Ministry of Transport
TE MANATŪ WAKA

BRIEFING

OPTIONS FOR A GOVERNMENT-INDUSTRY PACKAGE TO ENCOURAGE THE UPTAKE OF ELECTRIC VEHICLES

Reason for this briefing	The Ministry of Transport (the Ministry) committed to providing you with advice, by 30 October 2015, on a Government-industry package to encourage the uptake of electric vehicles. This briefing provides this advice and seeks an initial discussion with you on the package you would like to progress. We intend to focus this initial discussion on the A3 in Appendix 2 that summarises the package that has broad agreement in principle with stakeholders. Your office also asked for an A3 summary of the options for the package. This is attached as Appendix 3.
Action required	Consider this briefing and the A3 in Appendix 2 and discuss the measures you would like included in the package at the meeting with the Ministry on 2 November 2015.
Deadline	Monday 2 November 2015
Reason for deadline	This deadline will enable the Ministry to progress the Government-industry package in time for it to be considered by the Cabinet Economic Growth and Infrastructure Committee on or before Wednesday 2 December 2015.

Contact for telephone discussion (if required)

Name	Position	Telephone		First contact
		Direct line	After hours	
[redacted]	Senior Adviser	[redacted]		
[redacted]	Principal Adviser	[redacted]	[redacted]	
Erin Wynne	Manager, People and Environment	[redacted]	[redacted]	✓

MINISTER'S COMMENTS: Withheld under section 9(2)(a) of the Official Information Act 1982

Date:	30 October 2015	**Briefing number:**	OC03519
Attention:	Hon Simon Bridges (Minister of Transport)	**Security level:**	In-Confidence

Minister of Transport's office actions

☐ *Noted* ☐ *Seen* ☐ *Approved*

☐ *Needs change* ☐ *Referred to*

☐ *Withdrawn* ☐ *Not seen by Minister* ☐ *Overtaken by events*

Purpose of report

1. This briefing seeks direction from you on the measures you would like progressed as a Government-industry package to encourage the uptake of electric vehicles (EVs). It also seeks an initial discussion with you at our meeting on 2 November 2015. We would like to focus this initial discussion on the A3 in Appendix 2 that summarises the package that has been developed with stakeholders.

2. The A3 in Appendix 3 is intended for your meeting with the Prime Minister and senior Ministers on 11 November 2015. It outlines the options for the package coupled with their costs as requested by your office.

Your previous decisions on measures to encourage the uptake of EVs

3. New Zealand will be looking to reduce its transport emissions to help give effect to its post-2020 greenhouse gas emissions reduction target. If conventional vehicles could increasingly be substituted with EVs, New Zealand would reduce its transport emissions without compromising individual mobility or economic growth.

4. In considering the advice we provided on 26 March 2015 (OC02885 attached), you agreed in April that initiatives to encourage the uptake of EVs should include:

    4.1. an information and promotion campaign by the Energy Efficiency and Conservation Authority (EECA)

    4.2. government branding, promotion and information support for public charging infrastructure

    4.3. a trial of EVs in government fleets.

5. At a subsequent meeting on 27 July 2015, you asked officials to work with local government and industry to 'co-create' a package of measures to encourage the uptake of EVs. You also indicated that discussions with these stakeholders could traverse a range of options to reduce the risks and costs for suppliers and purchasers of EVs.

6. As in our previous advice, we define EVs as being motor vehicles powered by electric batteries and plug-in hybrid electric vehicles. Not included in this definition are conventional hybrid vehicles, which have an internal battery but need petrol or diesel to run.

The process we followed to co-create a Government-industry EVs package

7. To effect a co-creation policy process Martin Matthews brought together a group of chief executives from industry, local government and central government agencies. A list of the chief executives involved is in Appendix 1.

8. This group met on 10 September 2015 and was tasked with developing:

    8.1. joint targets specifying a reasonable level of EV uptake that New Zealand can aspire to

    8.2. a Government-industry EVs package that parties would commit to, even conditionally, to achieve the joint targets

    8.3. a governance arrangement that would bring the relevant public and private sector parties together on an ongoing basis to drive uptake.

9. On 12 October, members of the Sustainable Business Council, and local and central government officials came together to workshop a package. On 28 October, chief executives met to consider the draft package of measures to recommend to you. This briefing and the A3 in Appendix 2 reflect this draft package of measures.

The draft package of measures focuses on reducing the barriers that are limiting the uptake of EVs

10. The draft package of measures aims to reduce the barriers that are limiting the appeal of EVs to consumers and businesses. These barriers are the:

    10.1. relatively higher purchase prices. Although purchase prices have fallen, prices of EVs are still higher than their equivalent conventional vehicles. Most consumers do not recognise the additional value of EVs, such as their environmental benefits

    10.2. limited travel range of EVs. The range of pure EVs is generally up to 150 kilometres before they require recharging. This makes their use for long journeys less appealing

    10.3. very limited range of EV models available in New Zealand. The small EV range has to compete in the market against the substantially wider range of conventional vehicles. Many conventional vehicles offer superior features and good fuel efficiency

    10.4. information problems. These problems include a lack of awareness of EVs, uncertainty about the total costs of ownership (for instance maintenance costs, battery life and residual values) and misconceptions about EVs

    10.5. coordination problems. For example, consumers and businesses may be reluctant to purchase EVs without public charging infrastructure being widely available. However, the private sector may be reluctant to invest in a comprehensive charging network until there is widespread uptake of EVs.

11. The barriers of purchase price and travel range will reduce in the medium term. Industry experts expect electric vehicles to reach price parity with conventional vehicles between 2018 and 2025. Battery technology is also likely to improve, extending the travel range of EVs. These improvements will make the economic case for adopting EVs more compelling for consumers and businesses.

12. However, in the absence of government intervention, the barriers relating to the limited range of EV models, information and coordination are unlikely to reduce quickly enough for EVs to be a credible part of New Zealand's strategy to reduce transport emissions.

13. This is because the information and coordination barriers are to an extent market failures. The level of cost and risk that the motor vehicle industry and electricity providers would face in addressing them is likely to be prohibitive. The availability of a wider range of models is likely to follow the increased uptake of EVs in the New Zealand market, but could be improved through government intervention in the short term.

The draft package of measures

14. The A3 in Appendix 2 outlines the draft package. It covers the initiatives that are being, or could be, done to increase the uptake of EVs. The package has five elements:

    14.1. procurement across private and public sector fleets

    14.2. a contestable fund for innovative projects

14.3. normalisation to make EVs a regular vehicle choice

14.4. charging infrastructure

14.5. financial incentives.

15. Of these elements, stakeholders broadly agree that the Government-industry package should focus primarily on the first three elements, as the other two are already in place, or underway. Nevertheless, this paper includes measures that would enhance both of the last two elements.

16. These measures are the three measures that you agreed in April, see paragraph 4 above, and six new measures that are discussed in paragraphs 19–62.

17. To be included in the proposed package initiatives had to pass the test that they:

17.1. will work with the other measures to collectively address the barriers that are limiting the appeal of EVs to consumers and businesses

17.2. offer benefits in barrier reduction that are likely to outweigh their costs and risks.

18. The total cost of the package will depend on the level of ambition under the package. For the EVs package to have momentum, we estimate that if all options were included at least $5–10 million per annum for 5 years would be required. Additional Crown funding would be sought for the package as part of Budget 2016.

Procurement measures to facilitate an increase in the number of EVs in fleet purchases

Joint procurement for government and private sector fleets

19. The key procurement initiative from the co-creation process is to have joint EV procurement for government and private sector fleets. This initiative would aggregate vehicle purchases in order to achieve lower prices and/or an increase in the number of EV models available.

20. The initiative envisages a government agency co-ordinating the joint procurement with a commitment from public agencies and private businesses to purchase a set number of EVs. The Ministry of Business, Innovation and Employment (MBIE) could act as the co-ordinating agency but it would require a clear mandate from Cabinet and, potentially, additional funding.

21. The need for joint procurement would diminish with time. It would not be needed once the purchase price of EVs nears that of conventional vehicles.

22. Joint procurement would be successful if it achieves a price discount, or an increase in model availability, that outweighs the costs and risks involved. The risks are that:

22.1. even with joint procurement the volume of vehicles purchased may be too low to influence purchase prices or model availability

22.2. the procurement agent negotiates the procurement of a number of vehicles that are then not wanted by their would-be buyers. It could then be left with the costs involved, including arranging for the sale of the surplus vehicles

22.3. it could reduce the ability of the existing mechanisms of vehicle procurement to secure ongoing savings and reasonable delivery options. For instance, the All-of-Government contract for vehicle procurement could be negatively impacted.

23. We would need to analyse the significance of these issues before this option is progressed. The arrangements for joint procurement would also need to be developed.

24. We have had initial discussions with MBIE about this initiative. It has advised that it could undertake an assessment of the feasibility of the initiative by March 2016 if funding were provided. It would need funding because MBIE's procurement unit operates on a cost-recovery basis.

25. Given the need for further work, if you support this option we advise seeking Cabinet agreement in principle for it at this stage.

A trial of EVs in government fleets

26. You previously agreed that an EV trial in government fleets should be considered as part of the Government-industry package. In light of the joint procurement initiative we would like to discuss with you whether you still want to pursue an EV trial.

27. The type of trial we had previously discussed envisaged trialling 24 vehicles in four government fleet locations. This would require one-off funding of approximately $500,000 to cover the incremental costs of the trial vehicles. Industry feedback was that a trial at this level lacked credibility given the level of fleet uptake by leading businesses (for instance Air New Zealand, which is converting its whole fleet to EVs where feasible).

28. Discussions with MBIE suggest that a trial could be scaled up, for example, by adding an additional 24 vehicles each year. To put this in perspective, currently there are over 20,000 vehicles in the government fleet. Around 4,000 new vehicles are purchased through the All-of-Government contract each year. About 42 percent of these purchases are for compact passenger vehicles, like the Toyota Corolla.

A financial 'kickstarter' for the purchase of EVs in government fleets

29. Alongside the joint procurement initiative the Government could consider providing a financial 'kickstarter' to incentivise the purchase of EVs in government fleets. The kickstarter was not discussed during the co-creation process, so is not included in the summary of the whole package (Appendix 2) or the summary of options and costings (Appendix 3).

30. We know from discussions with MBIE that government agencies are facing difficulties in maintaining their current fleets and have been delaying the replacement of vehicles. The kickstarter is one way of overcoming barriers to government fleet buyers adopting EVs.

31. The kickstarter would involve one-off Crown funding to cover the price differential between a conventional vehicle and an EV equivalent. Funding of $1 million would fund around 100 EVs.

32. The key risk with a financial kickstarter is that it could attract criticism regarding the use of public money in a constrained fiscal environment.

33. This risk could be mitigated by making it clear that the initiative will yield a positive public outcome. This outcome is demonstrating to businesses and individuals how New Zealand can transition to a lower carbon future.

A contestable fund for innovative projects that reduce the barriers to EV uptake

34. To maximise the efforts of industry and government in addressing the barriers to EV uptake and to encourage innovation a contestable fund could be included in the package. The fund would be akin to the Urban Cycleways Programme in that it would co-fund projects developed by businesses or local communities.

35. In our view, a co-fund is warranted because the barriers require a joint Government-industry effort to reduce them. Key to the government role is reducing the risks and costs that the motor vehicle industry and electricity providers face in growing demand for EVs.

36. Examples of the type of projects that could be co-funded include:

    36.1. the creation and promotion of branded tourism routes using EVs. On such routes tourists could hire EVs, and preferentially park and charge them at participating tourist attractions, information centres, cafes and accommodation venues

    36.2. demonstrations of vehicle types currently not used in New Zealand, such as electric vans in commercial fleets.

37. The contestable fund would require Crown funding with the actual amount depending on the level of ambition sought and the expected impact of EV uptake of any initiatives. In our view, an appropriate amount would be in the order of $5–10 million per annum over five years. We consider that this amount could co-fund up to 10 to 20 projects.

38. The key risk with providing government funding is that it could fund initiatives that local government or industry may have provided anyway. This risk would be reduced through the co-funding approach. Further, the fund's criteria would be designed to ensure that only initiatives warranting government investment are funded.

39. If you support this option the Cabinet paper for the package would seek an in-principle agreement to establish a contestable fund. You would then seek agreement on the quantum of funding, the criteria for assessing proposals and on the administrative arrangements at a later date.

Normalisation to make EVs a regular vehicle choice

Having targets for uptake to demonstrate commitment and focus effort

40. Targets for EV uptake also warrant consideration. Targets would demonstrate the Government's commitment to reducing transport emissions via EVs. They would also provide a tangible way to focus government and industry efforts in this area.

41. Targets would contribute to tackling the information barrier by raising awareness of EVs among consumers and businesses. This would help to normalise perceptions about the purchase of an EV. For instance, by changing the perception of an EV being a risky vehicle to purchase to it being a regular vehicle choice.

42. For the year ended 30 September 2015, 438 EVs were sold bringing the total number of EVs in our light vehicle fleet to 817. This is 0.024 percent of the light vehicle fleet.

43. In our modelling, the status quo scenario forecasts EVs being around 12 percent of new vehicles sold in 2020. This is about 11,500 vehicles. This means that there will be about 43,000 EVs by 2020 (including used EVs) which is over 1 percent of the light vehicle fleet.

44. The proposed package would set the following targets for EV uptake:

    44.1. 1,000 EV sales in 2016

    44.2. 5,000 EV sales in 2017

    44.3. 25,000 EV sales in 2019.

45. The proposed targets are very ambitious, particularly the one for 2019. We will be stress testing these targets with industry representatives on 2 November 2015 using available modelling. This is important as all parties involved in developing the draft package want targets that are ambitious but still credible.

46. As part of this stress test, parties will need to consider how far the joint package will take us towards the targets and the respective contributions that would be required from central government agencies, local government and business.

47. The key risk with specifying targets is that ultimately they may not be met. Non-achievement could give opponents an opportunity to criticise Government policy. In our view, however, this risk is limited by the fact that the package will be a joint Government-industry one.

48. The risk could also be mitigated by stating at the outset that the targets are deliberately ambitious and have been set primarily to galvanise effort.

Other normalisation initiatives in the package

49. In addition to targets, the following measures that you agreed to in April will assist with making EVs a regular vehicle choice:

    49.1. an information and promotion campaign by the Energy Efficiency and Conservation Authority (EECA)

    49.2. government branding, promotion and information support for public charging infrastructure.

Replacing the remainder of the road user charges exemption with upfront payments to EV purchasers

50. As an alternative to allowing the current road user charges (RUC) exemption to run to 2020, we could investigate the option of converting it into upfront payments to encourage the purchase of EVs.

51. With this option the RUC exemption would end on 30 June 2016. In its place, purchases of EVs would come with a one-off upfront payment equivalent to the average amount of RUC that would have been paid up to 2020.

52. For example, someone purchasing an EV on 1 July 2016 would receive a one-off upfront payment of around $2,500[1]. Each year they would be required to pay RUC like all other vehicle owners. Assuming 10,000 kilometres are driven in a year, the annual RUC amount would be $620 (GST inclusive). Someone purchasing an EV on 1 July 2019 would receive an upfront payment of $620 and pay RUC of a similar amount.

[1] This is based on the existing RUC rate of $62 per 1,000 kilometres (GST inclusive) and an average distance travelled of 10,000 kilometres. The actual upfront payment would be $2,480.

53. To ensure current owners of EVs are not disadvantaged EVs registered before the exemption expires on 1 July 2016 would continue to be exempt from RUC until 2020.

54. This measure would offer a stronger financial incentive for people to purchase EVs than the current RUC exemption. Generally, there is more benefit in receiving a one-off upfront payment than in being exempt from paying out the same amount of money over several years. This reflects the falling value of money in an environment with inflation.

55. The option would also be fiscally neutral for the National Land Transport Fund (NLTF). This is because the monies needed for the upfront payments would be recovered from RUC. However, the NZ Transport Agency would face a small increase in administration costs to effect the individual payments.

56. The NZ Transport Agency would also need to manage the impact on the NLTF's revenue streams, with upfront payments being made up to five years before they are substantially recovered. As discussed later in paragraph 69, our forecasts suggest that between now and 2020, the foregone annual RUC revenue will increase from $294,000 to $9.5 million.

Risks and mitigation

57. The key risk with this option is that it could raise equity concerns. For example, it could be criticised as providing a subsidy to companies and individuals who are financially able to purchase EVs without the upfront payment. Although the exemption has the same practical effect, this option could re-emphasize the equity issue.

58. This risk would be managed by making it clear that this measure, like the others, focuses on encouraging an uptake of EVs as a means to reduce New Zealand's transport emissions. So although the option offers private benefit, its purpose serves a wider public goal.

59. We tested this proposal with chief executives from industry and government agencies on 28 October 2015. The reaction was mixed. The general response was that removing the RUC exemption to provide an upfront payment would not affect fleet purchase decisions. This is because these decisions are largely based on total cost of ownership, which factors in upfront and running costs. However, it could make EVs more appealing to private vehicle purchasers.

60. We still need to clarify how upfront payments could be made from the NLTF. Consequently, if you are comfortable with progressing this option we advise seeking Cabinet agreement in principle at this stage. Final Cabinet agreement would be subject to confirmation that the option could be implemented using the NLTF.

Governance arrangements for the ongoing leadership and coordination of the EVs package

61. Stakeholders have expressed support for a government agency to convene a group that provides ongoing leadership and coordination of the initiatives in the package. The group would consist of seven to eight people and would have representatives from industry, local government and relevant government agencies.

62. We agree that this type of governance arrangement is desirable. If you support this initiative the Cabinet paper would seek agreement to you deciding on the detail of the governance group. This includes its terms of reference, its members and its administrative arrangements.

We advise against the EVs package including an extension of the road user charges exemption

63. Currently, light EVs are exempt from RUC until 30 June 2020. We do not recommend extending the exemption beyond 2020, as it would increasingly compromise the user-pays basis of the transport system.

64. When Cabinet agreed to the exemption, it was on the basis that it would apply until EVs make up 1 percent of the vehicle fleet. An end-date of 2020 was selected as the year most likely to coincide with this level of EV uptake.

65. The Ministry has revised its forecasts for sales of EVs. The main factors impacting on the forecasts are anticipated price reductions in EVs, and the greater availability of new EVs on the market.

66. Our revised forecasts still support the view that EVs will make up 1 percent of the fleet by 2020. However, the revised forecasts show significantly increased sales of EVs from 2019 onwards, than were previously forecast.

67. With such an increase in uptake, a RUC exemption would mean that the cost burden of building and maintaining the road networks would fall on a smaller proportion of road users. This would raise equity issues. It would also exacerbate revenue pressures and consequently limit or delay desirable transport investment.

68. Currently, the RUC exemption results in foregone annual revenue of around $294,000. With the uptake of EVs increasing we estimate that by 2020 foregone annual revenue could be around $9.5 million. By 2025 it could be about $77 million rising to around $217 million by 2030 if the exemption remained in place.

69. If the exemption was extended this level of foregone revenue would have to be recovered from other road users. Alternatively, the National Land Transport Programme of investments would have to be reduced.

Using National Land Transport Funding to support charging infrastructure

70. You asked for advice on whether charging infrastructure for EVs could be funded through the NLTF.

71. Having charging infrastructure in place for EVs is a key part of supporting their uptake. This is because it addresses the range anxiety associated with EVs. Range anxiety limits a consumer's desire to purchase and use an EV.

72. Funding for charging infrastructure could be provided through the NLTF via an amendment to the Government Policy Statement (GPS). Such an amendment would either create a new activity class to fund the infrastructure or allow funding to be provided from an existing activity class.

73. In our view, the option to provide NLTF funding for charging infrastructure is best progressed as part of the development of GPS 2018. This is because it will allow decisions about the role and level of NLTF funding to be informed by the scale and reach of private sector investment over 2016.

74. Getting the role and level of NLTF funding right is important. This is because parties such as Mighty River Power, Vector and Charge.net.nz have made it clear that they are willing to invest in charging infrastructure without government financial support.

75. However, they do want support to clarify the consenting process and to promote the charging infrastructure they establish. They also see a potential need for government investment in charging infrastructure at locations where commercial action is not viable. Public investment could provide infrastructure necessary to complete a network.

The draft package of measures has risks as has using a co-creation process

76. We have noted the specific risks of each measure in the relevant sections above. As well, across the package there is a risk of role creep on the part of government. Specifically, there is a risk that government will invest public resources in reducing barriers that legitimately are the private sector's to address.

77. In our view, this risk is being managed through the design of the initiatives. This design limits the Government's role to:

    77.1. the provision of independent information about EVs and the role they can play in reducing transport emissions

    77.2. facilitating the resolution of co-ordination challenges, through lowering the costs and risks of private sector investment, for a limited period of time only.

78. Using a co-creation process to develop the package has also brought a level of risk. It has meant that we have engaged with a limited group of stakeholders. Parties not included in the process could think that their potential contribution is going unrecognised.

79. This risk will be managed by having the delivery agencies engage with interested parties as the EVs package is implemented. This opportunity for engagement will be emphasised in media announcements about the package.

Suggested process and timeline from here

80. We are seeking to have an initial discussion with you about the measures you want included in a Government-industry package at our meeting on 2 November 2015. We would like to base this discussion on the A3 in Appendix 2.

81. Following our discussion, we will make any needed amendments to the A3 in Appendix 3. This A3 is intended for your meeting with the Prime Minister and senior Ministers on 11 November 2015. It outlines the options for the Government-industry package coupled with their costs.

82. We will also finalise the draft Cabinet paper that we have been preparing.

83. In terms of timing, in our view it would be desirable to gain Cabinet agreement to a Government-industry package in early December 2015. This would enable the package to be announced in New Zealand at a time that coincides with the 2015 Paris Climate Conference, which will take place over 30 November to 11 December 2015.

84. Announcing the package over the time of the 2015 Paris Climate Conference would ensure that the package attracts maximum public attention. This in turn would enhance your opportunity to communicate its purpose and content.

85. To enable the EVs package to be announced in early to mid December 2015, the Cabinet paper would have to be considered by the Cabinet Economic Growth and Infrastructure Committee by Wednesday 2 December 2015.

86. Ideally, an announcement would involve the wider group involved in the co-creation process. The Sustainable Business Council has already indicated that it is willing to support a joint or parallel announcement.

Consultation

87. To date, consultation with government agencies has been limited to those involved in the co-creation process. We seek your agreement to consult other government agencies with an interest in the EVs package.

88. Consultation would be done by circulating the draft Cabinet paper that we have been preparing. The draft to be sent to government agencies will reflect our 2 November 2015 discussion.

Recommendations

89. The recommendations are that you:

(a) **consider** the A3 in Appendix 2 that summarises the package that has been developed with stakeholders

(b) **indicate** following our discussion on 2 November 2015, which of the following initiatives you would like progressed as a Government-industry package to encourage the uptake of EVs:

i.	allowing joint EV procurement for government and private sector fleets	Yes/No
ii.	having a trial of EVs in government fleets	Yes/No
iii.	providing a financial 'kickstarter' for the purchase of EVs in government fleets	Yes/No
iv.	establishing a contestable fund for innovative projects that reduce the barriers to EV uptake	Yes/No
v.	having an information and promotion campaign by the Energy Efficiency and Conservation Authority	Yes/No
vi.	establishing targets for EV uptake, with the targets being those outlined in paragraph 44	Yes/No
vii.	providing government branding, promotion and information support for public charging infrastructure	Yes/No

	viii.	replacing the remainder of the road user charges exemption with upfront payments to people, or companies, who purchase EVs	Yes/No
	ix.	having governance arrangements for the ongoing coordination of EV policies and activities	Yes/No
(c)		**note** that initiatives (b)(i) and (b)(viii) require further investigation and we envisage Cabinet agreement only being sought in principle at this stage	
(d)		**note** that initiative (b)(iii) has not been discussed with stakeholders as part of the co-creation process and could be considered as part of initiative b(i)	
(e)		**indicate** whether you would like initiative (b)(iii) to be included in the package for discussion with Senior Ministers on 11 November 2015	
(f)		**note** that in our view an appropriate amount for the contestable fund would be $5–10 million per annum over five years. However, we seek direction from you as to the quantum you consider desirable	
(g)		**agree** that the option of extending the road user charges exemption for EVs beyond 2020 not be progressed	Yes/No
(h)		**agree** that the funding of charging infrastructure for EVs be considered as part of the development of GPS 2018	Yes/No
(i)		**note** that it would be desirable to announce the EVs package in New Zealand during the time of the 2015 Paris Climate Conference	
(j)		**agree** that a Cabinet paper be considered by the Cabinet Economic Growth and Infrastructure Committee on Wednesday 2 December 2015, or sooner if you would like, to enable an announcement to be made during the Paris Climate Conference,	Yes/No
(k)		**agree** that the government agencies with an interest in the EVs package be consulted via a draft Cabinet paper that will reflect our discussion on 2 November 2015	Yes/No

(l) **consider** the A3 in Appendix 3 that outlines the options for the package coupled with their costs.

[redacted]
Principal Adviser

Erin Wynne
Manager, People and Environment

MINISTER'S SIGNATURE: Withheld under section 9(2)(a) of the Official Information Act 1982

DATE:

Appendix 1

The chief executives of the organisations involved in co-creating the EVs package

Name, organisation	photo
Penny Nelson, Sustainable Business Council	
Fraser Whineray, Mighty River Power	
Simon Mackenzie, Vector represented at the meetings by Brian Ryan	
Christopher Luxon, Air New Zealand represented at the meetings by James Gibson	
Greg Skelton, Wellington Electricity	
Dennis Barnes, Contact Energy represented at the meetings by Todd Spencer	

Mark Gilbert, Drive Electric	
Eric Pyle, Drive Electric	
Brian Gibbons, The New Zealand Automobile Association represented at the meetings by Mark Stockdale	
Malcolm Alexander, Local Government New Zealand represented at the meetings by Tom Simonson and Helen Mexted	
David Crawford, Motor Industry Association	
Graeme Peters, Electricity Network Association	
David Smol, Ministry for Business Innovation and Employment represented at the meetings by Jamie Kerr	

Vicky Robertson, Ministry for the Environment represented at the meetings by Peter Brunt	
Mike Underhill, Energy Efficiency Conservation Authority	
Martin Matthews, Ministry of Transport	

Appendix 2: The New Zealand Inc Electric Vehicle Package

	Shared Governance e.g. Governance group jointly lead by CEO of Business NZ/Sustainable Business Council, a government department, Local Government New Zealand		
	Business	**Central Government**	**Local government**
Procurement	Joint procurement		
	Fleet uptake	Fleet uptake	Fleet uptake e.g. Auckland Council, Christchurch City Council's holding companies
	Branding of vehicles		Auckland Transport and Christchurch City Council investigating electric car sharing schemes
		Local government and government agencies shared vehicle (electrification) project in Christchurch	
Contestable fund for innovative projects	Project proposals	Establish and administer contestable fund and investment framework	Project proposals
	Co-funding contribution for approved projects	Government co-funding contribution for approved projects	Co-funding contribution for approved projects
	Implementation	Monitor and report on effectiveness of the fund	Implementation
Normalisation	Advocacy and corporate engagement to encourage electrification by other fleet owners	EECA information campaign	Local government electric vehicle groups and programmes
	Mighty River Power partnering with Audi, Mitsubishi, Holden, Nissan and BMW including point of sale promotional material	Vehicle technology knowledge hub (MoT and AT)	
	Car companies promoting their electric vehicles	We could also investigate the potential for special electric vehicle licence plates. This has not been analysed	Christchurch Electric Vehicle Forum (established and chaired by Council).
	Publicity		Investigate possibility of preferential parking for electric vehicles
Charging infrastructure	Consortium of organisations to establish 'renewables highway'	Clarify the regulatory framework for charging infrastructure	
	Lines companies installing charging infrastructure independently and in partnership with others	National information, guidance and promotion for public charging infrastructure	
Financial incentives	Off-peak electricity rates for electric vehicle owners	Light electric vehicles are exempt from paying road user charges until 2020	

Appendix 3: Summary of electric vehicle package

Measure	Target audience	Description	Implementation considerations	Costs	Expected outcome
NZ Inc targets for electric vehicle uptake	The electric vehicle industry and general public.	Government setting NZ Inc targets for electric vehicle uptake together with local government and the business sector.	Easy and quick once agreed. Can be publicised through usual communication channels and overseen by governance group (see below).	No direct costs.	Would set the level of ambition and help focus efforts of all parties to achieve a common goal.
Contestable fund	Local authorities and businesses (chiefly in the transport, energy and tourism sectors).	An EV programme or fund (modelled on the Urban Cycleways Programme) to co-fund projects that encouraged the uptake of electric vehicles. This option would encourage the market and local communities to develop innovative projects to address the market failures/barriers that are limiting the uptake of EVs.	Moderate effort to implement once funding and governance is confirmed. Could be established within 6-12 months.	$5-10 million per annum for 5 years. The overall quantum of the fund depends on level of ambition and criteria, but co-funding would potentially be in the order of $250,000 to $1 million per project.	Would assist in overcoming information and coordination problems in the market and help to normalise EVs. Could attract additional models of EVs to New Zealand.
Fleet procurement	Central government agencies in the first instance, but information could benefit fleet buyers generally.	**A trial of EVs in the government fleet.** An EV trial would provide valuable information to government and private fleet buyers, and enhance the credibility of any other Government action on electric vehicles. More aggressive options for government fleet procurement would be revisited following a trial.	Moderate effort to implement once funding and governance is confirmed. Could be established within 6-12 months. Would requiring going out to market with a request. Could repeat the trial year on year adding a further 24 vehicles each year for the life of the trial.	$500,000 is estimated to cover the incremental cost of 24 vehicles in four government fleet locations, including charging infrastructure and monitoring costs. The trial could be scaled up if desired.	Would demonstrate the functionality of EVs to government and other fleet buyers. Would help dispel myths about EVs and actively show Government confidence in EVs.
	Government (central and local) and business fleet buyers.	**Joint public/private EV procurement for fleets.** Under this option, the a government agency would coordinate a joint EV procurement process, with a commitment from public agencies and private business to purchase a set number of EVs. The feasibility of this option is undetermined, therefore only in-principle agreement would be sought in the short-term. Joint procurement could potentially target new and near-new EVs, depending on demand. Initial estimates are that the public and private sector would commit to purchase 500 EVs each, however this would depend on the price and conditions negotiated.	Moderate effort (3 months) to investigate feasibility once funding and governance is established. Likely high effort (12 months) to implement once feasibility is determined. Would require the procurement agent to go to market.	Funding for investigation of feasibility. If feasible, funding for procurement work on a cost recovery basis and the additional cost of EVs for the government fleet (to be determined, depending on the bulk price negotiated).	Would help to reduce price and may result in additional models of EVs being introduced to New Zealand. Would also help to build the early market for peripheral EV services and goods e.g. trained EV technicians.
Normalisation: Information and promotion campaign	Fleet owners, lease companies, large businesses, and government bodies.	An information and promotion campaign by EECA. A campaign would focus on fleet buyers and industry engagement. The campaign would seek to address information barriers, facilitate coordination of the sector and enhance the visibility of other measures to address barriers to uptake. Clear success measures would be established for the campaign to ensure that it achieves its objectives.	EECA can deliver this campaign. It has already laid the groundwork for developing a campaign so it would be quick (less than 6 months) to implement once funding and a mandate is confirmed.	A campaign focused on fleet managers and industry engagement would cost about $850,000 per year. Funding could come from reserves held by EECA and/or reprioritisation.	Would help overcome information problems, particularly among fleet buyers. The campaign would provide verified information to buyers to overcome myths and encourage behaviour change.
Government support for charging infrastructure	Fleet buyers and motoring public.	The Government could support the private sector to establish a network of EV charging stations by offering branding, information and promotion support to the private sector. This would include clarifying the regulatory regime that applies to the installation of charging infrastructure on public land.	Moderate effort (less than 12 months) to implement once a mandate is confirmed.	No additional funding required. Costs will be covered by baseline departmental funding in the first instance.	Would overcome barriers to installing public EV charging infrastructure, help promote development of a cohesive and visible network and help create visibility.
Governance arrangements for joint package	Central and local government, and business sector organisations responsible for implementation.	The governance group is likely to involve joint leadership from central and local government, and business with a total of 8 members. Terms of Reference for the governance group would need to be established and approved by Minister(s).	Relatively easy and quick (less than 6 months) to implement develop Terms of Reference and establish the governance group.	Some funding could be required for meeting attendance and costs.	Would be accountable for implementation of the EV package, and help drive ongoing uptake as the market continues to evolve.