallow is currently exported and traded internationally as part of a larger oils and fats market. If the creation of a biodiesel industry in New Zealand is delayed too long, it is possible that locally produced tallow may be tied up in long term contracts by overseas biodiesel producers and exported. Australia currently provides an excise concession for biodiesel and it could be an attractive option for New Zealand companies to take advantage of this by exporting finished biodiesel or tallow to Australia. This would see the cost of producing biodiesel for the domestic market increase, potentially to the point where it is not economic.

Risk that imported ethanol is not bioethanol

50. Ethanol is produced from fossil fuel sources, mostly natural gas, in several countries. Currently the tax exemption for ethanol to be blended with petrol is for all ethanol, not exclusively bioethanol from renewable sources. Provisions are in place to require the testing of ethanol shipments coming into New Zealand for any countries with mineral ethanol plants, or from major ethanol trading hubs that mineral ethanol may have been shipped through. The test requires the ethanol to be carbon dated, which costs in the region of \$800 per sample. It is considered unlikely that fossil fuel ethanol will enter New Zealand, as it is generally more expensive than renewable ethanol. If fossil fuel ethanol imports are detected then legislative changes would have to be considered.

Consultation

- 51. The Ministry of Transport prepared this paper in close collaboration with the Biofuels Officials Group. The following agencies were consulted in the preparation of the paper: Ministry of Economic Development, Treasury, Ministry for the Environment, Ministry of Agriculture and Forestry, EECA, Land Transport New Zealand, Investment New Zealand and Transit New Zealand. The Department of Prime Minister and Cabinet was informed.
- 52. Investment New Zealand have concerns, which they anticipate would be the concerns of international investors:
 - there are concerns about the time it is taking for the Government to reach a firm statement of its position on biofuels;
 - from a potential investors' perspective the current position contains some uncertainty and may not be sufficiently bankable;
 - a firm position on biofuels would lessen the risk to the New Zealand supply of the biodiesel feedstock, as the tallow maybe secured under long-term contracts and sent to other markets.

Financial implications

- 53. The resource requirements for carrying out the further work outlined in this paper, as set out in Appendix 1, can be met from existing funding.
- 54. Currently fuel ethanol is free from excise and excise-equivalent duty (EDC Min (03) 21/10 refers). Imposing a mandatory target may increase the uptake of ethanol compared to "business as usual", hence there may be a small loss of revenue to government. For example a 1% replacement of petrol with ethanol would result in a revenue reduction of \$13.5 million, which is minor in the context of the National Land Transport Fund. This will be dealt with in more detail when firm mandatory target proposals are considered.

Legislative implications

55. In order to implement policies to encourage the uptake of biofuels and also to set quality specifications for biofuels, new fuels related legislation would need to be developed. It is proposed that this legislation is developed and enacted by December 2007.

Regulatory impact and business compliance cost statement

56. A work in progress regulatory impact statement is attached, which reflects the early stage of development of policy proposals. The impacts of the policy proposals will be presented in more detail once firm courses of action have been identified.

Human rights , Gender and Disability implications

57. There are no human rights, gender or disability implications.

Publicity

58. It is proposed that:

- this Cabinet paper be made publicly available on the MOT and EECA websites;
- I make a formal announcement, as soon as possible, that:
- the government is committed in principle to encouraging the uptake of transport biofuels;
- the government is developing and introducing a mandatory sales target on biofuels; and
- indicate that public consultation will be undertaken in the near future.
- EECA and the MOT co-ordinate an industry and consumer consultative group (or groups) comprising representatives of:
- the fuels industry: oil companies, biofuels producers and raw materials suppliers;
- the motor industry: Motor Industry Association, Motor Trade Association, the Independent Motor Vehicle Dealers Association, the New Zealand Engine Reconditioners Association and other specialist repairers;
- consumers and user groups: Bus and Coach Association, Automobile Association, Road Transport Forum, Federated Farmers, Consumers' Institute.

Recommendations

59. It is recommended that the Committee:

- (a) **note** that the Ministry of Transport has accepted the role of lead agency for the biofuels policy development programme, and is working closely with the Ministry of Economic Development, the Treasury, Energy Efficiency and Conservation Authority and other agencies as appropriate;
- (b) note that the Ministry of Economic Development administers legislation relating to fuels, including developing regulations covering the quality and use of transport fuels in New Zealand;
- (c) **note** that as Minister of Transport and Convenor of the Ministerial Group on Climate Change I will ensure that other relevant Ministers are informed and involved in the development of biofuels policy as appropriate;

Uptake of renewable transport fuels

- (d) **agree** in principle to encourage the uptake of transport biofuels by developing and introducing a mandatory sales target on biofuels;
- (e) **note** that further policy investigations outlined in recommendation (f) below are required before a biofuels sales target can be finalised;
- (f) direct the Ministry of Transport, in conjunction with the Ministry of Economic Development and Energy Efficiency and Conservation Authority, to undertake further policy investigations for mandatory biofuels sales targets; specifically target levels, risks and mitigation, liability issues, costs and benefits, implementation issues, financial incentives and review mechanisms, as outlined in the work programme in Appendix 1 and report back to Cabinet by June 2006;

Legislation governing transport fuel

- (g) **note** that new legislation would be required in order to regulate the quality and form of biofuels and also to impose mandatory biofuels sales targets;
- (h) agree that new legislation is developed and enacted by December 2007 that enables the quality and form of both renewable transport biofuels and petroleum-based transport fuels to be regulated;
- direct the Ministry of Economic Development to report back to Cabinet on developing a new legislative framework for regulating transport fuels by June 2006;

Information and consultation

- (j) **invite** the Minister of Transport to announce the Government's commitment in principle to encouraging the uptake of transport biofuels by developing and introducing a mandatory sales target on biofuels;
- (k) note that the Ministry of Transport and the Energy Efficiency and Conservation Authority will post information for the public on suitable websites to coincide with the Minister's announcement, including fact sheets and question and answer material about likely costs and effects of biofuels on consumers and their vehicles;
- (I) **note** that the Ministry of Transport will set up an industry and consumer biofuels consultative group to assist in the evaluation of biofuels policy; and
- (m) **invite** the Minister of Transport, in consultation with the Minister of Energy, to make public announcements regarding the government's new legislative framework for transport fuels.

Hon Pete Hodgson Minister of Transport

CAB 100/2002/1

Appendix 1: Proposed biofuels work programme

Project	Lead agency	Timing
Announcement of policy approach	МОТ	One month after Cabinet approval of this paper
Put in a legislative bid for a new fuels bill	MED	In accordance with directives for 2006 legislative programme
Set up industry and consumer consultative group	МОТ	By September 2005
Report to Cabinet on mandatory targets and incentives for biofuels including: target levels risks and mitigation liability issues costs and benefits implementation issues further investigate financial incentives review mechanisms	MOT	By June 2006
 Report to Cabinet on content of new fuels bill and regulations including a new framework for regulating transport fuels (biofuels, petroleum fuels and any future fuels) mandatory targets and incentives for biofuels quality specifications for biofuels and petroleum fuels testing of fuels and enforcement 	MED	By June 2006
Report to LEG with fuels bill for introduction (Recommend Bill to be enacted by December 2007)	MED	By December 2006
Make regulations	MED	Once fuel bill passed (likely late 2007 or early 2008)