



Options for procurement of electric vehicles

Reason for this briefing	You have requested preliminary advice on options for procurement of electric vehicles (EVs), following decisions on electric vehicles by Cabinet Economic Growth and Infrastructure Committee on Wednesday 16 March 2016. The paper provides several options for assisting in the procurement of EVs.
Action required	Review this paper and discuss your feedback with officials at your meeting on Monday 21 March 2016. This will also inform your discussions with Hon Steven Joyce on Monday at 1.30pm about procurement issues.
Deadline	Monday 21 March 2016
Reason for deadline	This is on the agenda for the Officials Meeting scheduled for 21 March 2016 and for your meeting with Minister Joyce.

Contact for telephone discussion (if required)

Name	Position	Telephone		First contact
		Direct line	After hours	
Erin Wynne	Manager, Policy Programme	[REDACTED]	[REDACTED]	Y
[REDACTED]	Principal Adviser	[REDACTED]	[REDACTED]	

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

Date:	18 March 2016	Briefing number:	OC03906
Attention:	Hon Simon Bridges (Minister of Transport)	Security level:	In-Confidence

Minister of Transport's office actions

- | | | |
|---------------------------------------|---|--|
| <input type="checkbox"/> Noted | <input type="checkbox"/> Seen | <input type="checkbox"/> Approved |
| <input type="checkbox"/> Needs change | <input type="checkbox"/> Referred to | |
| <input type="checkbox"/> Withdrawn | <input type="checkbox"/> Not seen by Minister | <input type="checkbox"/> Overtaken by events |

Purpose of report

1. The briefing provides preliminary advice on options to assist with the procurement of electric vehicles (EVs) for discussion at the Officials meeting on Monday 21 March 2016. This will also inform your discussions with Hon Steven Joyce on Monday at 1.30pm about procurement issues.

Background

2. Following decisions by the Cabinet Economic Growth and Infrastructure (EGI) Committee on Wednesday 16 March 2016 around the EV package [EGI-16-MIN-0034 refers], you asked for further advice on options around procurement of EVs. This paper builds on the advice set out in the Cabinet paper, and represents early thinking on how procurement of EVs might be able to progress. The paper has been prepared by the Ministry of Transport with assistance from officials at the Ministry of Business, Innovation and Employment (MBIE).

Options to assist procurement

3. It is widely recognised that the high upfront cost of EVs is a major obstacle to their uptake. In the absence of direct subsidies, there are other options to reduce the price of EVs in New Zealand. One of the key ideas in the Cabinet Paper was to conduct a joint public-private procurement process in order to generate a large potential order for EVs (consistent with the co-creation process with industry and the Sustainable Business Council (SBC) and other stakeholders). The combined order could then be used to negotiate a lower price. This remains an option, discussed below, but there are also other options that may be considered to assist in the procurement of EVs.

Ministry of Business, Innovation and Employment (MBIE) NZ Government procurement process

4. The NZ Government Procurement Vehicles (NZGP) Centre of Expertise (CoE) has provided the following advice.
5. The CoE has started some early market engagement and has considered its appropriate level of involvement in each of the initiatives. It will lead the procurement work with a view to aligning it with all of Government (AoG) vehicle contracts. It is willing to support the other initiatives, but is mindful of available resources. It can provide the necessary contacts, such as agencies wanting to participate in the trial and source the vehicles for the trial.
6. A trial purchase of 25 EVs could begin in the 2016/17 financial year, provided vehicles are available that meet the Government's requirements. For example, the mandatory requirement, set by NZGP, for AoG passenger vehicle classes is a minimum five star NCAP rating. Some potential vehicles, for example the Nissan Leaf, sold domestically in Japan, is currently not five star. Neither Ministry wishes to see safety compromised. Five star safety should remain a core requirement.
7. If the timing demands, the first 25 vehicles could be purchased as an off contract one-off buy. Assuming vehicles that meet relevant criteria can be found, we understand that purchase could happen reasonably quickly.
8. The trial initiative would be closely linked to the steps required to establish an EV vehicle class within the AoG vehicles contract, which would include defining the requirements including any required/minimum vehicle specifications. Timing will play a critical role in the

process used to create the AoG EV class. While the AoG vehicles contract allows for the addition of new classes under the AoG panel suppliers, the current suppliers do not currently have fit for purpose vehicles for the EV class.

9. If the creation of the new class is delayed, until one or more of the current providers can meet the requirements, then an open procurement process would not be required. Establishing the EV class earlier will require a robust but light touch approach to market to identify viable supply chains and vehicles.
10. Through the AoG Vehicles contract, the CoE has gathered information on Government and private sector purchasing interest for EVs. The CoE included EVs as a viable vehicle type in the return to market for the contract in 2015. It is actively working with suppliers (contracted and non-contracted) and has knowledge of the supply market and how the current vehicles align to Government requirements. As part of the procurement process NZGP would look at how the private sector will be able to benefit, including as part of the proposed bulk procurement process.
11. The Ministry will continue its discussions with the CoE on the implementation of EGI's decisions, should these be confirmed at Cabinet on Monday 21 March 2016.

A Ministerial delegation to Japan to encourage sales of new EVs

12. In mid-2015, you visited a number of Japanese vehicle manufacturers and sought to encourage them to sell EVs in the New Zealand market. Having a Minister visit these companies was valuable, as it showed New Zealand's high level of interest in EVs. We consider a further visit, with a delegation of potential buyers, and relevant organisations such as the SBC and the Motor Industry Association, would have a positive effect. It would assist in negotiations to secure vehicles not currently available in New Zealand, especially if there was a commitment to purchase a specific quantity of vehicles. Public and private commitment to purchase EVs through the bulk procurements process is going to be central to the success of the package, and achieving the new targets, especially in the first few years.
13. A visit comparable to the one in 2015 would build on the good relationships established on your previous visit. It could be arranged with around eight weeks notice. However, to be effective, work would need to be done in New Zealand to get commitments to purchase the vehicles. This may take longer to achieve and mid-2016 could be a realistic timeframe for such a visit to take place.
14. We would expect that a direct meeting would have the most benefit with Nissan and Mitsubishi Motors, who are the market leaders for EV sales in Japan. Neither Toyota nor Honda currently have full EV offerings and sales of their plug in hybrid vehicles have low sales (less than 50 vehicles per month in second half of 2015), compared to the Leaf and Outlander (both around 1000 units a month). No other Japanese manufacturers are currently selling EVs in Japan. This suggests there may be supply constraints from other manufacturers, for even modest orders.

UK used vehicle market could provide a source market

15. Although Japan is an obvious choice for New Zealand to purchase both new and used EVs from, EVs are still not being sold in large numbers in the Japanese market.
16. Drive Electric has approached the Government on several occasions offering to facilitate the purchase of used electric vehicles from the United Kingdom. Relatively large numbers of EVs can be purchased at 18 months to 2 years old from commercial fleets. Because of the subsidies for purchase of EVs in the UK, and refunds on taxes if the vehicles are exported,

UK EVs can be secured at prices that make the vehicles directly competitive with conventional powered equivalents when sold in New Zealand. For example, Drive Electric has provided indicative costs that showed an 18–24 month old Nissan Leaf imported from the UK, could be sold in New Zealand for around \$35–\$40,000.

17. It may be effective to source used vehicles from the UK. This could be done relatively easily through a tender process, once orders had been identified.

China is also a source of EVs

18. A delegation was in New Zealand in early March 2016 with representatives of the Machinery Sub-Council of the China Council for the Promotion of International Trade, seeking to promote trade in EVs. Representatives of Chinese EV manufactures, such as the electric bus manufacturer BYD have also separately been in New Zealand in mid-March. Both groups have shown strong interest in working with New Zealand to enable export of EVs from China to New Zealand. There may be benefit in a Ministerial level visit to China to follow up on these preliminary discussions to consider the suitability of Chinese vehicles for New Zealand. In particular, we would need to confirm whether Chinese made vehicles meet all our requirements around safety.
19. We understand that you are scheduled to attend a China Mining conference in Tianjin 22-25 September 2016. It may be possible for you to also discuss EVs as part of this trip. If you do wish to discuss EV procurement it would require further consideration as to who it would be beneficial to visit. Alternatively, the Trade Council identified a large EV conference, the China Energy Saving and New Energy Vehicle Technology Exhibition, 13 – 16 October in Beijing¹ as an event you may wish to attend.

The Government could underwrite the risk of buying used EVs

20. As already noted, used electric vehicles can already be purchased from the United Kingdom (and potentially from Japan as well) at prices that are comparable to conventional vehicles of an equivalent age.
21. While there is no major barriers to prevent the import of the used EVs at this time, such as those promoted by Drive Electric, the prices for most are still well above those most private motorists are willing to pay for used vehicles. Most newly-imported used conventional vehicles sell for less than \$15,000. This suggests that only commercial buyers are likely to purchase near-new EVs. We have been advised that the lack of warranty from the original manufacturer and lack of knowledge about expected depreciation and subsequent residual values on the second hand vehicles has meant there has been little interest in this trade so far.
22. To overcome this barrier the Government may be able to offer to underwrite both the risk covered by a conventional mechanical warranty and for depreciation on resale. This could be done directly by the Government (depending on the agreed scope and parameters, this could be through the proposed contestable fund) or, alternatively, it could be done by facilitating a commercial provider to cover the risks at a commercial rate. We do not know how successful this approach would be in overcoming market concerns and would need to work further with sector experts to develop this.

¹ <http://www.evautoe.com/plus/list.php?tid=15>



Appointment of an EV champion and promotion of the package

- 24. It is clearly beneficial to be able to bring together a package of EVs sales. This enables us to present a manufacturer with a large enough sale as to be able to offer reasonable discounts and to secure vehicles not currently available in the New Zealand market. We expect that this process could be successfully managed by MBIE (or another part of Government if desired). However, the approach might be enhanced if either a specialist vehicle marketer or alternatively a high profile figure, from the business community, was engaged to assist with the process. This person would need to understand Government objectives and standards. The role of the champion would be to meet with potential purchasers and encourage them to be part of a bulk purchase deal.
- 25. We have not assessed costs, but to work well, this role would need to be near full time for several months in order to be beneficial. The person would need to work closely with MBIE's CoE on this task.
- 26. We have been advised that you will be asked to speak to a large meeting of vehicle fleet managers in Auckland in September 2016. This type of meeting will provide a good opportunity for you to promote the role that fleets can play in promoting the uptake of EVs and in meeting the target.

Recommendations

- 27. The recommendations are that you:
 - (a) **note** that, in cooperation with officials from the Ministry of Business, Innovation and Employment (MBIE) we have prepared some initial thinking on options for procurement of electric vehicles Yes/No
 - (b) **note** that this is prepared as a basis for discussions with officials at the meeting on Monday 20 March 2016 Yes/No
 - (c) **note** that this may also assist you with your discussions with the Hon Steven Joyce scheduled to take place on Monday 20 March at 1.30pm



Principal Adviser


 Erin Wynne
 Manager, Policy Programme

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MINISTER'S SIGNATURE:



DATE:

19/3/16