

TRANSCRIPT

STANDING COMMITTEE ON THE ECONOMY AND INFRASTRUCTURE

Inquiry into electric vehicles

Melbourne — 13 February 2018

Members

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Mr Craig Ondarchie

Mr Luke O'Sullivan

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Witnesses

Ms Marissa O'Halloran, Project Manager, Goulburn Broken Greenhouse Alliance.

The CHAIR — This committee is hearing evidence today in relation to the inquiry into electric vehicles. The evidence is being recorded and is also being broadcast live on the Parliament's website — so smile! Welcome to the public hearings of the Economy and Infrastructure Committee. All evidence 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 ask you to state your name and organisation and suburb or town in which you are based for the record, then speak to us for about 5 to 10 minutes, and then we will open up to questions.

Ms O'HALLORAN — Fabulous; thank you. My name is Marissa O'Halloran. I am the project manager with the Goulburn Broken Greenhouse Alliance. I am based in rural Victoria, in Shepparton, in central Victoria. Thanks for the opportunity to speak with you today and provide a bit of a regional perspective on electric vehicles. Our Goulburn Broken Greenhouse Alliance is working on a state-funded project that is called building the case for electric vehicles in regional council fleets. As a bit of background, this project is assessing the suitability of electric vehicles via a feasibility study that has been completed here and a business case which is due for completion by the end of March for 11 regional council fleets. The greenhouse alliance is one of a number of alliances throughout the state. We operate over a very wide geographic area in the Goulburn Broken and north-east regions of Victoria. We encompass 11 councils, we work with a couple of catchment management authorities and we also have DELWP Hume as a partner with the alliance. Our mission at the alliance is to, in partnership, raise the awareness and capacity of the region to respond to a changing climate, with our vision for a prosperous, resilient and well-informed regional community that is adapting to a changing climate.

The idea for this particular project originally came from a tourism perspective. Our region has many popular tourist destinations but virtually no public EV-charging infrastructure at all. So the first question was, 'How could we actually facilitate metro EV owners to come to our region?', and the second question that developed from an increased understanding of electric vehicles was, 'How could councils actually become involved with EVs with their fleets, and could we actually look at improving the financial costs of our fleets through using EVs?'. The fact that our 11 councils have come on board with this project demonstrates the opportunities and the benefits that our councils see in moving forward with this technology. All of these 11 councils provided both financial and in-kind support to the project, along with state government funding, so they really were putting their money where their mouth was to have a look at this.

A positive feasibility study has been returned, which has basically found that fit-for-purpose EVs are suitable to replace internal combustion engine vehicles in our council fleets, and the business case for the financials is due by the end of March, so I am sure we would be able to provide you with a copy of those.

Ms DUNN — Terrific.

Ms O'HALLORAN — Through our project we found two main themes when it comes to a successful uptake of EVs. We have got firstly the issues surrounding public infrastructure and education, and secondly the issues surrounding the internal council fleets and emissions. So I will begin with some general learnings from the project so far on facilitating a successful uptake and then touch on some specific issues for local governments.

Infrastructure and range anxiety — this came out as probably one of the key concerns about electric vehicles. We have observed that there is a real concern about the lack of public charging infrastructure in our region. We generally have roughly between 40 and 100 kilometres between any major towns, and so it is a real and legitimate concern for moving into this space for our vehicles. We have also discovered that there is a real lack of understanding about EVs in terms of the kilometre range and how the charging works — both home and public charging, and the charging infrastructure types. Most people that we talk to currently think that the public chargers will basically be like a current service station that you will basically pull up to and charge with but that it will just take a lot longer, rather than understanding the concept that you would generally be charging at home, perhaps at work, and then using the public infrastructure as a sort of interim measure for the longer trips.

We in our region have a handful of Tesla charge points. They are located at Euroa and Wodonga, and there are a few going in at wineries and cafes around the Wangaratta and Shepparton region, but we have no other public charging infrastructure at all. We cannot get other carmakers up to the region at all. We have also observed the need, I suppose, for a universal charge point network. Obviously Tesla are the first primary adopters in the region and so they have gone through and done that, but there is no other charge point there so we cannot

support any other vehicles at this stage. Any network needs to really consider that universal charge point infrastructure.

Linked to that is the need to understand who is responsible for funding the public infrastructure. Our councils are all operating under very, very tight budgets and rate capping, and most of our member councils are actually classified as resource constrained, so they are going to find it very difficult to fund public infrastructure for charging directly through their budgets. However, our councils also do have access to the best potential charging sites, as they are the ones that are responsible for the parks, the facilities and the car parks, and we often have grid-connectable electricity to a lot of these sites as well. One of the larger expenses is that connection to the grid for charging infrastructure, and we have that currently.

We have found through the project that we really need to start that initial discussion with relevant agencies — state and federal agencies — as to how we are actually going to get this infrastructure in, because it is going to be big. Working across 11 regional councils, it is going to be a big effort to get them all in and to install them in safe locations as well. Obviously we do have people who are coming through at all hours of the day, and we need to make sure that whatever location is chosen for the public charging infrastructure is actually a safe location.

We also have had some interesting discussions regarding planning for new developments and infrastructure projects and things like that. Most people are not thinking EVs at this stage in terms of project management, whereas we have been trying to get some discussions in that — if you are going to be putting in new facilities, this is the time to actually be considering your EV charge point locations and that sort of stuff because it is actually a lot cheaper to do it in the earlier stages rather than trying to do it as a retrofit later on. So these conversations are highlighting that an effective public charging network linking all of our towns within the region really is a priority if you are going to get a successful uptake of EVs through our region.

Vehicle costs and model availability have come as probably the second really big issue. We have currently got very limited fit-for-purpose vehicles in Australia with pretty high initial purchase costs, so the likes of Tesla and BMW are probably out of the range of most of our regional buyers and particularly out of our council's, from a council perspective, so to support EV uptake we really need incentives for manufacturers to actually bring out suitable vehicles to Australia and reduce the up-front costs for buyers. We know that EVs should be cheaper to run in the long term due to reduced fuel costs and maintenance requirements, so it is really just trying to get over that hurdle of the high initial purchase price that is an issue.

Currently we have pretty much negligible promotion of EVs in our region, but we do have some EV owners in our region. Most potential customers are actually sent down to Melbourne, so for a successful uptake of EVs in regional areas we really need to have those localised sales support networks servicing. Time and safety constraints need to be considered for our residences. Melbourne can be anything from an hour to four hours each way as a drive, so you cannot just whip down to Melbourne to get your car serviced. It is just not an option, so we really need to make sure we have got bases in the regional area to support it.

Fuel security is another issue that has been identified through the project. We are currently very vulnerable to increased fuel prices or a disrupted fuel supply. We have generally got pretty poor public transport options in our region, so we are very heavily vehicle reliant — that is for both our passenger and our heavy vehicles — and any increase in fuel costs is virtually impossible for us to offset. Any fuel disruption would be disastrous for the region really because we have got a lot of heavy trucks, a lot of agricultural machinery and the like, so any option to look at alternatives to power vehicles such as electric vehicles makes a lot of sense. We also have a very high solar capacity in our region, so that is another really strong potential for our region, looking at alternatives. We really have no options other than to pay whatever the cost of fuel is, so any alternative option would be welcomed.

Quickly moving to a council perspective, all our councils are working to reduce their greenhouse gas emissions in order to reduce the impacts of climate change on our communities. All our councils have agricultural sectors, and they are already being impacted on by climate change. Our regions are particularly vulnerable to further impacts, and so all our councils are keen to decrease their emissions. All our councils have environment officers, and often their role is to actually assess current emissions, impacts council operations have and how any improvements can be made.

Council vehicle fleets, although they are not generally the highest pedigree of emissions compared to other energy sources — usually that is the gas and electricity — are a constant measurable contributor to our council emissions, and therefore they are a target for our energy reductions. They are also a constant contributor to our council costs, and particularly as our regions often have high fuel costs just because of the distances we have to travel, that is reflected in our fuel costs for our councils. Some of our councils are looking at and have trialled hybrid vehicles to try and address this, but some of them have not as well. Fuel costs are an issue, an ongoing issue, for our councils.

The electric vehicles have the potential to reduce emissions through their more efficient energy conversions, and we also have the potential to power our vehicles through solar. We have got very strong solar potential. We have got a lot of space so we can actually put solar installations in, and the solar radiation is actually higher than in areas such as Melbourne, so we actually get a more economical return on investment having solar up north.

Lastly, there are health benefits of EVs. It is probably not as much of an issue in regional areas, the pollutants from tailpipes of internal combustion engine vehicles, but it certainly still is a factor in our regions. Our councils try and promote healthy living, active activity and walking, and when you are walking next to a road and you have got a big truck belting out diesel and stuff like that, it is not exactly pleasant for walkers and cyclists. So that is another area where councils do try to provide a healthier lifestyle.

In terms of public sector fleets and buses, we have a lot of agencies that work in rural areas as well. They have got depots and dedicated car spaces, so vehicles are always returning to that central base, which makes it ideal for the EV charging. We will all have contracted fuel suppliers as well, so it is just as easy to charge in your own depot as it is to go out and try to find your contracted fuel supplier, particularly if you are travelling down to Melbourne and back, because we do have contracts for our fuel.

Most councils and agencies have dedicated fleet or procurement managers whose specific role it is to manage the fleet, so they can ensure the maximum financial benefit from EVs. Part of our project is the business case looking at the whole-of-life aspects. So it is not only the purchase price; it is the ongoing fuel cost and maintenance requirements. That will be completed shortly. EVs in theory, because of their lower maintenance requirements, can actually stay on the road for a lot longer, so we do not have to pull the vehicles out of our fleets for repairs and maintenance because they should have less maintenance requirements.

Our councils very frequently work in partnership, so we are happy to look at options such as bulk procurement for electric vehicles, and this is a space we are also investigating with another greenhouse alliance. We know that the rough rule of thumb for a bulk procurement is about 500 vehicles, which is more than our councils on their own can deliver, but working with other agencies and councils we would certainly be interested in looking at that bulk procurement option to get into the EV space. Buses also present a large opportunity for electrification in our region as well.

Again, they are returning to a central base and they are often idle during the day between the morning and afternoon school runs, so they can charge during the day, optimising solar power. We currently do not have many car share options really in our region. Uber does not really operate in our region at all, so it will just be taxi operators. It is a very exciting opportunity. Our councils are pretty excited to be part of this project and are really looking forward to the business case being finalised and a reduced emissions future.

The CHAIR — Thank you very much indeed. Could I start off by asking: this project that you are running, how much have you been funded by the councils so far?

Ms O'HALLORAN — The councils put in I think \$2000 each plus in kind, and Local Government Victoria was \$75 000.

The CHAIR — And how much will we be looking at to actually make your vision a realistic option?

Ms O'HALLORAN — Provided there is a positive business case, for the next step we will be looking at potentially working with NAGA, another greenhouse alliance, to look at a bulk procurement option. There are difficulties in bulk procurement, particularly within councils, because we do have procurement guidelines and policies, and there are a lot of issues that will need to be sorted through that. We are looking to potentially put in a funding application to look at the costs of going to tender and putting in a full tender. By the time you get the public infrastructure in, so public infrastructure plus council infrastructure, you would be looking at at least one

to two charge points per council if you are going to get the electric vehicles in. So it is not going to be a cheap process, but I think the councils are happy. If they are working in a regional partnership with some co-funding, it is a step that we would look very closely at.

The CHAIR — Do you have a ballpark figure that you are looking at?

Ms O'HALLORAN — Not at this stage. We are having the business case. Give us a month, and the business case will be in. That will give us a really good view, because we are waiting on the figures.

The CHAIR — We have heard that electric vehicles are quite feasible in the city. Given the extra distances that you have mentioned that have to be travelled in regional areas, how realistic do you think it is for electric vehicles to become commonplace in regional areas?

Ms O'HALLORAN — As long as you can get to about a 200-kilometre range I think you could do it quite easily. They are not huge distances, but they are enough that you just have to consider your trip and where you are going to fill up, which is what we do anyway. Whenever you are travelling you are always aware of where your next big town is, but it is just more that if you get caught in between you are not going to be carrying your jerry can to get you through to the next town. It is something we factor into our driving anyway. But I would say if you are in the 400-kilometre range you would be fine. No worries at all.

Mr O'SULLIVAN — Thank you for coming in. I just noticed that all of the councils that you cover are within my electorate in northern Victoria, so it is great to see you down here today. I want to ask a question which sort of follows on from the last lot of questions that I asked. I acknowledge David Jochinke, the president of the VFF, is here. It is certainly relevant to his industry as well. It does seem that the rollout of electric vehicles, particularly in the city, is going to certainly happen, and in other countries happening sooner rather than later. What do you see as the challenges that are really going to face your group of councils, which are all underpinned by the agricultural sector? What are the challenges for electric vehicles in terms of the broader use in the agriculture sector out on farms?

Ms O'HALLORAN — That is something that we have just discussed quite a bit within our group of councils. Most regional councils will have vehicles that are just little run-arounds for your council and staff. We have a lot of vehicles that need four-wheel drive towing capacity, and that is the real big gap in the market. We know that the Mitsubishi Outlander does have towing capacity, but it is a very limited range at the moment. I see that as a big one. Most of our residents will have four-wheel drive utes for a very good reason, because they need them for work purposes. So I see that as a real gap. The towing capacity — we have got to have vehicles that can tow and have the strength to do that. So that is a real gap, and I would love to see another car on the market that actually fits that. Small vehicles tend to pick up against that larger towing capacity vehicle. That is a gap.

Mr O'SULLIVAN — It is even more of a challenge when you look to larger on-farm machinery such as tractors.

Ms O'HALLORAN — Yes. Hydrogen has been floated as one of the options there, because obviously you do not want to be taking up all of your payload with batteries. You really need something else when you are harvesting and things like that. The big vehicles is another one. We have a lot of trucks around Shepparton. It is on one of the main truck routes between Melbourne and Sydney. There is a lot of trucking and a lot of headers, tractors and all that sort of stuff. That is a real gap, and the only one I have heard so far is the hydrogen. It might be an option to look into that. I know CSIRO is looking at doing some work with hydrogen vehicles and things like that, which can also take up the excess solar capacity, so any excess renewable can go into hydrogen and can then be stored. That would be one that I would like to see a bit more done in, because it is a real gap.

Mr O'SULLIVAN — And a concern that I guess I have that I can see coming is that it is quite easy to roll all this infrastructure out in particularly the metropolitan areas, and you can see a path forward for some of the larger regional towns, although some of the smaller regional towns are certainly going to be a real challenge, let alone the rural ones, but I just hope that we do not just see a situation with the on-farm element of it. With David Jochinke's header, for instance — a large consumer of energy — there is no charge point anywhere in the corner of his paddock. So I just hope that that element of our industry does not sort of fall between the cracks and just get put in the too-hard basket in terms of their requirements into the future so that we are left in a situation where it is just on a little island over there that people in the city ignore because it is just way out in the

rural areas and no-one really worries about out there. That is a real hole in the system that I see that we have got in front of us.

Ms O'HALLORAN — Yes. A conversation I just had with one of the councils yesterday was about the interest in looking at things like biodiesel as a way of getting around that sort of issue. If we can get the waste to energy sort of things sorted, then the biodiesel angle of it would be something that councils would also look at.

Mr LEANE — I would imagine that in council fleets there are a number of vehicles that may sit at a depot during daylight hours.

Ms O'HALLORAN — Yes.

Mr LEANE — The depots that are in the councils you are working with, do some of them have solar panelling?

Ms O'HALLORAN — More and more there has been a real shift in the past couple of years, and solar power is actually going in really, really quickly in a lot of our regional councils.

Mr LEANE — So the environmental benefit, as far as the electric vehicles that you charge there, has been maximised due to that?

Ms O'HALLORAN — Yes. There are a lot of conversations going on about the cost and when it is best to feed into the grid and when it is best to draw from the grid. There are all those sorts of things that need to be maximised, but one thing that the councils do have is that generally we do not use our facilities during the weekend. So we know that a least two days a week whatever solar installation you have is going to be using minimal drawdown for actual council facilities. So you know you have got two days a week generally where that is all going into the grid, so it is an opportunity to charge vehicles over the weekend as opposed to during the week if that needs to be. But there will be a calculation as to whether it is more cost effective to use your energy on-site or send it to the grid. The technology is available for us to make those decisions.

Mr LEANE — You spoke about — you did not say mess — the mess around charge anxiety, where if a motor vehicle is charged all weekend you have got a case where it does not necessarily need to be charged on Monday night.

Ms O'HALLORAN — Yes.

Mr LEANE — So it could be a few days until it actually needs to be —

Ms O'HALLORAN — That is right, depending on which vehicle it is. It is very much going to be a fit-for-purpose vehicle. Particularly at this stage with the vehicles we have available to us, you will be choosing you vehicles carefully.

Mr LEANE — You mentioned barriers, where you see federal and state governments could assist in public infrastructure as one of the barriers, I suppose, outside of the council depots and the council. Are there any other recommendations you would give to our jurisdiction about how we could assist this to come to fruition to the point that you are trying to get to?

Ms O'HALLORAN — Certainly in our region the infrastructure was one of the key ones. If we can safely go from one region to the other, that is probably the biggest barrier that we have seen at the moment, plus the vehicle availability, because we really just do not have those fit-for-purpose vehicles. It is trying to reduce the upfront cost of the vehicles. Particularly when councils are doing their procurement, it has got to stack up financially and we have got to be very careful about the impression we are giving to our ratepayers. It has got to be a vehicle that is fit for purpose and in a suitable price range. We cannot really afford to be paying double for a similar vehicle, so we have got to be very careful about how we are using ratepayer money and getting value for money for that. It then comes in with the charging infrastructure as well, making sure the charging infrastructure gives us that benefit as well. The business case will hopefully give us the tool to be able to actually compare all those and make sure the choice is for the benefit of council ratepayers. Having said that, all of our councils really invite that leadership space and to be seen as early adopters to help communities come along for the ride. If they can see electric vehicles in council fleets and council officers using them quite happily, then we do have that leadership role in the community. So councils probably initially would be able to

pay a little bit of a price premium, provided we can show that leadership and that they are safe and effective, and that we have got the network that supports uptake.

Mr LEANE — You mentioned in your submission that in the catchment of these councils most of the larger towns are about 50 kilometres apart.

Ms O'HALLORAN — Yes.

Mr LEANE — Yes, so the range issue is not a huge issue when you are talking 50 kilometres.

Ms O'HALLORAN — It is not, but you would like to be able to get there and back before you charge. You would not want to have to drive from, say, Shepparton to Benalla and have to charge while you are at Benalla. You would want to get there and back. There are the time constraints for meetings and things like that.

Mr LEANE — Depending I suppose on what activity you are doing when you get to the —

Ms O'HALLORAN — Yes, and that is where, if each council had its own network, then you could confidently go to another council office and charge while you were waiting.

It has been quite interesting. Euroa council have got the Tesla chargers just in their back carpark, and every day they are like, 'Yes, we have Teslas charging there'. It is just a constant stream of Teslas, so the need even within the communities is there because they are the only charge point pretty much between there and Wodonga. Wodonga often have chargers as well, so those councils are actually seeing the benefit. Most of those people that stop there will then go to the park, go down the street, go to the bakeries, do all that sort of stuff, because they are in a really good spot. The travellers are using it as an opportunity, and that benefits the town because they are actually stopping and charging there.

Mr LEANE — That was going to be my last question, but a follow-up to Euroa: do the people that charge their Teslas get charged?

Ms O'HALLORAN — No.

Mr LEANE — There is no fee.

Ms O'HALLORAN — No, at this stage Tesla have free charging for a certain time period, I believe. That is a relationship that has worked really well, I think, for that particular town, having the Teslas come into town. Apparently they had been at the service station and it was not really working, so they moved them into town and it is actually much more beneficial for the town, having them in the town rather than at the service station. It is a much nicer spot to stop for people. Wodonga and Euroa, which have the Tesla stations, are getting a lot of benefit from having them there.

Ms DUNN — Thank you for your presentation today. It is fascinating actually in a regional context. I just wanted to follow on from those stations. Tesla are covering the cost of electricity at the moment in relation to those stations? You can get back to me if you do not know.

Ms O'HALLORAN — Yes, I will get back to you on that one. They are definitely covering all the installation costs.

Ms DUNN — Yes, so they are installing them. The land is public land?

Ms O'HALLORAN — It is council land.

Ms DUNN — Yes, I guess it remains council land and they just let Tesla put this infrastructure —

Ms O'HALLORAN — Yes, sort of like a planning lease arrangement on it.

Ms DUNN — Okay, I am just interested in how that sort of works. I am wondering, across those councils, how many vehicles are you actually talking in terms of the fleet?

Ms O'HALLORAN — For this study we have looked at almost 600 vehicles in terms of our light vehicles. We did not include the heavier vehicles because we do not have vehicles to replace them.

Ms DUNN — No, because there are no options, so it is really ones that could be replaced by electric vehicles.

Ms O'HALLORAN — Yes.

Ms DUNN — In terms of procurement, I am wondering — and this is hard because I guess you have got a lot of different councils that you dealing with — are there environmental criteria as part of your procurement specifications?

Ms O'HALLORAN — Yes, different councils will have different fleet policies basically, and some will specify. We have got an example of Shepparton council. They have a hybrid vehicle policy. If you are looking to add another vehicle to the fleet, it has basically got to be hybrid for environmental reasons essentially. They have got an energy reduction target, so that all feeds into that. Others are just basically fit for purpose but, yes, there is scope.

Most councils are very interested in the energy efficiency of the vehicles and will rate them. I think a lot of them use the Green Vehicle Guide use as a basis. It is a driver of that, but depending on the council will affect how strictly they adhere to those sorts of things and the policy and how clearly it is stated. Something that was picked up in our study was that the councils probably should look at strengthening some of the wording around the vehicle fleet policies to help drive that so that when it actually does come to budget time, you can actually go to fleet policy and say, 'Well, it does say this' and that fits in.

Ms DUNN — And you can look at return on investment.

Ms O'HALLORAN — Yes.

Ms DUNN — I guess the business case is probably the missing link at the moment in terms of telling the story in relation to that.

Ms O'HALLORAN — Yes, we are waiting on that. We are very keen to see it. Yes, that is right. So as part of that they have developed a tool so that we can vary the input costs of it because we know that it is a very sort of changing space — to give the councils the ability to actually just plug in different details and vary kilometres and fuel costs and things to see how that business case will then stack up before they purchase vehicles.

Ms DUNN — Okay. Fantastic. A broader question: you said at the start of your presentation that really the motivation to undertake this was around tourism.

Ms O'HALLORAN — Yes, the initial discussion started at a tourism level.

Ms DUNN — Has that, I guess, continued? I mean, your story around people stopping and charging and then spending money in the town is probably a pretty compelling one. Is that still part of what you are trying to achieve out of this particular study?

Ms O'HALLORAN — Yes, absolutely. Because of the distance we are from Melbourne it really could be a deal-breaker to not actually have that infrastructure in. And a lot of our towns are tourism based, so you would imagine you would go from one to another and explore the region, and without that effective infrastructure there that is not going to happen. So it is still a very key part of what the councils are doing in terms of getting the public infrastructure in to be able to get the tourism in.

Ms DUNN — And kind of cement it as part of the regional economy.

Ms O'HALLORAN — Yes. This study has also shown that we do not actually have that many local EV owners. There are a few but there is not that many, so the public network would not be essentially for them at this stage; it would be more about drawing new visitors to the region.

Ms DUNN — Okay. Terrific. Thank you.

The CHAIR — Thank you very much for your contribution to our deliberations today. You will receive a copy of the transcript in the next week or two — if you could have a quick look at that and see if there is

anything that jumps out at you. If there is, let us know. If not — I am sure that will be the case — please leave it, and that will be great. Thank you very much for coming in today.

Ms O'HALLORAN — Thank you.

Witness withdrew.