

TRANSCRIPT

LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

Inquiry into Electricity Supply for Electric Vehicles

Melbourne – Thursday 12 February 2026

MEMBERS

Georgie Purcell – Chair

Richard Welch – Deputy Chair

John Berger

Gaelle Broad

Katherine Copsey

Moira Deeming

Tom McIntosh

Evan Mulholland

Sonja Terpstra

WITNESSES

Jo Oddie, Acting National President, and

Brendan Davies, Secretary, Victorian Branch, Australian Electric Vehicle Association.

The CHAIR: I declare open the Legislative Council Economy and Infrastructure Committee's public hearing for the Inquiry into Electricity Supply for Electric Vehicles. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the Aboriginal peoples, the traditional custodians of the land we are gathered on today, and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee or who are watching the broadcast of these proceedings. I also welcome any other members of the public watching via the live broadcast.

We will just have committee members introduce themselves to you first, and we will start down this end with Mr Mulholland.

Evan MULHOLLAND: Evan Mulholland, Northern Metropolitan.

Moira DEEMING: Moira Deeming, Western Metropolitan.

Richard WELCH: Richard Welch, North-Eastern Metropolitan region.

The CHAIR: Georgie Purcell, Northern Victoria.

John BERGER: John Berger, Southern Metro.

Gaelle BROAD: Gaelle Broad, Northern Victoria.

Tom McINTOSH: Tom McIntosh, Eastern Victoria.

The CHAIR: Wonderful. Thank you. We also have Mr Davis here. He should be back soon. He just ducked out of the room.

Thank you so much for appearing before us today. All evidence taken is protected by parliamentary privilege as provided by the *Constitution Act* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing, and then transcripts will ultimately be made public and posted on the committee's website.

For the Hansard record, could you both please state your full names and the organisation you are appearing on behalf of?

Jo ODDIE: Great, thank you. My name is Joanne Oddie, and I am representing the Australian Electric Vehicle Association. I am a director of the association and currently the Acting National President.

Brendan DAVIES: I am Brendan Davies. I am representing the Australian Electric Vehicle Association, and I am the Secretary of the Victorian branch.

The CHAIR: Wonderful. Thank you so much. We now welcome your opening comments but ask that they are around 10 to 15 minutes maximum to ensure there is plenty of time for discussion and questions.

Jo ODDIE: Great. Thank you so much. We really welcome this opportunity to present at this public hearing, which is about a super interesting topic. The Australian Electric Vehicle Association has advocated for

electric propulsion across the full breadth of the transport sector since 1973, so for more than 50 years, and this includes light commercial vehicles, trucks, buses, trams, trains, boats, electric bikes, motorcycles, scooters, cars and aeroplanes – looking forward to those. So electrification of all forms of transport has been our purpose for a long time. We are a federated association with branches in every state and territory and a national board comprised of eight directors who represent each of those states and territories. We represent more than 2100 members, 380 of whom are registered in Victoria. Our members are everywhere across Australia. We are run by volunteers, and we represent EV consumers. We do not represent EV makers or other EV sector actors, although we often work with them productively. AEVA is not politically aligned, but we are aligned around and advocate for sound policies that enable the transition to electric transport and the many benefits that can be derived. Our members hold and share a significant body of knowledge on electric vehicles, and we share this through EV drive days, EV-related presentations and webinars, our national conference and many other processes and a fantastically informative website, in fact.

Our policy and advocacy group is highly skilled and comprised of hugely capable people experienced in designing and advocating for robust government policies. We aim to contribute to all relevant state and territory government and federal government reviews and inquiries, although sometimes as volunteers we miss some of those. Our policies meet the needs of our current members who drive, ride and benefit from electric vehicle technology, and they have been crafted with the needs of the wider Australian public in mind, considering inclusion, equity, urban and regional needs, light and heavy transport and public and private transport needs.

We appreciate the many benefits of EVs, such as reduced air pollution and reduced burden on the public health budget, reduced carbon emissions and the improved national security that we gain through improved liquid fuel security and resilience – currently we import \$40 billion of fuel annually. We acknowledge that EVs contribute to household, community and grid energy resilience, and this is really important of course with increasing extreme weather events. We acknowledge that EVs contribute to reducing the cost of living. They are cheap to run and now cheap to purchase too. Finally, they are great to drive.

On the EV transition, in 2025 there were 103,000 additional new EVs on Australia's roads, an increase of 12 per cent on 2024 new sales. Right now we are at around about 12.3 per cent of new sales. By comparison, Norway has the highest global rate of new EV sales at 99 per cent, but they are still only 30 per cent of the fleet, so there is some way to go there – even more so for Australia. Good quality second-hand EVs are now available, too, at very accessible prices. Battery testing was mentioned in your earlier session, and what we are learning with great news and great relief is that batteries are actually outlasting the bodies of the cars. Research out of Dalhousie University in Canada by Professor Jeff Dahn has shown that batteries are in great condition for up to more than 200,000 kilometres. It is pretty exciting news. The battery will outlast the body of the car.

We have shared this with you for later consideration. This is the chart of EV uptake. The curve is leaping up. It will be interesting to see what happens next. This chart, which we will also share later, is the typical adoption curve for technology. The innovators, the early adopters and the early majority are at these parts of the bell curve, and we need different policy mechanisms for each stage. So who are the early majority? We would describe ourselves as an association as the innovators. We have been around for 50 years, so our early members, some of whom are still going and ticking along, have been EV converters. The current wave of membership is really about early adoption, and we are moving into the early majority. The early majority adopt before the average person, but they do take more time to make the decision than the innovators and the early adopters. They do not like complications; they just want it to work. That is our next challenge. Some incentives are still appropriate for the early majority and are needed, but they may differ to those used to date.

On EV charging, which I am sure you are well across, 85 per cent of AEVA's members do most of their charging at home and often source from excess home solar PV. But the reliability and location of public charging infrastructure remain vital. It needs to be well thought through, co-designed with communities and suit long- and medium-distance travellers. For the early majority, they need great, reliable public charging with a mix of charging speed options in suitable locations – trickle, slow, fast and rapid charging. For private charging, they need to be able to charge in strata, and there are regulatory and technical challenges there. We like to think about the right to charge. We need kerbside charging for inner-city Melbourne and other inner-city areas in, say, Ballarat or Geelong, and local government plays an important role in this. New South Wales have just published a really useful guideline on kerbside charging. Home solar is really important in the equation too, and we note that there is a strong correlation between solar PV adoption and EV ownership.

In our submission we reinforce that electric vehicles provide for a highly flexible load when charging and a potential reservoir of energy which can address spikes in demand when parked. They absorb abundant low-cost renewable energy during the day, and, critically, they do not need to demand energy from the network during peak demand periods. We can learn how not to do that. They are a key part of the energy transition with the increasing amount of distributed and community energy resources. Finally, using locally produced zero-emission electricity for transport improves Australia's resilience to global energy prices. That is it. Thank you.

The CHAIR: Thank you so much. We will now move to questions. I will start with Mr Mulholland.

Evan MULHOLLAND: Cool. Thanks for coming in today. There are many claims, including your own, that EVs are becoming the cheapest in the world and no longer need purchase subsidies, which is fantastic. However, if we include the true cost of a battery EV, including factoring in the billions in infrastructure and grid upgrades, there are some estimates that the real cost of fuelling an EV is significantly higher than your regular gasoline. Why should the Victorian taxpayer fund things like destination charging grants if the market is already as robust as claimed?

Brendan DAVIES: Well, firstly, I will say we are not claiming the market is robust. It is still very early days, so we still need incentives to kickstart it. If you were to stop any incentives now, it would really halt and cause massive issues with uptake of EVs in the future. So incentives are still needed to kickstart it, to get momentum rolling. Look, we do not support removing all incentives. That would have adverse effects on EV uptake. In our view we need incentives. And it also does not have to be the Victorian taxpayer. EV infrastructure is not only government-funded. It can be from different levels of government. It could be from private investment. In our submission – I cannot pull out the exact number – we encourage businesses, not only government but businesses as well, to install charging infrastructure so that their employees can charge during the day. That may be a business investment. Maybe the government is partly invested, but it is not only the taxpayer who foots the bill for everything.

Jo ODDIE: On destination charging, tourism is an important business in Victoria. You know that. It has of course been particularly stressed this summer. Destination charging is not actually ubiquitous out there yet. There is a really good reason for tourism businesses to co-invest, maybe with a little bit of government support – and that is often the case, early incentives for early adopters – to actually get destination charging out there. It is going to make their businesses more attractive to those who are driving EVs, and it is going to actually increase the confidence of EV drivers to be out there doing tourism in Victoria.

Evan MULHOLLAND: Thanks. A big topic of conversation has been road user charges and fuel excise and electric vehicles not being part of that. You support a universal road user charge only if fuel excise is retained as a sort of highly efficient pollution tax. Given that fuel excise revenue currently funds roads, how is it fair to wait for a federal RUC while EV drivers continue to use Victorian roads without contributing to the specific tax that maintains them? You only have to drive around the outer suburbs or rural and regional Victoria to see the deterioration of our roads.

David DAVIS: Experience the potholes.

Jo ODDIE: Yes, I do love Victorian potholes, and I am fully supportive of paying for road maintenance. Let us go back to the beginning. The fuel tax excise has been around for a long time. It is Australia's oldest tax. It has not been hypothecated to road funding since 1992. It is a big myth that it pays for road funding. When it was first created, it was created as a revenue generation measure. We are meeting with the Treasurer's office about this on Monday, the federal Treasurer. That is the first myth that we would like to bust. You can look at a Parliamentary Budget Office paper on the fuel tax excise. EV drivers do pay registration, they pay for licences and they pay stamp duty, so they are paying. Our principle is that we support good funding for road maintenance. That is missing at the moment. I met with Minister King on this back in November, and there are certainly issues around it. I also attended the national roads congress.

Evan MULHOLLAND: Great. I just want to get –

Jo ODDIE: Let me answer the question. We are happy to pay. If there is going to be a road user charge, it needs to be universal. The fuel tax excise is not paying for roads. It needs to be universal, based on mass – heavy vehicles do the most damage – and based on distance.

Evan MULHOLLAND: Thank you. You argue against distribution businesses owning charging assets to protect competitive retail. If private companies are failing to install chargers in black holes due to lack of profit and you want to begin banning those distribution businesses from doing it, aren't you essentially advocating for the state to, I guess, leave behind rural Victorians to protect a preferred market model?

Jo ODDIE: No. What we are advocating for is that – it is actually unfair to the market. We believe that there is a role for DNSP charging in those black hole charging areas. If DNSPs, distribution network service providers, are to be un-ring fenced, let us call it that, so that they can own and operate charging points, it needs to be done really equitably. They need to have that community service obligation of installing chargers in black hole charging places. At this stage we support the principle of competition for the establishment of charge points, but if there are areas where it does not work, I think it is a possibility. But in principle, overall, we think it should be a competitive market.

Brendan DAVIES: I will add to that. From an end user perspective, it does feel like there are an unnecessary number of hurdles to get chargers installed, particularly in the regions, with DNSPs taking – I think I saw a figure somewhere – up to 18 months to approve certain sites. From an end user perspective, if a DNSP who owns all the poles and wires does have the ability to put in chargers, we as end users worry that it will end up creating more of a monopoly on charging. They own all the infrastructure, so they will try to push out other competitors. So keeping the ring fencing legislation on at the moment will hopefully encourage good competition and not create a monopoly on charging, which ultimately benefits no-one.

The CHAIR: Great. Thanks, Mr Mulholland. We will go to Mr Berger now.

John BERGER: Thank you, Chair. Thank you both for your appearance this morning. I am interested to understand some of the common myths that you talk about in your studies about EVs.

Jo ODDIE: Okay. All right. Well, we probably need to look up our *Little Book of EV Myths*. There are many. One is that there are graveyards of batteries out there or that there will be graveyards of batteries. We are really very conscious of the need to reuse batteries if they are able to be reused. As I mentioned earlier, the life of a battery is actually really long. The science on lithium ion battery life is that it has a long life. That is a big myth, that your battery will never work in the future. That is one of the myths. One of the more recent myths, if you read our *Little Book of EV Myths*, is about how EVs have low resale value. I think when you have been an early adopter of a technology, you are often buying in at the high price end; you might have spent \$70,000 on something that you can only sell for \$20,000 now. So there is that issue for the early buyers, but what we are seeing now is that resale values are fantastic. I have been following some values for a particular model that I am interested in on the second-hand market. They are not cheap, so resale values are there, and people are buying those cars.

Brendan DAVIES: Would it be possible to send through, on notice, the *Little Book of EV Myths* for the committee to review in their own time? For all the myths, that might be easier. I think we are –

Jo ODDIE: I know you are interested in some. Another one is about battery fires. EV batteries have amazing battery management systems. We have a letter from the Insurance Council of Australia, I think it is, that basically says they are not concerned about fires with EV batteries; they are more concerned about fires with ICE vehicles, so that is another classic myth too. Our little book is actually accessible only online as opposed to being downloadable, but you can look up those myths there. Is there one that you have in mind?

John BERGER: No, I was just reading some of your material; you just hear of a few of them, and I was wondering if there were any more.

Jo ODDIE: There are reams of them. What we find is that we are often, particularly in the print media, responding to myths that are being generated and turning into negative sentiment against EVs. So we are actually commissioning some research in that negative sentiment space, or hoping to anyway, and we are finding – the Global EV Alliance had a survey last year of 25,000 people. It was a large amount of people who responded to that survey, and they are seeing misinformation as one of the biggest deterrents to EV adoption.

John BERGER: Can you tell us a bit about charging etiquette?

Jo ODDIE: Charging etiquette – Brendan, do you want to talk about that?

Brendan DAVIES: I can also refer you to AEVA's website; there is a page on charging etiquette, but that is a thing that does need improvement. Basically, charging etiquette is you do not leave your car sitting in a charging bay not charging. I would argue they are commonsense principles. You have finished charging, you are charged to 80 per cent if on a fast charger, but because of technical reasons the battery charge rate slows down above 80 per cent and then it takes longer and other people get angry. Generally speaking, from observations on the ground, it is fairly good, because most people are early adopters and innovators at the moment, so they know the challenges and they are conscious of these things. However, regarding information about charging etiquette going forward, the early majority buying EVs will likely need education about what to do and what not to do so that we do not have people – correct me if I am wrong, but I believe it is illegal, and it falls into the same category as parking a petrol car in an EV charger, if you have just parked your EV and are not charging. That is an offence, and you can be fined. So information like this –

John BERGER: Do you think it would discourage people from buying EVs if there are those types of behaviours around charging?

Jo ODDIE: You can usually get around all these things. Most EV drivers – everyone I talk to – use PlugShare. It is an app. You can log in to PlugShare and say, 'I'm charging, I'll be back in 20 minutes,' and then stick to that plan. The other thing is that while your car is charging, you are constantly getting updated on it. You can easily check the level of charge it is at, and you will go back and check that as a conscious, community-minded EV driver.

Brendan DAVIES: There are people in all sorts of cars who will park in places that they are not supposed to and just leave their car outside a petrol bowser when they have gone into the shops. I do not know how common it is, but that does not necessarily discourage people from buying petrol and diesel cars. I do not view etiquette as a major hold-back for EV uptake. Yes, statistically, most people charge at home or do the majority of their charging at home. There are some people – I think one of our members had commissioned a survey with a different group, and of the people who answered that survey there was a non-negligible percentage who had never used a DC fast charger; they just did all of their charging at home. So it is not a major drawback, but it is something that does need to be looked at.

John BERGER: Thank you. Thanks, Chair.

The CHAIR: Thanks, Mr Berger. We will go to Mr Davis.

David DAVIS: A couple of things. Your organisation is a 1973-founded not-for-profit organisation, largely run by volunteers?

Jo ODDIE: Absolutely only run by volunteers.

David DAVIS: Do you receive any grants from government?

Jo ODDIE: No.

David DAVIS: I just wanted to hear that.

Jo ODDIE: No, we have not. We may apply for some; I do not know what for. But no.

David DAVIS: Yes. That is all right. That is very good.

Jo ODDIE: We are purely funded through membership fees, which are low, by the way, if you want to become a member.

David DAVIS: Yes, I might. I might do that.

Jo ODDIE: We encourage you.

David DAVIS: Yes. Very good. Victoria and the other states: we have been a laggard in rolling things out in Victoria. Is that a fair description?

Jo ODDIE: No.

David DAVIS: You think we are we are ahead of the pack?

Jo ODDIE: What are we talking about?

David DAVIS: About the rollout of distribution. New South Wales is better, we heard.

Jo ODDIE: Yes, but only slightly.

David DAVIS: Only slightly?

Jo ODDIE: Yes. Until the start of 2023 I lived in New South Wales for 10 years, so I have watched that space closely. I also watch Western Australia closely. I think Victoria is travelling pretty well. You have got a publicly funded charging network that has some reliability issues. You have supported EVs with incentives earlier on. So no, I would not call Victoria a laggard.

David DAVIS: Yes. All right.

Brendan DAVIES: I think everyone – every state, the whole country – needs to do better, but Victoria in comparison with everyone else is no –

David DAVIS: Well, everyone I talk to says New South Wales is far ahead – so you have a different view?

Brendan DAVIES: When it comes to the regions' DC chargers, from memory they were done quite early on, and so at the time that was all right. But compared to other states and territories who have waited on a bit longer, they have done things differently – so other states have learned from what Victoria has done. Victoria did start early; however, other states who started later learned things and made improvements upon Victoria.

Jo ODDIE: Let us call it a lumpy transition everywhere. There is nothing smooth about it, but there is a lot that is working.

David DAVIS: I am interested in ways to smooth that transition. One of the things you mentioned is the risk of fires, and you are in possession of a letter from the insurance council – is that right?

Jo ODDIE: I believe so. I believe our ACT branch has a letter that covers off on –

David DAVIS: We would welcome that, because I have had representations from a number of people, including owners corps, that are worried. They are worried about insurance. I am just saying you have got a body –

Jo ODDIE: Totally. It is one of the myths.

David DAVIS: But it is also not a myth in the sense that they are actually talking to their insurer and they are being told no. So the owners corp then tells the people in the tower or in the body, 'No, you can't put a charger in.' They are not necessarily taking a position, they are just in a spot where they feel if they cannot get insurance, it is not responsible. So I am just looking at how we fix this particular problem.

Jo ODDIE: Okay. Thank you. I am happy to speak to that. Our ACT branch last year did a comprehensive analysis of the strata management legislation in the ACT. What we want to do this year is a national project that looks at all of the strata legislation across all of the states and territories of Australia and actually puts that together and makes policy recommendations for each state. Yes, I will endeavour to provide that letter to you.

David DAVIS: Yes. That would be good. But do you know that what I am saying is actually replicated many times over?

Jo ODDIE: Totally. We are really concerned about strata and enabling people to actually charge in strata. It does not mean that you have to have a hundred EV chargers in a strata residence. It is just having one or two places where you can charge and –

David DAVIS: But if you are the OC, it does mean you have got to have insurance.

Jo ODDIE: Yes.

David DAVIS: You cannot have your place burn down and no-one is insured.

Jo ODDIE: And it will not burn down, because there is more risk from your ICE cars than your EVs.

David DAVIS: You can understand the poor old little local owners corp is going –

Jo ODDIE: Oh, totally. So we will help you with that. We want to help owners corps understand that there is very little risk.

David DAVIS: But they are getting told stuff by their insurer.

Jo ODDIE: Yes.

David DAVIS: That is why I am interested in that letter.

Jo ODDIE: Yes.

Brendan DAVIES: I will also add to that there is a difference between e-rideables and electric vehicles, and this is where things can also get confused. E-rideables have a higher risk of fire. Electric cars – there is a whole system in the car dedicated to making sure the battery is at the right temperature and it is safe and all of that. The other smaller e-rideables have – there have been numerous cases of fires due to poor charging, poor battery management systems, cheap imports. So these are two different things, and they can and I have seen them be confused in the past. Statistically electric cars, electric road vehicles – their charging is incredibly safe. But this is where from an insurance perspective, not fully understanding the difference between these two can cause confusion for consumers and insurers and businesses.

David DAVIS: Okay, thank you.

The CHAIR: Thanks, Mr Davis. We will go to Mr McIntosh.

Tom McINTOSH: Sure. Thanks for both being here, particularly as volunteers. Given your role with consumers, I want to ask you some questions about potential consumer behaviour and what might drive them, if I can. Ms Broad outlined concerns – rightly so – about materials and where they come from with EV cars. Equally, we have heard reports in recent months, whether it is Russia using its petroleum exports to fund wars or whether it is authoritarian regimes. Do you think – compare that to having Aussie jobs, local generation of transmission, people being able to generate on their own rooftops – that is helping to drive people towards EVs, that equation, when people consider purchasing?

Jo ODDIE: I believe that there is a strong correlation between EV adoption and having solar PV, yes, if that is the question.

Tom McINTOSH: Yes, and also knowing that – I will come back to fuel imports.

Jo ODDIE: I was in a meeting last week, and that was on the electric car discount actually. But one of the bodies in that room had evidence that there is strong correlation – particularly Werribee, apparently. That is one of the highest adopters of EVs and solar.

Tom McINTOSH: Yes. I understand Nepal had a petroleum blockade some years ago and they were unable to access fuel, and now it is one of the world leaders, with 76 per cent uptake in new EV purchases. Do you think in some sort of geopolitical event where there was a slowdown or a blockage of fuel coming to Australia we would see a massive EV uptake at that point which might really impact projections that you have?

Jo ODDIE: Well, I hope so. And we have done analysis on –

Members interjecting.

Jo ODDIE: Yes, thanks. We have done analysis on the liquid fuel security situation. We actually had a military security expert present a webinar to us last year on liquid fuel security too. If you became a member, you would be able to watch that webinar.

Tom McINTOSH: I will keep that in mind, thank you.

Jo ODDIE: It is a great webinar. I am just selling memberships here – not really; encouraging, let us say. But that is great information. I mentioned earlier we have very poor fuel resilience. I think the figure is we are meant to have 90 days of fuel in Australia. We often only just keep that in storage. I can provide this paper to you on notice – remind me, Brendan. But we currently spend \$40 billion a year. Australia spends \$40 billion a year –

Tom McINTOSH: Yes, I want to come back to that point.

Jo ODDIE: importing fuel from overseas manufacturers. And yes, we are importing fuel that actually comes out of Russia. So the idea that we can shift some of that usage to electric vehicles will increase our liquid fuel security.

Tom McINTOSH: And despite what we have been told about the long weekend being taken – I worked construction for 10 years as an electrician. Do you think tradies – we have seen massive uptake of battery operated tools and stuff around people's homes, everything around the home, but particularly on sites. Being able to pull in with a ute with all their batteries in the back and go camping, pull up with 50 to 60 kilowatts under the hood anywhere, roll out their fridge, all their devices – do you think we will see a massive uptake of people, whether it is camping or trades, wanting to use EVs? We have seen the BYD Shark has been so popular.

Brendan DAVIES: We have already seen it with the uptake of the Shark.

Jo ODDIE: Yes, the Shark is a hybrid. It is not full battery electric yet. I think it has got 100 or 200 k's of battery range. We want the Shark to get better, because we are quite keen on full battery electric vehicles. You are absolutely right. As soon as that niche is filled – and it is one of the gaps in the supply market at the moment, to have a full battery electric vehicle tradie ute.

Brendan DAVIES: This year we will have I think at least two full electric utes come on the market, and I think there are already one or two on the market.

Jo ODDIE: Yes. We are assuming that demand for those, as they enter the market, will be strong, because the demand for the Shark was mind-blowing: 4500 to 5000 sales on the first day that it was on sale.

Tom McINTOSH: Just alongside the generation being in Australia and Aussie jobs, we have talked about the \$40 billion to \$50 billion of purchasing and the impact that has on our trade deficit. Once people really get their head around how that impacts our trade deficit, our budget for our nation, do you think there will be a sense of pride, a sense of nationalism, knowing that using petrol (a) puts us at geopolitical risk, (b) is bad for our budget and (c) we can have jobs in Australia? Do you think that will kick in to the point where there will be a mass push to electric vehicles to support our economy and to support jobs in our nation?

Brendan DAVIES: Maybe, but ultimately, from our observations, from speaking with many people at community events, the reason that people go electric is for cost: 'It's cheap. I can do it at home. I don't need to ever go to the petrol station again.' I do not think that level of big picture will factor into it much. It is just going to be 'It helps my hip pocket. I'm getting an EV, done.'

Tom McINTOSH: But perhaps decision-makers should keep it in mind, though.

Jo ODDIE: Yes. I think it is a really good thing to look towards. Currently, all sides of government – no-one is prepared to take on the liquid fuel security thing. It is not front of mind for shadow defence or defence, really, whereas it should be, because it is a pretty big issue for Australia's national security. We have written to defence and shadow defence on the very topic, with fully informed letters, and we are happy to provide copies of those too if they are of interest.

Tom McINTOSH: Thank you.

The CHAIR: Thanks, Mr McIntosh. We will go to Mrs Deeming.

Moira DEEMING: Thank you. Thank you for coming in. I am interested in knowing a little bit more about the organisation. You have said that you work collaboratively with the government, and sometimes apply for

grants, and with industry partners. It says that you can receive sponsorship, and you were talking about a research project. Can you just tell me a bit more about that?

Jo ODDIE: Okay. Fundingwise, our only form of income at this stage is through memberships. To my knowledge we have not received government grants – I can find out about that historically – but certainly not at the moment. We operate with our own members' money. We have a request for quote out for a research project on negative sentiment in the media against electric vehicles.

Moira DEEMING: With industry partners who also happen to align, are there sponsorships from them for any research or anything like that?

Jo ODDIE: No. We have what we call business memberships, but they are really small. A business membership is still very low dollars, and it does not involve any perks for the association.

Moira DEEMING: Sure.

Brendan DAVIES: It involves perks for members. So business members can, say, if they are selling chargers, provide AEVA members a discount or a discount on car rental, those sorts of things. But the business members we have do not have any sway over the policy.

Jo ODDIE: Our national board – you have to be an individual member to be a director. You cannot be a business member as a director, so they do not influence decision-making.

Moira DEEMING: Sure. When you say a business membership, is that still just an individual, or are they registered as a business that has got that business membership?

Jo ODDIE: Well, they would have an ABN and –

Moira DEEMING: But as in it is the name of the business, or is it the name of the person?

Brendan DAVIES: Name of the business.

Moira DEEMING: Right. Great. You distinguish yourself from lobby groups on the basis, as you said, that you represent your members only, so you do not act for commercial or third-party clients, which would require registration as an official lobby group and have all those conflict-of-interest disclosures and reporting requirements and things like that. I just want to confirm with you that you do have conflict-of-interest protection measures in your organisation, as you have outlined. But if there are any more, can you tell me about that?

Jo ODDIE: No, we have conflict-of-interest measures in place for all of our board meetings. As directors we declare up-front any conflicts of interest at every board meeting where there is likely to be a conflict of interest on a particular topic. Members are invited – well, asked – to declare those conflicts of interest.

Moira DEEMING: Great. That is good to hear.

Jo ODDIE: We are a well-governed association.

Moira DEEMING: I am very glad to hear it. I think I will leave it there. Thank you.

The CHAIR: Thank you, Mrs Deeming. We will go to Mr Davis.

David DAVIS: A second round – that is very nice. I am happy to do that. I have got more.

The CHAIR: No, sorry, that was my mistake. We will go to Mr Welch.

Richard WELCH: Thank you, Chair.

The CHAIR: I am trying to go back to front in order from last time.

Richard WELCH: Good morning to you both. Thank you for coming in. I think I will get away from geopolitical considerations of whether locals use EVs or not to more practical questions on the DNSPs and the

provision of supply. It always seems curious to me – and I am wondering whether you have contemplated this as well – that there are similar models across society. You would know in inner-city Melbourne that to park somewhere you have to have a parking account, and if you go to a different suburb, it is a different company and you have to have another account. It is the same with the big mistake America made with mobile coverage: the wires were unique to a company, so if you were not in the area of a particular mobile network, you could not connect, whereas the rest of the world said, ‘We’ll make those things generic, and any account can log into it.’ Have you reflected on the idea that we should have a universal account that of course can be billed back through – a bit like the toll roads – to a supplier, but then break the nexus between the infrastructure and the supply so that that conflict does not create the monopolies you are describing?

Jo ODDIE: Yes, that is probably a model that could be considered. I mean, I think the thing is with distribution network service providers that the whole model is structured differently in every state. In Victoria they are privatised, in New South Wales they are privatised and in WA they are still government business enterprises, so there are different models for how they work. I think the more we can get to simplicity and streamlining stuff is a good principle.

Richard WELCH: Yes. I think in a similar vein too, do you advocate for – I mean, one of the barriers and one of the bottlenecks is the charging experience, because it is very, very hard to efficiently time-manage charging. So have you done any advocacy or thought about improving the actual mechanisms of charging – that is, the car design of how charging is done?

Jo ODDIE: No. It is a bit like the old USB port, right? We eventually got to having a USB port, and now we have USB-C on our iPhones.

Richard WELCH: Well, we got that far.

Jo ODDIE: So, no, we are not really lobbying for that. The main charging issue is about reliability of charging, not so much the charging experience. Once you have got your EV, you have worked out the technology within a week or two; that is actually easy. But it is more about: is that charger working, is that public charger working?

Richard WELCH: Well, my experience is: is that charger available? And no matter what the website might say or if you google-check it, by the time you get there, it is probably not.

Brendan DAVIES: Not available in what sense? As in, someone is there, it is down, or –

Richard WELCH: Someone else is using it. Because even if it said 5 minutes ago it was free, by the time you then make the detour to go to it, it is not.

Brendan DAVIES: But look, that is theoretically simple to overcome by having multiple charging ports.

Richard WELCH: Yes, but that is a greater capital outlay, right? So now you are upping the capital investment. So more efficient management of the infrastructure is part of the key, otherwise, yes, you would have to have more than a bell curve’s worth of chargers just so you could always do it.

Jo ODDIE: Sure. I think there is a whole supply, demand and efficiency thing going on here for sure, and probably there is not a perfect world yet, but most people are managing pretty well.

Richard WELCH: But I just think that would be a good area. You are the early adopters, and thank God you are, and you do that, but I think that would be a very valuable area of investigation and advocacy around that, if I could say that.

Jo ODDIE: Sure. We will put that on the list.

Richard WELCH: Thank you. We have only got a little bit of time, but the last point I would like to ask you about too is on the amount of deployment of charging stations. We had the previous witness say that the constraint was actually more to do with the grid having availability at certain sites than the commerciality of having one in the first place. Do you have any views on that?

Jo ODDIE: I think there are multiple factors in how it all works. Grid availability – what is available in the grid – is really important; location and demand on location are really important. So a big list of factors leads to where chargers should be and can be.

Richard WELCH: But which is the constraint?

Brendan DAVIES: It depends. It entirely depends on what site.

Jo ODDIE: Triple constraint.

Richard WELCH: Thank you.

Jo ODDIE: But I would say that at our WA branch we had a presentation from a young researcher who is doing research on the Western Australia network, and she was saying that there are 14,000 chargers in Singapore; there were 140 in Western Australia.

Richard WELCH: Yes, and then look at the UK model as well. I think the London model is an interesting model.

David DAVIS: How many in Victoria?

Brendan DAVIES: We do not have the exact numbers.

Jo ODDIE: Yes, we can get the number, but I have not got that one.

Brendan DAVIES: As in how many, but then the question is how many fast chargers, how many AC chargers and so on.

David DAVIS: That would be nice.

Jo ODDIE: And every household that has got a charger and a power point – solar.

Brendan DAVIES: Yes, there are more EV chargers than petrol bowsers in Australia.

Jo ODDIE: And I always say there are more power points than there are petrol stations too.

The CHAIR: Thanks, Mr Welch. We will go to Ms Broad.

Gaëlle BROAD: Thank you very much. Look, I just want to pick up – Mr Mulholland mentioned this earlier – on page 9 of your submission, and I will quote. It says:

With the surge of imports from China, and following the implementation of Australia's New Vehicle Efficiency Standard, new EVs in Australia are now some of the cheapest in the world. As a result, upfront purchase price is not a key impediment to EV uptake, and purchase rebates or subsidies are no longer needed.

I just want to clarify because, Brendan, I think you were saying, no, it is too –

Brendan DAVIES: Yes, that sentence did not have enough clarification to it. Look, theoretically if you take out all these other factors, the price of EVs is coming down, and they are almost at price parity, and in some cases at price parity, with internal combustion vehicles. However, there are so many other factors, and we are still that early on the bell curve that we do need incentives. It is basically saying that –

Gaëlle BROAD: So you think the removal of subsidies would impact sales?

Brendan DAVIES: It absolutely would.

Gaëlle BROAD: Okay.

Brendan DAVIES: The up-front purchase price compared to how it was in the past is no longer the deal breaker. There are other things that – I will let you speak, Jo.

Jo ODDIE: Yes, totally, we need to be a bit more nuanced than the way it is written there. We probably need something for the next set, the early majority that we are moving into –

Gaelle BROAD: So how many years?

Jo ODDIE: but it does not have to be the same. It does not have to be the same as what we have done previously. We could think about adjustments to stamp duty. Our ACT branch is talking to their treasurer about adjustments to stamp duty, and rego has been a pathway that has been used in New South Wales too.

Gaelle BROAD: So I guess you are saying you do want to see subsidies continue?

Jo ODDIE: Yes, but I would think you would be seeing things out in three to five years, really.

Gaelle BROAD: Yes. It is just interesting, because I note that the Labor government in Victoria did used to promote gas, but at the moment the Premier has been very critical of the Energy to the Regions program, and gas has been cut off from 10 regional towns. She pointed out that when subsidies were removed the price went up, as to be expected. So the cost is now being borne by the local residents, and we are seeing some paying up to \$25,000 or \$30,000 because the government has completely pulled out of the contract that was 20 years, down to 10 years.

John BERGER: On a point of order, Chair, I just wonder what the relevance of this is.

Jo ODDIE: When we are talking about incentives, we talk about the outcome we want to reach – for instance, with our submission on the electric car discount for the fringe benefits tax, we are sort of agnostic on whether it stays or not. But it is really: let us focus on the outcome. Let us say when we are at 50 per cent of EVs in the fleet, or 50 per cent of new sales of EVs, that is the outcome we want, and that is when you would phase out incentives.

Gaelle BROAD: Okay.

Jo ODDIE: Make it based on a percentage of the fleet rather than some other random number or years.

Gaelle BROAD: Now, I am just interested because your submission mentions the increased significant surge in imports from China. I mentioned earlier that Channel 7 had done a *Spotlight* program which highlighted the nickel industrial site there, which produces a huge amount of emissions and also has seen people killed on the worksite. So people are concerned where the batteries are coming from, because a large component goes to electric vehicles. Would you like to see this committee make a recommendation that consumers are informed as to where batteries come from?

Jo ODDIE: Yes, I think that is a good idea. It is always good as consumers to know what is going on behind the scenes, absolutely.

Brendan DAVIES: Yes. Arguably one thing that I am sure many people would like to see is local manufacturing of batteries, so that we have alternatives to another case of a monopoly, a monopoly on battery. If we can say in Victoria, and I think that was under the terms of –

Gaelle BROAD: Well, I think the impact of that has actually had a significant impact on Australia's nickel manufacturing. The emissions over in Indonesia are 11 times what Australian manufacturing is, so I think that where it is coming from is so important to inform consumers. I appreciate your support for that.

Brendan DAVIES: And the same thing is also with battery chemistry. There are different battery chemistries that determine whether certain minerals are or are not used. That could be also another thing to make consumers informed of.

Gaelle BROAD: One last question I had was that the climate change strategy 2026–30 indicates that Victoria will need an additional 1.4 million EVs and 1.4 million charge points up to 2035 to meet demand. I guess in regional areas we are seeing just a lack of reliable energy. What impact do you think that that increase will have on the demands for Victoria's electricity supply?

Jo ODDIE: I think as we increasingly have household solar – I live regionally; I have lived remotely, regionally, in New South Wales particularly – farm-level solar will make a really big difference to that. Having more solar in the regional towns will make a big difference to that in terms of electricity supply, whether it is wind or solar, really. More local renewables, particularly at household or business level, is going to make a big

difference to that. I think the number of EVs – that is a prediction. We recommend that there are investments made in public transport, electric public transport. I have just been in WA for a month. All of the new rail there is electric. It is beautiful, particularly when you look at the NEM watch data and they are on 70 per cent renewables through the day. Of course there are other ways of getting around too, and e-bikes are a great thing for small town commuting. I think there is lots of technology and behaviour change in all of that, and even though the renewable energy transition is going brilliantly well, it has got a long way to run too, certainly at that regional town and regional village level.

If you are running an agricultural enterprise, you are absolutely mad not to have solar on your farm now and to be generating your own electricity. When I was born – 1959, do the maths – our farm generated its own energy. We were out west of Ballarat. That is how old the grid is, basically. Victoria's grid is now about 60 years old, and it has got an asset maintenance life of 70 years, so do the maths on that too. Having your own distributed energy resources, businesses having their own energy, is a very empowering thing that we can look forward to, and farms will have their own energy generation.

Brendan DAVIES: I was just going to also add: contextually, we have to keep in mind that the behaviour of people who charge electric vehicles is very different to those who drive petrol cars. With a petrol car some people leave it until the low fuel light goes and fill up the tank at whatever the closest petrol station is. Electric car drivers have so many more options. Most people, as we have seen through our membership survey, do not do that. They do not just get empty then charge up to 100 per cent at a fast charger. People charge in the middle of the day on solar, often using their own solar panels if they have them. That puts less of a strain on the grid per se. So this behaviour change is not necessarily going to cause a complete grid crash. There are alternatives that petrol and diesel cars do not have that electric vehicles do.

The CHAIR: Great. Thank you so much. We are running out of time, and there is just me left, so we will try to be quick. Before I start I just want to note Mr Berger did call a point of order just as Ms Broad was finishing her questions. I think I have been pretty accepting of some broad-ranging questions and the terms of reference are quite expansive, but if people could just remember to make sure that it has some relevance to this inquiry or else I am going to have to draw people back in, and that includes everyone.

A quick one from me. Current charging infrastructure is more likely to be found in Melbourne's eastern suburbs. Do you know if this is reflected in ownership rates as well?

Jo ODDIE: We do not have data on that. Let us just say equity is really important to us. Having equity in where public charging is available and having equity in access to driving an electric vehicle is really important, which is why it is so good that second-hand electric vehicles are on the market too, and also other e-rideables. There are lots of things going on there.

The CHAIR: Yes. Okay.

Brendan DAVIES: I would also add: I do know through statistics – and I cannot remember exactly where from – that at some point the postcodes in the west were the highest uptake of EVs. I think it was two or three years ago. That is a statistic, that there was a massive uptake. You mentioned that Werribee had a very high uptake as well.

Jo ODDIE: That was data from NALSPA.

The CHAIR: Cool. All right. Do you have any thoughts on how we can ensure that renters are not locked out of electric vehicle benefits?

Jo ODDIE: We do not have an easy answer to that. I think our work on strata will pull something out around that. Home charging is really important. Victoria is already doing some things on rentals in other areas of renewable energy and electrifying houses. We will be thinking about that when we work through our strata analysis this year. But it is a really important point.

The CHAIR: Great.

Jo ODDIE: And it does not have to be complex. It can be a power point or a very slow charger; it does not have to be fast charging.

The CHAIR: Yes. That is all we have time for. Other members might have some further questions for you and they will submit those on notice through the committee staff. Thank you so much for taking the time to appear before us today. I especially want to acknowledge the effort that goes into this when you are a volunteer. We do really, really appreciate it. That concludes the public hearing.

Witnesses withdrew.