TRANSCRIPT

STANDING COMMITTEE ON THE ECONOMY AND INFRASTRUCTURE

Inquiry into electric vehicles

Melbourne — 9 November 2017

Members

Mr Bernie Finn — Chair
Mr Khalil Eideh — Deputy Chair
Mr Jeff Bourman
Mr Mark Gepp
Ms Colleen Hartland
Mr Shaun Leane
Mr Craig Ondarchie
Mr Luke O'Sullivan

Participating members

Ms Samantha Dunn
Mr Cesar Melhem
Mr Gordon Rich-Phillips

Witnesses

Mr Yves Noldus, Head of Corporate Affairs, Marketing and Investor Relations, SG Fleet.

The CHAIR — This committee is hearing evidence today in relation to the inquiry into electric vehicles, and the evidence is being recorded. Mr Noldus, welcome to our inquiry and to the public hearings of the Economy and Infrastructure Committee. All evidence that is taken at this hearing is protected by parliamentary privilege; therefore you are protected against any action for what you say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege. I would ask you to state your name, your position, your company and the city in which you are based and then to address the committee for 5 to 10 minutes, and then we will open to questions.

Mr NOLDUS — My name is Yves Noldus. I appear before the committee as a representative of SG Fleet Group Limited. My role at that company is corporate services and investor relations executive, and SG Fleet is a specialist provider of integrated mobility solutions, including fleet management, vehicle leasing and salary packaging services. Allow me to read out my opening statement, which will take approximately 8 minutes. I will start by explaining why SG Fleet is a relevant contributor to this inquiry. I will then respond to the terms of reference, to which we believe we can make meaningful contribution.

SG Fleet's involvement with electric vehicles, or EVs, occurs in two contexts: one, as a provider and manager of EVs and EV fleets to corporates and government departments; and two, as a provider and manager of EVs for individual drivers under a salary packaging or novated lease structure. Currently SG Fleet already provide EVs for corporate customer fleets in New Zealand, and we expect to do so in Australia in the near future. As EV penetration increases, the number of EVs selected by novated lease drivers, which is currently minimal, will also increase.

Given the high cost, the limited EV model range and the specialised maintenance and charging requirements, private and public organisations will tend to outsource the purchasing and maintenance of EV fleets to fleet managers and leasing companies such as SG Fleet. The absence of specialist integrated fleet management and support capabilities would greatly complicate the large-scale use of corporate EV fleets were it not for such fleet managers.

From the perspective of the use of EVs as personal vehicles under salary packaging arrangements, SG Fleet utilises its purchasing power to help minimise the so-called sticker shock which is commonly attributed to EVs at this stage. It is estimated that currently an EV costs approximately $10 000 more than an equivalent ICE, or internal combustion engine model, in Australia, predominantly due to battery costs. It should be noted that corporations and consumers generally have concerns about the resale value of new-generation or new-technology vehicles. This was also the case at the time that hybrids were introduced. SG Fleet and its peers offer lease structures that allow corporations and individuals to transfer this residual value risk to the leasing provider.

It should be noted that SG Fleet has operations in the UK, where the government actively supports the uptake of EVs and other low-emission vehicles by offering tax incentives. For example, individuals who salary sacrifice to obtain a personal vehicle obtain significant tax savings if they opt for a lower emission vehicle. This arrangement has strongly supported EV uptake in the salary sacrifice segment and is evidence of the positive impact of incentive structures.

In summary, SG Fleet is a relevant contributor as a potential manager of the more complex needs of EV fleets and a potential contributor to the lowering of EV costs and the concerns about EV residual values, and it is a company that has direct experience with EV incentive structures in other jurisdictions.

To the terms of reference, with regard to the substantial benefits of the widespread uptake of electric vehicles to the environment, we take this as a given and refer to specialists on the matter for further evidence. With regard to options for supporting the uptake of privately owned electric vehicles, some of the following comments will be familiar by now, I am sure. Our starting question must be: what drives uptake amongst members of the public? EV penetration is largely defined by what we term consumer pull and legislation push, with the latter being most critical in our view. Consumer pull on demand is driven by consumer acceptance of a new technology and the cost of acquiring the vehicle. Legislation push is direct or indirect government support, be it via emission regulations, purchase and use incentives or support for the development of a charging infrastructure. As I said, in our view legislation push is the overriding and critical factor in the early stages of EV penetration.

Consumer acceptance of the EV concept is high in principle as there is no substantial change to the driving or usage experience versus ICE vehicles, and there is a clear environmental benefit, which is increasingly important to the members of the general public.

From an international perspective costs will come down as manufacturing of EVs increases and battery costs decline. Battery pack prices fell 80 per cent from 2010 to 2016 from a level of US$1000 per kilowatt hour to $227 per kilowatt hour and are expected to dip below US$100 by 2025. On a total-cost-of-ownership basis, private EVs may equal ICEs by 2025, possibly earlier for higher utilisation fleet vehicles. However, evidence abroad suggests that a lowering of the vehicle cost itself is not the primary driver of uptake at an early stage.

Which factors do drive uptake more directly? The first influence is emission restrictions. They are increasingly severe as urbanisation increases. However, they generally stop short of forcing the public into EVs and simply drive a greater focus on emissions of less costly ICE vehicles or the adoption of hybrids. Direct or indirect incentives have been a critical driver in other countries. There is no evidence of significant EV penetration or growth in countries without a government incentive scheme. These incentives take the form of registration or purchase tax discounts, access to special parking or traffic lanes, or discounted electricity pricing. A combination of incentives appears to be most effective.

An example in this case is the state of California. In that state buyers receive a clean vehicle rebate, which is a one-off payment from the state government at purchase of approximately US$1500 for a hybrid or US$2500 for a full EV. The purchaser also receives a federal tax credit of US$3000 to $7000. Finally and importantly, EV drivers are given access to so-called high-occupancy vehicle lanes comparable to our public transport or T2 lanes. Compare this to Australia, where no such incentives exist and where still — given the high cost of EVs — purchasers are effectively penalised by the luxury car tax in many cases.

A further impediment to EV uptake is the lack of charging infrastructure. Private enterprises at this stage are discouraged by low economic viability when EV numbers are limited, but in turn EV numbers stay low because of the limited infrastructure. Establishing a critical scale to attract private sector investment in charging infrastructure may require initial support or incentives from the government.

It should be noted that EV uptake will in any case vary across geographies. Adoption rates will initially be highest in developed densities where there is less dependence on driving range and more restrictive emissions standards or traffic restrictions combined with a better charging infrastructure.

With regard to the applicability of electric vehicles in public transport bus fleets and public sector fleets, in our view the adoption of EVs is likely to accelerate most with selected applications in controlled environments — for example, public sector or corporate fleets — as this may to some extent negate current impediments to uptake by individual members of the public. Increased applicability of EVs in a fleet set-up is a consequence of both the cost and operational benefit of a fleet structure. From a cost perspective, there would be lower vehicle acquisition costs per vehicle due to the larger number of vehicles being acquired. Efficient fleet management will also optimise individual vehicle usage and lower the total cost of ownership per vehicle and for the entire fleet to close the cost gap compared to ICE vehicles currently.

In terms of operational benefits, larger fleets justify the investment in back-to-base charging infrastructure. Closed-loop fleets, such as bus fleets or corporate vehicle pools, also equate to shorter distances travelled and a lesser need for multiple recharging locations.

It should be noted that corporations are increasingly being required to report on their environmental impact. If companies or public bodies operate large fleets for pooled or individual transport, CO_2 emissions constitute a significant part of their environmental impact, and consequently the reduction of emissions via the electrification of parts of their fleets will be a significant contributor to their impact minimisation efforts.

A number of Australian companies have replaced ICE vehicles with hybrids in the past — for example, for mobile bankers — and are likely to introduce EVs where and when the necessary incentives and support infrastructure are available. A similar approach may be taken by public bodies if emission reduction targets are set at a municipal, state or federal level. A case in point is the UK, where the government's support for low-emission buses is part of a £600 million package of measures by 2020, plus £270 million was announced in the 2016 autumn statement to support the rollout of low-emission cars, taxis and buses and supporting infrastructure.

In summary, we believe that the introduction of EV fleets by government departments and corporates will help establish the necessary scale to make EVs a realistic option for the wider public.

With regard to options for supporting the manufacturing and assembly of electric vehicles in Victoria, I refer to other inquiry participants for this point.

Finally, with regard to the applicability of electric vehicles to the car-share providers market, the concept of car sharing and the structure of car-share providers make EVs relatively more suitable compared to ICE vehicles for this market segment. For example, car sharing is more prevalent in an urban environment, where EVs will have fewer range challenges due to shorter trips and a more developed charging infrastructure. The fixed drop-off, pick-up locations of most car-share providers make the investment in matching recharging stations more viable. Car-share fleets can be sourced and managed more efficiently than individual vehicles, and finally, car-share vehicles will have greater per-vehicle usage rates, thus reducing total cost of ownership.

The uptake of EVs by car-share providers will depend on the impact of currently high EV prices and the insufficient charging infrastructure on their economic model. In other words, it will depend on the same government initiatives and incentives as for members of the public. Again, I refer to the UK for an example of government support for EV uptake by car-share providers. The transport body called Transport for London aims for 1 million car-sharing users by 2025, with 50 per cent of the car-sharing fleet to be electric vehicles.

That concludes my statement.

The CHAIR — Thank you very much indeed. Listening to your statement, there was one thing that seemed to be repeating, and that was the need for support — incentive, call it what you will — from the taxpayer. Will this happen? Will we have a viable, an expanded, EV industry in Australia without support from the taxpayer?

Mr NOLDUS — As in the manufacturing industry?

The CHAIR — Manufacturing and beyond, other areas as well.

Mr NOLDUS — Well, starting off with the charging infrastructure, clearly that is not something that you can outsource to a foreign manufacturer. Effectively they need to be assembled locally. Given the nature of these charging stations, there is certainly potential to build up a manufacturing capability to produce these units locally. Just like petrol pumps, this is something that requires a high volume ultimately and clearly also replacement on a regular basis, so that certainly would boost manufacturing activity in that space, provided the technology —

The CHAIR — Can that happen without the government paying for it?

Mr NOLDUS — Well, as I said, there is this, unfortunately, chicken-and-egg problem where you cannot expect companies to take a five-year view that if they build enough charging stations, people will then buy electric vehicles and then they will get the returns. Unfortunately and equally, people are reluctant to buy electric vehicles because they believe there is not a sufficient number of charging stations, or at least they are not distributed equally across the country. Hence our comment that at the beginning there needs to be some support to build that infrastructure to a level or scale where it overcomes that reluctance of the individual member of the public to actually purchase an EV. Once that gains momentum you will see obviously for-profit organisations starting to invest because their return horizon shortens substantially.

The CHAIR — How much do you think we would be looking at the government putting in to make that happen?

Mr NOLDUS — I cannot advise on the possible cost of it, but clearly again the recommendation we are making is that if the government or government departments themselves start using electric vehicle fleets with charging stations, that will produce economies of scale to then deploy that infrastructure to the general public.

Ms HARTLAND — I was interested in your comment about the fact that obviously you manage a number of fleets, but your aim is to reduce the cost to government and government departments and others. How would electric vehicles assist that situation?

Mr NOLDUS — As was said earlier, clearly from a fuel cost perspective there is no doubt that eventually it will become a cheaper option, pending the establishment of a charging infrastructure and pending the lowering of the cost of vehicles over time. As I mentioned, the cost of batteries is coming down; it will make the vehicle cheaper. In a fleet context the great benefit of electric vehicles is that effectively you have less of an issue about the recharging. If you have a vehicle pool — say, if the Victorian government has a fleet of electric vehicles behind this building — with a charging station clearly there are sufficient economies of scale to utilise that charging station for a large number of vehicles. By virtue of having a fleet of such vehicles you do get significant benefits, which you effectively get with traditional ICE vehicles as well.

As an organisation we manage large fleets for government departments and corporations. The fact that we have a visibility across the use of that fleet means that we know where every car is. If you walk out of this building, we know where you can get a car and we can make sure the car is out the front. We can obviously take care of the maintenance and the servicing of those cars. We make sure that there is not a car sitting in a different building in Melbourne that never gets used and then the other cars are being used extensively to breaking point. These efficiencies are inherent to fleet management, and electric vehicles will fit into that concept. We believe that that will effectively mean that we can generate greater cost savings.

Ms HARTLAND — As governments take on that role of being the major purchasers of electric vehicles, then that presumably would help the market in general and it would bring down the cost, and then ordinary people like me could actually purchase one.

Mr NOLDUS — Yes. As I said, it is a combination of incentives. There is the purchase incentive and there are other incentives, such as the use of transport lanes. But ultimately to get over that hump of the infrastructure investment, if the government starts and some corporations — as they do — start building up a fleet of vehicles, the scale of manufacturing increases. It makes much more sense from an economic point of view for for-profit providers to build charging stations, and once you get to that point it then gets momentum and, as you say, it becomes more viable for the individual member of the public to purchase and use electric vehicles.

Mr LEANE — Thanks for assisting us today and giving us your time. You mentioned in your submission that initially it was difficult, as far as resale, for hybrids. Has that been overcome now? Is that something that is not —

Mr NOLDUS — That has been overcome to some extent. I recall, let us say, five or 10 years ago when the first hybrids became commonplace that one of the biggest fears was around the battery technology. Stories were told, which proved incorrect, that these batteries would fail after a certain amount of years. That has been overcome to an extent. I think if you talk to members of the public today about full electric vehicles, you will hear some people say, 'Yes, I'm not so sure about that. I'm not sure where that technology is going'. So again it is about building up that momentum and seeing them in your environment, and in the transport environment generally, operate without problems. That will build sufficient confidence in members of the public to start purchasing these vehicles. Again, coming back to my earlier point, if they see that the federal or state or municipal governments start using these fleets, we have found that to be a big promotional factor for adopting by general members of the public.

Mr LEANE — Does SG Fleet have many electric vehicles in any of the fleets that you manage now?

Mr NOLDUS — In New Zealand we have, yes. It is clear from the queries we are getting from existing customers, both private and public, that there is an increased interest, but again it then gets to the point about, 'Do I need a charging station? How do I organise that fleet?'. For example, what we do in New Zealand for certain quite well known companies there is we have small fleets of BMW electric vehicles that are being utilised there, and they are looking at expanding that over time.

Mr LEANE — I suppose the interaction with your company is the request from the client around the types of vehicles they would like the fleet to be managed in.

Mr NOLDUS — So the client will come to us and for the client generally the starting point is the cost of operating a fleet — again, it is the same for government and private; They all say, 'Listen, we have a fleet of X number of vehicles. How can we reduce the cost of that fleet in total?'. Interestingly that also involves reducing the number of vehicles in that fleet. If you can do what I described about knowing where the cars are and where they need to be for people to get around in a particular department, you probably do not need

1000 cars, you can do it with 900. That means our customer makes a saving. If you apply that to alternative modes of power, be that electric or hydrogen, you can take that further, because there are other savings to be had. Particularly in the context of vehicles that are still technologically a bit little more complicated, the ability to have a fleet manager to look after that fleet is greatly beneficial. You would not want as an individual at this point of time — you would not roll an electric vehicle into your garage and open the hood and start tinkering with it. As vehicles become more sophisticated, the management of fleets of such vehicles requires the value-add that fleet managers provide and the know-how they can provide.

The CHAIR — The economic benefit to government, I suppose, of having electric vehicles — fleet vehicles that you would provide — on what scale would that benefit be, if indeed any?

Mr NOLDUS — In monetary terms? I think, again, I am not in a position to answer that with any degree of accuracy because it depends on the scale of such an effort, but what is clear is that if you compare the vehicle technologies, the power technology, as I think the previous speaker pointed out, there is no doubt that over time there is a benefit there, let alone an environmental impact. Having the introduction of electric vehicle fleets will effectively allow for the reducing of the overall costs of that fleet due to the fuel technology. But you have to see electric vehicles in the context of a number of other patterns in the automobile industry. We talk about autonomous vehicles, we talk about driverless and semi-driverless and different stages of driverless vehicles. Electric vehicles, because they have a central control unit, lend themselves a bit better to that.

What we are discussing here is what is the benefit but at the same time what is the inevitability of such technology ending up on streets and the need to actually lead that and support that for the benefit not just of the individual customer or government department but ultimately for the public at large. In terms of safety, the environment and cost, this is something that is inevitable that we are heading in that direction, but unfortunately I cannot give you an exact number about what the savings would constitute.

The CHAIR — Thank you very much, Mr Noldus. I understand that you have joined us from Sydney today. We appreciate that particularly. We thank you for your contribution to our hearings today. You will receive a transcript in about two or three weeks time. If you could just proofread that and see if there are any small mistakes or anything that you can pick up and let us know, that would be great. We do thank you so very much for joining us today.

Mr NOLDUS — You are welcome.

Witness withdrew.