LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON PLANNING, TRANSPORT AND CITY SERVICES

(Reference: Inquiry into electric vehicle (EV) adoption in the ACT)

Members:

MS J CLAY (Chair)
MS S ORR (Deputy Chair)
MR M PARTON

TRANSCRIPT OF EVIDENCE

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WEDNESDAY, 1 MARCH 2023

Acting secretary to the committee:
Ms M Ikeda (Ph: 620 50199)

By authority of the Legislative Assembly for the Australian Capital Territory

WITNESSES

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Amended 20 May 2013

The committee met at 9.01 am.

KEIGHTLEY, DR DAVID, Executive Committee Representative, Urambi Village Owners Corporation
GUTHRIE, MR NEALE, Executive Committee, St Germain Apartments
KENNA, MR MATHEW, Chair, Executive Committee, Trilogy Apartments

THE CHAIR: Good morning everyone. Welcome to the public hearing of the Standing Committee for the Planning, Transport and City Services Committee for its Inquiry into Electric Vehicle Adoption in the ACT. I am chairing from home as I have COVID. I will be handing over the chair quite shortly to somebody who is in the room. We will hear today from 31 organisations and individuals, including community groups, industry groups, private individuals, environmental groups and the ACT government.

The committee wishes to acknowledge the traditional custodians of the land we are meeting on, the Ngunnawal people. We would like to acknowledge and respect the Ngunnawal peoples continuing culture and contribution they make to the life of our city and our region. We would like to acknowledge and welcome any other Aboriginal and Torres Strait Islander people who might be attending today or who might be watching this from whatever country they are meeting on. I would just like to note personally that I understand sovereignty was never ceded.

Please note the following housekeeping matters. Please practice good hand and respiratory hygiene to minimise COVID risks. I am managing that myself by dialling in. If anyone has flu-like symptoms or feels unwell, please withdraw from the committee room. Socially distance and please stick to the allocated seats we have marked. Please turn your phones off or put them into silent mode. Please also speak one at a time and speak directly into the microphone. This makes sure Hansard can hear you and transcribe you accurately.

Proceedings today are being recorded and transcribed by Hansard and they will be published. We are also being broadcast and webstreamed live. When taking a question on notice, if you could say, "I will take that question on notice", it helps our secretary to track down those answers later on.

I would like to welcome our apartments residences and owners panel. We have two panels of this because it was pretty clear from the submissions that apartment charging and apartment adoption was one of our big implementation challenges. So, I would like to welcome Dr David Keightley from Urambi Village Owners Corporation, Mr Neale Guthrie from St Germain Apartments and Mr Kenna from Trilogy Apartments. I would like to remind all witnesses that there are protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. Have you each had a chance to read that statement and do you understand and agree with its contents?

Dr Keightley: Yes.

Mr Guthrie: Yes.

Mr Kenna: Yes.

THE CHAIR: We are not taking opening statements. We have received and tabled some. I thank you for that. We have received some fantastically detailed submissions, and I thank you for your attention to those too. I live in a house; I do not live in an apartment; so I was really pleased to read some of the details of what you have to go through to bring in charging capacity for your apartment owners. There were costings in there, but I was interested in knowing the journey that people were taking. How many of you have had quotes from people to retrofit and provide apartment charging? Did you look at trickle charging? We have heard of lots of different ways to charge in apartments. We have a range of costs in here. We have a range of different technologies. Was it easy to find who you needed to talk to? Did people tend to quote you the same sorts of set ups?

Dr Keightley: At Urambi Village, we have not had any costings yet. We are seeking costings. We have a significant rewiring problem over a large area. We have 72 townhouses spread out over a number of hectares and our garaging is such that the blocks of garages are separate from the houses. All of the garages are on common power fed from our community centre. So, the community pays for any power that is used in the garages. Sweet for the 1970s, but it does not quite work now when we want to charge electric vehicles. To rewire our community, over a number of hectares and to put individual monitoring on each garage is going to be fairly expensive. Anyway, we are trying to find out the costs. It is probably going to be far more than we can afford. Even trickle charging, if we have more than about four or five electric vehicles being charged at once, trips the circuit breaker.

Mr Guthrie: Yes, we have. We are at the stage where the executive committee is ready to go with a supplier. We have gone to three suppliers for quotes. We actually went to four and did not want to proceed with the fourth because they were seeking some funds up front for design costs. Yes, we have gone to quote and there is significant difference depending on managing the on-charging to residents for the power.

Certainly, in all apartments there is no system that would be able to connect power back to each individual apartment. There is just not enough capacity. There will not be enough capacity in apartments to deliver that. Most apartments that have basement carparks do not have power in any of the basement carparks unless owners right back off the plans paid for that. Retrofitting can happen, but it is quite a significant disruption and costly exercise to start pulling extra circuits through power, through all the services ducts which are all bogged up with fire retardant between each floor. So, if you are going from the top floor to the bottom, it is quite an exercise to get a cable all the way down to your basement. But yes, we are ready to probably accept a quote.

Mr Kenna: Similar to Mr Guthrie, we have gone out and sought a few quotes through one of our executive committee members. I guess that, similarly to previous issues raised, the exercise perhaps raised a few more questions than answers into how we adopt EV charging in our complex. We are a large complex of 323 apartments. We have 466 basement level car spots. A lot of those do have power outlets next to them, but we understand they are not suitable for EV charging.

Some of the questions that the exercise raised is that the equipment that we may have in common road visitor parking, where we can retrofit one of those car spots, is who owns the infrastructure? If the complex owns it, what are the ongoing maintenance, repair, warranty and insurance costs moving forward? In a complex where we only have four EV vehicles at the moment, two of which are owners, adoption of such at an upfront cost for the owner's corporation would be a little bit tricky to pass at the moment.

THE CHAIR: I will not ask a follow up on why a normal power point is not sufficient. There might be different constraints in your building. There is a full $2,000 scheme out to help apartment buildings. I am wondering, if apartment buildings need more assistance with the costs of retrofitting, do you think that assistance could come in the form of a loan rather than a grant, on the basis that the people using it are likely to save on fuel costs?

Dr Keightley: My bet is, knowing the people living in our townhouses, a grant would be preferable. I reckon you will find that from most citizens. But our costs are going to be quite substantial; I cannot imagine a grant being provided.

Mr Guthrie: From St Germain, our apartment is reasonably lucky in this transition of energy supply. All our energy needs are electric. So, we are already wired and we have capacity there. We just need to find the system to do the EV charging, which we think we can do through a managed system. So that is easy for us. But the vast majority of apartments with gas, the apartment that David is talking about, it makes sense you need to upgrade the electricity capacity. I mean the EV issue is one thing we are talking about today, but to upgrade for gas energy is far more complicated and far more costly, I believe. So, most apartments need to upgrade their power supply and that is a very, very, expensive exercise. For most apartments it is definitely a six figure at least.

MR PARTON: Mr Guthrie, please excuse my ignorance, but when you talk about the cost of upgrading for gas, what—

Mr Guthrie: Transitioning—

MR PARTON: Just transitioning?

Mr Guthrie: Transitioning gas into electricity.

MR PARTON: Right. Okay.

Mr Guthrie: So if you have gas hot water. I think, talking with Mathew, they have a shared boiler downstairs that delivers hot water to each of the units. I am not an expert, but to replace that system, if you just replace it with instantaneous hot water into each apartment, which are nice small systems you would find in a cupboard, the instantaneous hot water will be by far the biggest user of power in that apartment by quantum.

MR PARTON: And so that then leads to some capacity issues?

Mr Guthrie: Yes. Each of the circuits that would be supporting into those apartments has a maximum limit. Adding 28 kilowatt power demand from an instantaneous hot water system into each apartment would drown that circuit very quickly. So that circuit would have to be upgraded and that flows down to the apartment. More power would need to be bought in. It is that whole exercise to (a) rewire and (b) deliver. If more power is coming in, you might need to upgrade substations on the other side and that cost has to be met by somebody. So, it is a very expensive exercise. I am not an expert but there is certainly enough information out there to tell you that that is where it is going.

Mr Kenna: I have something to follow on from Ms Clay's question on grants versus loans. Additionally, as you would be aware, across the ACT there are a number of apartment complexes that have been impacted by combustible cladding where our owners corporation have had to absorb the 14 per cent increase in administrative funds over the last year. That is through the uptake of a concessional loan to remediate our cladding. For Trilogy, I cannot speak for the whole owners corporation, but there would be less of an appetite to absorb a loan as opposed to a grant because of cost of living pressures at the moment. I might add the 14 per cent is the first increase we have had in five years, so there would not be an appetite for the owners corporation to absorb more increases or more upward pressure on the administrative fund levy.

MR PARTON: Mr Kenna, you mentioned that there are four vehicles at the moment in your complex. Four EVs. How are they being charged?

Mr Kenna: Well, as an owner, I guess one of the first things I would do is to understand where I might be able to charge my vehicle, upkeep and charge, fuel the car if you will. Two of those cars have come in as tenants. They would have made pre-existing arrangements as to how they might service their vehicle. We have a number of public charging spots in the Woden area, which I am assuming they are servicing that facility there.

MR PARTON: Urambi Village is a unique development. At this stage of the game, you have 72 townhouses. To your knowledge, are there EVs currently being driven by residents at Urambi?

Dr Keightley: Yes, we have two.

MR PARTON: Two. How are they charging?

Dr Keightley: They trickle charge. Because it is a Tesla—I assume probably most EVs—you can work out just how much power they consume when they are being charged. So, we are charging the owners of the vehicles for the amount of power they are using, just taking a guess at the rate.

MR PARTON: Mr Guthrie, of the three here today, your complex seems the most forward in regard to your pursuit of changes that would allow EVs to be charged. I am sure, knowing you the way that I do, you would be on the front foot to do this. Why? Why did you see the need to pursue it so much more quickly than a lot of others? I

think it is probably a sensible thing, but I just wanted to get your feedback on that.

Mr Guthrie: We have four EVs now in our complex. Three from owners, one renter. The owner of the renter is seeking to put a power supply for the EV into their carpark. The three owners all have their own chargers in their base because they all installed power off the plans when they purchased their unit as they intended to purchase EVs sooner than later. So, our executive committee just got on the front foot, 12 months ago, to look at both solar and this issue. We have moved on that journey. We did a survey of all our owners and that survey came back with a pretty large majority of owners looking to purchase EVs over the next five-year period.

The issue for us is with the three owners that have EV charging, if you look at it, we can sustain that for a few more owners. It is not going to overload any power. But there is a capacity that it will reach. So, it is not in the owners corporation or the owners interest to continue to just let onesies happen until we reach the maximum. We are much better to move to a shared network system off the common power. There is quite a lot of capacity still in the common power network because we upgraded our lighting to LED lighting soon after we took control of the building.

MR PARTON: So, when you say you are ready to accept a quote, what I hear is that you are marching forward with the worst possible case scenario of no one is coming to help, we may have to do this on our own.

Mr Guthrie: That is right. We have an owner right now that is ready to install power. We can certainly let them do that. And then wait for the next owner. But then that next owner might be next week. So, there is a point where you have to bite the bullet.

MR PARTON: When you say you are ready to accept the quotes, you have a quote and you are ready to roll. What is that going to cost per owner?

Mr Guthrie: Just under $4,000.

MS ORR: Mr Guthrie, you said you have single units installed. What power supply are they connected up to? Can you just clarify for me?

Mr Guthrie: All of our energy needs are delivered through electricity. So, we have no gas in the building—

MS ORR: Sorry, that is not what I meant. Are they just connected straight to the commons or does it go through their own—

Mr Guthrie: How are we connected, the system?

MS ORR: Yes.

Mr Guthrie: It will be connected to common power. At the moment, the three owners are connected back into their unit power—

MS ORR: Okay, yes.

Mr Guthrie: Power in the building is delivered on two resident circuits and one common power circuit. So, they are drawing power at the moment off the resident's circuit.

MS ORR: Okay. But the future ones will have to come off the common power—

Mr Guthrie: The future will come off the—

MS ORR: —with capacity issues—

Mr Guthrie: Yes.

MS ORR: Good, I just wanted to make sure I understood that. I noted in here you said that you would like to have a little bit more information and advice concerning retrofitting of multi-storey apartment buildings if the ACT government could provide that. Could you just run us through what you would like that advice to contain?

Mr Guthrie: I suppose, when we started the journey here and I have seen on other submissions you have received, the New South Wales government have got some really great information there that is current. I dare say they have that from a consultant called Wattblock that operates in the Sydney market. They are very advanced in their information. The point I was making is that there is really nothing, or very limited amount in the ACT, about those sorts of things. The detail in these sorts of things is specific to each state and town because of the different, just the way local government and state government works.

MS ORR: Maybe another way for me to phrase the question is what information would have helped you in your body corporate?

Mr Guthrie: We wasted three or four months on the belief that we could retrofit our circuits directly without worrying about a shared system, which to me was a waste of time. That was more of an education for me. It would have been great if that information was up front to say, if you are in an apartment, it is highly likely that you are not going to be able to do that or that there is a limit to how far you can go with that solution.

MS ORR: On the shared system, have you actually sought advice from an electrician or from anyone about how a shared system would be implemented within the building?

Mr Guthrie: Yes.

MS ORR: What is the advice that has been given to you?

Mr Guthrie: Well, there are a couple of ways. It depends on the supplier. The more common one is JET Charge, which is probably the biggest and best known. Their system is based on effectively a networked system that is power managed, so power comes in and it controls the power. It then also has a third party charging system, I think called Chargefox. Owners or users of the system have to become a member of the Chargefox system. They have an app and they pay a subscription of about $150 to

$165 a year, every year, for the use of that app. Then you pay for a Chargefox charger that goes into each of the owners bases and those systems are $2,000 to $3,000 dollars.

MS ORR: Would your building be able to accommodate every renter and every tenancy on that system?

Mr Guthrie: The way we are structured, we have two car spaces per unit and they are all side by side, so the answer is yes. We have come up with one charger per two car spaces.

MS ORR: Have you had any consideration under the Unit Titles (Management) Act and whether that provides provision for you to do what you need to do and set up charging arrangements and financial arrangements adequately?

Mr Guthrie: I have actually not looked at the legislation on that but I feel comfortable that it is a fair system. We have already done a preliminary briefing at the last AGM to owners. We had 30 to 47 owners present at that meeting and gave a briefing on what the options were and everyone was comfortable.

MS ORR: Not the cars that perhaps were the ones done prior to construction but the ones that have been done subsequently, are being retrofitted, what arrangement has the owners corporation entered in to allow them to install everything and to have the charging in place?

Mr Guthrie: I am not sure what others have done. The way we are viewing this is that effectively the building is purchasing the system and it will be a building wide system, even though each individual owner will contribute their share. They will each get a charger but the building will own it. This means in the future that can be replaced and serviced through the sinking fund and that we would have to take on the maintenance and checking of the system. Personally I think you would like that, as these things are robust, people pulling things; it would be good to do an electrical check each year to make sure there is no fire risk et cetera associated with it.

MS ORR: Some of the submissions have indicated the public charging network would be a good back up if you were not able to get a charger into your own car space. Do you have a view on that view?

Mr Kenna: I do. Currently, Irving Street in Phillip is serviced by Trilogy, 323 apartments. We have Oaks stage 1, stage 2 about to open and stage 3 about to be built and of course, Ivy down at the end of the street. So collectively with the Phillip Oval car park and the big car park across the road in Irving Street, there might be some advantages in being able to have a big EV charging facility that would not only service maybe apartments in the road but of course workers to the nearby area, particularly the public service Department of Health, IP Australia et cetera that service that large particular footprint. So there could be some advantages for the ACT government with that public infrastructure.

MS ORR: Would you see the public infrastructure as an alternative to having private charging facilities within the building car park?

Mr Kenna: I do, because there are some owners, for safety and security reasons, that may prefer to charge their vehicles in their own underground car spots at night in particular. So I think it would be a good alternative.

MS ORR: Sorry, just to clarify, the public charger would not be an alternative to personal use? You are saying you would need to have both?

Mr Kenna: I would say you need to have both. Yes, yes.

MS ORR: In your submission you raise some points around insurance and owners corporations and maintenance, saying they need to be clarified. Can you elaborate on what it is you see would need to be clarified and the sorts of information and guidance you would be seeking?

Mr Kenna: Sure. One of our executive committee members went and sought a few quotes for equipment we may be able to have in our common road area. We currently have six visitor car spots and an area that predominantly is used for drop offs and pick ups that we could utilise for an EV charging bay. What that might mean for us is we would hire some equipment or own some equipment at an upfront cost. The more questions than answers to come from that are the ongoing maintenance, repairs, insurance and those sorts of secondary fees.

MS ORR: Have you had any feedback from insurance companies regarding EVs when you have been seeking your insurance renewals?

Mr Kenna: No. As a large complex—323 apartments, 466 car spots—we only have four current electric vehicles in the complex. I spoke before about the upward pressure we have on our annual levy and the appetite that the owners corporation may have for any large upfront costs for such a small uptake at the moment. Notwithstanding that, we have spoken to a few owners on the owners corporation that would look at purchasing electric vehicles should the infrastructure be there. But again, when we get to an AGM situation, if that is going to add more costs on our admin levy over the following 12 months, there will be little appetite by sheer weight of numbers.

MR PARTON: Mr Keightley, you have indicated that government assistance in planning and costs of improving power supply would be beneficial and accelerate the uptake of EVs. Obviously, there is some government assistance that is offered now, but if indeed that did change, if the cavalry did not come, how would the journey forward be for your complex, if you are going it alone, for argument's sake?

Dr Keightley: Being realistic, I think we are going to be dependent on public chargers. We are in a suburban street in Kambah. I have no idea where the nearest public charger is but I suspect it is some distance away. Certainly, there would be too few of them to service the number of vehicles around our area. I think probably what is going to happen is that we are going to have to just increase the amount of power supply to the garages over the next five years, or something like that. One of the issues with that is that there may not be sufficient power supply from the street. One of the electricians has told us there may not be enough power that we can get from the street to service all of the vehicles that we might want to service. So it is a Territory power

supply problem apart from what we have within our own community. I think in the short term most of us are going to have to charge with trickle chargers and hope that not too many people buy electric vehicles, or take it in turns to charge our cars.

THE CHAIR: I am afraid that brings us to the end of our time. Thank you very much, Dr Keightley, Mr Guthrie and Mr Kenna. Is there anything else that any of you want to flag before we close this session?

Dr Keightley: No, I am good.

Mr Guthrie: All good.

Mr Kenna: I would like to add that I am happy to be involved in the subsequent conversations around the uptake of EV. Thank you for your time.

Mr Guthrie: Yes, thank you.

THE CHAIR: Thank you very much. That brings us to the end of our first session.

Short suspension.

ECKERMANN, MR ROBIN AM, Chair, Executive Committee, Owners Corporation, The Parade Apartments
BOCKING, MR DENTON, Committee Member, Owners Corporation Network ACT
MULHERIN, MS SHELLEY, President, Strata Community Association ACT
DAW, MRS MOIRA, Treasurer, Executive Committee, Owners Corporation, The Parade

THE ACTING CHAIR (Ms Orr): Welcome Mr Robin Eckermann, representing The Parade Apartments; Mr Denton Bocking, representing the Owners Corporation Network of the ACT; and Ms Shelley Mulherin, representing Strata Community Association ACT. I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. Can I please confirm that you understand the implications of the statement and that you agree to comply with it? If you could say so for the purposes of *Hansard*, that would be great.

Mr Eckermann: Yes, I do.

Mr Bocking: Yes, I do.

Ms Mulherin: Yes, agreed.

THE ACTING CHAIR: We have received written opening statements from Mr Eckermann and Mr Bocking—thank you. We have noted those down, but we will not discuss the opening statements. We will proceed to questions. Mr Parton, you wanted to go first.

MR PARTON: Yes, I might start with Ms Mulherin. You have made it pretty clear it is your position that you would like to see equity of access to chargers—that people living in standalone houses should not have the ability to get access to EV charging ahead of those in strata. Can you add further to that for us please?

Ms Mulherin: Certainly, thank you. What we are mindful of is not to create a situation in the territory where there are disparate outcomes for owners and occupiers of standalone property versus strata. Strata is a really important part and type of the way we live in the territory, and it will remain, as we understand it, a really important part in terms of future builds.

It is an equity point that there should not be a real distinction in those outcomes, so we are concerned to see engagement with the infrastructure challenges that are probably fairly clearly faced in a strata environment that might not be so obvious in a standalone property.

MR PARTON: I thought it was a little optimistic to go down the path of suggesting the possibility of passive income by offering the public charging facilities. Certainly the feedback we are getting from those in multi-dwelling complexes is that the escalation that is required for the wave of EVs is such that I am not sure you are going to have capacity to offer it to those from the outside. Is it not possible to offer that at

the moment?

Ms Mulherin: I would certainly accept that the submission is more on the optimistic side, but it is intended to demonstrate that there are, potentially, opportunities for strata, and we accept and support that the enthusiasm for this charging already exists and will continue to grow.

Of course, strata is facing these challenges whereby there are a whole range of existing types of strata already built. Some of those will have capacity on their common property for EV chargers to be installed that might be sufficient to meet demand; others will not. Some will already be granting special privileges to individual owners over common property. Some owners might want that and may fail. So there are a whole range of challenges in that strata space. I would agree with you, Mr Parton—I think if we have that problem, it will be a good one.

THE ACTING CHAIR: Supplementary to that, you just mentioned granting of special privileges that some may have. Can you elaborate on that process, and what it involves, and why some people might not get special privileges?

Ms Mulherin: Certainly. A special privilege refers to a right that can be granted by the owners corporation over its own common property. The effect of a special privilege is, as that name suggests, to give the right holder, which is an individual owner, the exclusive use of that part of the common property. A special privilege will come along with the obligation for that owner to repair, maintain, pay—there are a range of matters prescribed by the legislation.

If you take, for example, a plan where you might have one discrete area of common property, it is absolutely conceivable that an owner could request a special privilege. They have to be voted on, but they can be passed by a special resolution of the members. If they are passed, that area of common property then becomes subject to the special privilege, and it is, effectively, no longer available for the common use of all.

THE ACTING CHAIR: How is the special privilege and the common property relevant to individuals wanting to install charging facilities?

Ms Mulherin: If they did not have suitable space in their own subsidiary, it would be conceivable that they might look to the common property as being a place that the charger could be installed.

THE ACTING CHAIR: Okay, thanks.

MS CLAY: We have heard quite a lot about capacity concerns and the precise access to electricity in apartment buildings. I am interested in unpacking that a little bit. Mr Bocking, I think you mentioned incentives for off-peak charging, which sounded like a good idea. Ms Mulherin, you also noted concerns about whether, even with triple charging, there would be capacity. Do you think if we get the right tools in place—EVs charging overnight at off-peak times in apartments—that is something the current infrastructure would allow?

Mr Bocking: I think that it is technically feasible—just as we have had off-peak hot water service, for example. I think that the indications are very clear that most people will be charging overnight, so if they could charge at a time when there is excess capacity in the network and reap the benefits through lower tariffs, that would be something which I think would provide a strong incentive for EV owners to take advantage of.

MS CLAY: Are you picturing that simply like an ActewAGL or Evoenergy sort of deal, or have you got a specific sort of fix in mind for that?

Mr Bocking: No, not really. It would be something that the utilities—the electricity suppliers—would need to look at as an incentive scheme, but it seems to me that it would parallel the off-peak arrangements for hot water, for example. The peaks, of course, may change as we have more renewable energy in the supply system, so that peak might well shift to a daytime peak as well, and we have got that to some extent with differential timing for pricing. I have not looked into that, but it is something which I think is worthwhile looking at to see whether there could be a plan developed for EV owners to give them an incentive to charge their EVs at certain times during the day.

MS CLAY: Thank you. Forgive my ignorance—with those differential charges, are they able to be applied down to individual apartments at the moment?

Mr Bocking: I think so. I will turn to Robin, who is more technically savvy in these areas than I am. Perhaps Robin could comment on that?

Mr Eckermann: Where the charging infrastructure is tied back to the owner's meter, it will naturally inherit any utility pricing discounts that might apply after hours and so on. The challenge for most apartment blocks is that the meters are not located in an accessible area, and you have to look at some quite separate charging infrastructure in the basements.

MS CLAY: Thank you.

THE ACTING CHAIR: Mr Eckermann, do you have experience in The Parade of having to install chargers, and can you run us through the challenges or the opportunities that have been there?

Mr Eckermann: At this stage, we have not put in any communal infrastructure. Three apartment owners negotiated, when they purchased their unit, the supply to their car parking spot tied back to their meter, but it is not possible to replicate that on a wide scale, because of fire separation between units and the cabling complexity.

I think the challenges we face are social, economic and technical. On the social side, you have a lot of owners who do not envisage an electric vehicle in the future, so they do not want to contribute anything by way of levies or charges. You have others who have bought them and are frustrated that they cannot charge overnight—so quite a lot of social issues there.

On the economic front, we have looked at two notional solutions so far. They have not

been fleshed out, and they have not been supported by site visits. The indicative flag-fall cost to put in communal infrastructure would typically run, for our complex, a 250 unit complex, in the $100,000 to $200,000 level—a fairly substantial amount. Then on top of that, individual owners would face the cost to connect to that communal infrastructure of typically between $3,000 and $6,000 up front. So, there are significant economic challenges in putting that sort of infrastructure in.

On the technical front, the whole question of adequate supply to the building really dictates a standardised charging outlet that has in-built load balancing so that if you have 20 chargers working together, they intercommunicate and do not exceed the capacity that is available to them. On the technical side, there is quite complex infrastructure required.

The question about public charging facilities—we have no spare parking bays in our complex, but even if we did, and you put in a high-capacity charger, the bulk of people want to charge overnight, and you would have to have people coming down at 2 am and 3 am to swap vehicles into that space. That is problematic, needless to say. I think some public charging infrastructure in the vicinity would be helpful during the day, but it is not really a solution for the overnight charging problem, for reasons of security and convenience.

MR PARTON: You really articulated well the social issue that in so many of these apartment complexes you have got a cohort who are not of the belief that they will ever have an EV, so they do not wish to participate. We had St Germain in here earlier who were about to accept a quote to move forward, and they are a long way down the track. How do you get to that point if there is a percentage of owners who say, "No, we don't want to do it"? Is it just majority wins, and they have to do it?

Mr Eckermann: Ultimately, for some of these things you need a majority. Invariably, the sort of general meetings you call never attract a quorum, so you may have an enthusiastic group come and pass some motion to spend $100,000, but then there are 28 days before that takes effect. During those 28 days, everybody in the complex needs to be notified of the decision, and they all have the opportunity to object, so it is complex to pass something that involves significant expenditure.

MR PARTON: But ultimately if more than 50 per cent agree to it, that would become the path?

Mr Eckermann: Yes. At this stage we are in the process of putting solar onto the rooftop; that is our first sustainability challenge. EVs and gas hot water are two of the next cabs off the rank that we have to deal with in some shape or form. I am not sure which one will get a guernsey first, but they are both very challenging.

In the case of solar, we were able to borrow from the sinking fund and pay that back from the electricity savings, so that was a fairly easy proposition. No owner had to dip into their pocket with special levies or additional charges to support the installation of solar, and it fully pays for itself in about five years. It is not quite as easy with EV charging infrastructure or gas hot water.

Mrs Daw: I am also from The Parade, and I am the treasurer. I head up a little energy

sustainability committee. I guess, listening to what people have been saying, what we are trying to do is to futureproof our building. We are not making a decision, or we should not be making a decision, for the next five years—we need to make it for the next 55 years.

It is no good crying over spilt milk, although I do frequently—that we are landed with a building now two years old, where there is insufficient capacity in the transformer, no solar panels on the roof, gas hot water and no space between the risers to put extra cabling. So, in a word, we are "stuffed", right?

We are tackling it, as Robin said, bit by bit. We have done the easy, no-brainer, solar panels on the roof. We have scrounged money out of the sinking fund because, fortuitously, at only two years old, hopefully we do not need to spend much of that for a while. And we will press ahead and probably put more solar panels on the second part of the roof and change gas water to electric. It is not easy, but we have a very committed group, and one thing we asked for in our submission was some funding for a feasibility study to look at our options for the long term, because we are a new building. We are part of Campbell5, as is St Germain—they are all sort of cookie cutters. We all face the same problem: no common car parks; all have been allocated and sold with each unit. There is not a single solitary one. So, we are stuck with this fixed infrastructure, and while we have got a lot of good will amongst the people in the apartments to move forward, we are very, very hampered.

MR PARTON: And I sense that you are extremely frustrated—

Mrs Daw: Only a little!

MR PARTON: that this building that has only just been completed is so far short of the mark on so many of the things that would clearly be required.

Mrs Daw: Correct, but, as I said, there is no point in crying over spilt milk.

MR PARTON: No, but I mean, obviously, there are lessons that need to be learnt, are there not?

Mrs Daw: We are a bit teed off about it, frankly!

MR PARTON: Yes.

Mr Bocking: Could I just come back quickly to the special privileges that you raised with Shelley? I have had experience, as I chair an owners corporation committee. We have been through the grant of special privileges. The special privilege has to be approved at a special general meeting and requires, I am pretty sure, under the Unit Titles (Management) Act, 75 per cent in favour, so that can be a problem. I think I made the suggestion in my submission that the EVSE, electric vehicle supply equipment, be classified as environmental infrastructure. Certainly, New South Wales have changed their legislation recently to allow that to be—I think it has to be 50 per cent; I think it is less than 50 per cent against in their legislation.

Mrs Daw: That is correct. They have changed that.

Mr Bocking: Yes, and that makes it a bit easier. The other thing about special privileges is, as Shelley said, they are given to a person who receives them, and that person has to agree to relinquishing the special privilege. So it is pretty important, when someone has committed to a charging station, that they have that special privilege there for as long as they want it, which would be the life of the unit, normally. I did not see in the legislation, though, that it automatically transfers to a new owner, and I think that is something which needs to be looked at.

THE ACTING CHAIR: Yes. Mr Bocking, just picking up on that—you are on the owners corporation and you have done a few approvals. What are the mechanisms through the act that you have been able to approve these with? Is it clear? Is there an easy way to approve them?

Mr Bocking: Yes, there were specialist privileges, and they were recently amended when the act was changed back in 2020, I think—back in the 2020 amendments. The process is clear enough. It is a bit convoluted, because a specialist privilege has to be registered, and it takes a bit of time to go through. Of course, if you are in a large unit complex, and the owners corporation has to deal with special privileges on an individual basis, which is the way the legislation is framed, you could be looking at 20 or 30 applications in a large unit complex, so it adds to the work of the owners corporation to grant these special privileges, and—

THE ACTING CHAIR: I guess what I was getting at is: if an owner comes to you and says, "I want to install a charger", what are your options under the regulation for approving or not approving the request?

Mr Bocking: Because the charger is on common property it involves—

THE ACTING CHAIR: It always as to go through special privileges?

Mr Bocking: amendments, and we have to go down that path, yes.

MS CLAY: Ms Mulherin, I was interested that you raised insurance risk and concerns around maintenance and repair of chargers. I thought that was particularly interesting, partly because we do not have as much experience with apartments, and because the experience with public chargers out in the regular world is certainly that repairs and maintenance are a growing concern. Can you talk me through what you were thinking on that?

Ms Mulherin: Certainly, thank you for the question. The concern in the strata sector, broadly, relates to any and all matters that might be perceived to increase a risk in our strata buildings, principally for the flow-on effect of this potential for increased premiums.

Building insurance in the ACT is becoming more expensive for a range of reasons. It is, I think, reasonably foreseeable, at least in our view, that an insurer may see this EV charging infrastructure as potentially adding to the risk of fire and to the safety, broadly, that a building faces. So we are really keen to see engagement with various stakeholders in this space and to hear from the insurers to the extent that we can. I do

not think that we, in the SCA ACT, necessarily have had any of that direct engagement thus far, but we want to be in a position where we are managing that potential for an increased premium cost resulting from these safety concerns that could arise.

MS CLAY: Sure. That sounds very reasonable. Do you imagine that is more of an issue with certain types of chargers? I am assuming a charging infrastructure that is simply a power point in a basement garage, where that is applicable, would not trigger that, but other types of infrastructure might.

Ms Mulherin: Indeed, yes.

MS CLAY: Yes, interesting. It sounds like there has not actually been a lot of conversation yet within insurance companies. Maybe there needs to be a bit more of a conversation between the government, apartments and insurance about how this is handled.

Ms Mulherin: Yes, I think it is inevitable. It is just a question of having those conversations, I think, and seeking to manage what we hear back from the insurance industry.

MS CLAY: Thank you.

Mr Eckermann: If I could just add something? The key risk for insurers would be fires. Lithium-ion fires are typically not able to be extinguished by the infrastructure that would be in the building by default—water sprinklers. There are lithium-ion fire extinguishers out now. I do not know how effective they are. We seem to have a storm of things affecting insurance premiums in the ACT, really flowing back to the hailstorm some years ago, leading some insurers to withdraw from the market, and prices are kind of going through the roof at the moment.

MR PARTON: At least we do not have floods.

Mr Eckermann: Yes.

THE ACTING CHAIR: Famous last words, Mr Parton!

Mr Bocking: Still got to have flood insurance.

THE ACTING CHAIR: Do not jinx us!

MR PARTON: I want to ask a broader question. Obviously, the city, the country and the world are transitioning to electric vehicles. There is no question about that. We have got a situation where the government has already flagged the cut-off point in terms of the ability to register a new ICE vehicle here in the ACT.

As we progress with that transition, if in five years time we have arrived at the point that 25 per cent of cars in the ACT are electric vehicles, and that translates to 25 per cent in the strata properties that you guys are either associated with or overseeing, is that going to work? How do you see the journey to get to that? What has to happen so

that that is actually functional in only five years time?

Mr Eckermann: Looking at our complex with 250 units, a rough assessment based on the typical mileage that people do during a day and that they might want to recharge overnight, we could supply up to about 80 electric vehicles. So that could be a third of the units having an electric vehicle. There are some uncertainties over that, but that is in terms of power supply and trickle charging. Beyond that you hit new sorts of limits, and more serious network upgrades and so on.

MR PARTON: Serious, to what extent? How serious? Mrs Daw did make the very clear point that, obviously, if we only focus on the next five years it is an extremely short time—

Mr Eckermann: Yes.

MR PARTON: We have to focus on more. So, what you are telling me, Mr Eckermann, is that there would have to be significant investment from somewhere—either from owners or from government—because otherwise there is a breaking point where it just will not work.

Mr Eckermann: Yes.

MR PARTON: You could not accommodate 80 per cent of vehicles as EVs, could you?

Mr Eckermann: Not at the moment—

Mrs Daw: No, we could not. I think, the bottom line is that at some point all of these buildings will need to be retrofitted to allow trickle charging. Because the future, going 50 years on, which is not going to impact me, is directional charging; so you use a battery in your car to feed up to your apartment and to feed back into your car. There is a trial already—the REVS trial—that is happening here in the ACT with government vehicles, and it is happening elsewhere. That is the future, so at some point there has to be a retrofit of all buildings.

MR PARTON: That is a massive cost though, isn't it?

Mrs Daw: It is a massive cost, but if you think a little bit outside the square, and think creatively, it is not unlike putting infrastructure like toll roads together. Toll roads work—people pay charges to drive along the road. So, infrastructure put into a building. Hook into the infrastructure; pay a toll. It is possible.

We are talking about millions of dollars. We do not know precisely at The Parade what it would cost to retrofit the building, if indeed it is technically possible. We do not really know, but it would be several million dollars.

MR PARTON: All right.

Mrs Daw: Do you think that is fair, Robin?

Mr Eckermann: It is significant. Also, the grid is a longstanding asset that has not been designed with electric vehicles in mind, so the factor that in the short term limits us to probably 80 vehicles is supply to the building. That would need a network upgrade to overcome that limitation.

Mr Bocking: If I could just add to that. I chair the owners corporation of Eldon units, which were built in 1965, and the feed-in from the street is 250 amps per phase. That barely is enough to service the units as they are, so adding the load of electric vehicles is a huge increase, and just how that affects the infrastructure outside the building, I do not know. But as Robin said—

MR PARTON: Sorry, what is the name of that complex, Mr Bocking?

Mr Bocking: Eldon. It is in Turner, and it was built as accommodation for students for the ANU all those years ago. Of course, it is way out of date now. I am also involved with the Argyle Square, and that was built in 1985, a little bit more recently, but, as Robin said, it does not have the infrastructure to accommodate electric vehicle charging. Retrofitting that will be necessary, and it is very, very, difficult.

In my submission I said we really need to get access to good advice on how best to tackle these problems, because the average owners corporation does not have the technical expertise to do that.

MR PARTON: Yes. That is one of the reasons we are doing this hearing, Mr Bocking, because we think it is important. Ms Mulherin?

Ms Mulherin: Thank you. I really echo what is being said here. People are going to charge at home, and they are going to do that whether they are incentivised to do it or not. We are also most concerned with this retrofitting problem. I certainly have heard what Mrs Daw says, and that is also an issue that needs to be plainly engaged with, but at the base of all of this, there seems to be a missing education piece, I think, for most participants in the industry from owners, occupiers and strata managers to where you are seated today. Because we are all learning a lot of things about the limitations that these buildings have that is really only coming to light as a consequence of these questions.

THE ACTING CHAIR: Are there any last remarks or questions people would like to ask in the five minutes we have left?

Mr Bocking: Can I just ask if you could outline the follow-up or where we go from here? We are certainly keen to pursue these issues and contribute.

THE ACTING CHAIR: The committee will have the hearings today, members will then put forward recommendations and we will have a deliberation and a report, which the committee can choose to accept. We can have instances where people write dissenting reports too, but hopefully we will not get to that. The committee will issue a report. It will be tabled in the Assembly. The government then has four months to respond to the report, where they will note or accept or not accept the recommendations that are made by the committee. Then the real process kicks in, which is making those recommendations come to life. From that perspective, that is

the process. Does that answer the question, Mr Bocking?

Mr Bocking: Yes, although time is of the essence in this, as we have heard. I tend to be holding off, waiting for this hearing and the outcome of the inquiry, before taking any further action with my committee—and this is the Eldon committee in particular—but I would really like to get started.

We will have to go with the legislation and the procedures that are in place at the moment, but if there is anything that the ACT government can do to assist us in advance of the report being tabled—and any further action coming from the inquiry—that would certainly be very much appreciated.

MR PARTON: Mr Bocking, even you just making that statement here is a call for help that will be heard by those who have the ability to act on it.

Mr Bocking: That would be good.

MR PARTON: It is important that we are having these conversations and that we are having them in a public space that is viewable by the public but also by the powers that be. As soon as we are in a position to tell you more, we will.

Mr Bocking: Excellent, thanks.

MS CLAY: On the last point—we were talking about the need for an education piece. Obviously, there is need for an education piece. Do you think it would help if that conversation included transport costs as well? There is a bit of a market failure with apartment owners, I think, in particular, where there are costs upfront, and they are quite significant, and then some people who will have EVs will get cost savings on their transport and people who do not have EVs will not get cost savings. Do you think we should actually include the whole costing package when we talk about that, or is that just confusing?

Mr Bocking: From my point of view, our focus would be just on how it would impact on the owners corporation at the property itself, and not that wide a consideration. Because the tenants and other residents—owner occupiers—in our complex have got wide interests, and it would be outside of our mandate to start inquiring about their transport needs and attitudes and so on, I think.

THE ACTING CHAIR: Before we finish, are there any final things that you would like to state that we have not got to?

Mr Eckermann: Some of the incentive schemes seem to be pitched primarily at detached housing. It would be nice to see something scalable, based on the size of the complexes.

Mrs Daw: I would just like to say: the future is now. It is not in four months time. It is now.

THE ACTING CHAIR: Mr Bocking or Ms Mulherin?

Ms Mulherin: We are very keen to see incentives for owners corporations as well as for individual owners. It would be a great step forward.

THE ACTING CHAIR: We will finish up there. On behalf of the committee, thank you very much for your attendance today. There will be a transcript sent out to you, so if you would check that for any minor errors and so forth, that would be great. Otherwise, stay tuned for the report, and thank you again for your contribution.

Mr Eckermann: Thank you for your interest.

Mr Bocking: Thank you for the opportunity.

Mrs Daw: Thank you.

Ms Mulherin: Thank you.

Short suspension.

GRIFFIN, MR PETER, Director, State and Territory Advocacy and Communications, Federal Chamber of Automotive Industries
NARGAR, MR SCOTT, Senior Manager of Future Mobility and Government Relations, Hyundai Motor Company Australia
JENNINGS, MR COLLIN, Head of Government Relations and Advocacy, Motor Traders' Association of New South Wales
PAGE, MR TOBIN, Managing Director, Electro Moto Pty Ltd (trading as Australian Electric Motor Co)

THE ACTING CHAIR: We now welcome witnesses from industry groups, including Mr Tobin Page, who is appearing via Webex. I remind witnesses of the protections and obligations afforded by parliamentary privilege. I draw your attention to the privilege statement, which is the pink sheet on the tables, for those who are here. Mr Page, you should have been sent the statement. For the record, can I get you to state that you have read and understood the implications of the statement and that you comply with it?

Mr Griffin: Yes, I have read and will comply.

Mr Nargar: Yes, I have read and will comply.

Mr Jennings: Yes, I have read and I will comply.

Mr Page: Yes, I have read and I will comply.

THE ACTING CHAIR: Great. Thank you very much. We have received a written statement from Mr Griffin, so thank you very much for that one. We have noted that down.

MS CLAY: Mr Griffin, the Federal Chamber of Automotive Industries has its own fuel efficiency standard, I understand, and it is a different standard from the one that is widely in use in Europe. Why do you think Australia would want to adopt your standard, rather than adopting the one that is already in use?

Mr Griffin: Thanks for that question. I am very pleased to get that question first up. The voluntary standard that was introduced by the FCAI in 2020 was introduced for the reason that there was no federal standard in place. In the absence of any standard, and with what appeared to be little enthusiasm—I will say—from the previous federal government to move forward on a fuel efficiency standard, the industry elected to introduce its own voluntary standard, just to get things started.

It was understood that the targets that were set for 2020 needed to be reviewed. There was a review to take place in 2022, which did commence. In the meantime, we had a federal election. With the new government in Canberra, there is a greater appetite to move ahead with a federally mandated fuel efficiency standard, and that is fully supported by the FCAI. In fact, the FCAI have been speaking to people in government since about 2016 on the need for a federally mandated fuel efficiency standard.

When, hopefully, a federal standard is in place, the voluntary standard from the FCAI

will disappear. Our discussions with government that are underway, as you would expect, are for a standard that is challenging but meets the needs of the Australian market and ensures that customers, wherever they are, metropolitan or regional, have access to the vehicles they want to drive at a price they can afford. So, in short, the voluntary standard will disappear when there is a federally mandated standard.

MS CLAY: Excellent. We have heard from a number of submitters, including the ones we have in this session, that one of our big problems in Australia is attracting a supply of electric vehicles to such a cool market. We have heard that one of the big barriers there is our lack of the European fuel efficiency standard, because the EV manufacturers overseas then do not get credits and do not have an incentive to sell Australia EVs. Given that the FCAI is happy with Australia, federally, having a standard at some stage, do you think that it would be best if we had the same European standard that would then incentivise manufacturers to give us the same access to EVs as other countries have?

Mr Griffin: We need to have a standard that is right for Australia. Australia is a very different market to Europe, and standards in Europe have been in place for many years, so Australia is lagging. We are a long way behind in terms of where we need to be in this challenge. Having said that, it is a challenge for the Australian market to adopt targets similar to Europe immediately, because of the dramatic shift that takes. That is the first point.

Second, the nature of the market in Europe is very different to Australia. In Australia, 50 per cent of the market, the new vehicles sold every year, are light commercial vehicles—utes. Think Toyota Hilux, think Ford Ranger or think Isuzu D-MAX. Those vehicles are currently not in volume production in right-hand drive in the world at a price point that is acceptable to the Australian market. We do hear claims about some vehicles being made available, but they can be at price points of $US100,000-plus.

So 50 per cent of the market is light commercial. Another 25 per cent is SUVs. Again, the range of electric vehicles at a price point that people can afford is still limited at this point. It will happen, but the production cycle for a light commercial vehicle or an SUV can be anything from seven to 10 years. We need to take into account that model cycle. It does not just change on a dime. We certainly need to have challenging targets, but we need to take into account the range of vehicles that Australians choose to buy.

Can I add that we are looking at a fuel efficiency target. From the FCAI's perspective, the policy objective here is emissions reduction, not an EV sales target. If we are looking at emissions reduction then we should bring to bear all types of technology that reduce emissions. That includes plug-in hybrids, hybrid vehicles and, in some cases, highly efficient internal combustion engines. Also, internal combustion engines that can run on synthetic fuels can be zero emitting, so they are in play as well.

Our standards should be challenging, achievable and take into account the full range of technologies that are in place, first and foremost to encourage the increased take-up of electric vehicles in Australia but also to allow Australians to drive lower emission vehicles at a price they can afford.

MR PARTON: Mr Griffin, what I am hearing is that you are a little frustrated that, in

this move forward, hybrid vehicles are virtually being dismissed by many.

Mr Griffin: We struggle to understand why we would eliminate an emissions reduction technology. A hybrid vehicle or a plug-in hybrid can reduce emissions by, say, 50, 70 or 80 per cent. There is no doubt, in our view, that the future is electric and we will be driving electric vehicles.

Currently in Australia the range of electric vehicles is outstanding, and it is outstanding quality, but they are not all at the price point that the majority of Australians can afford, and they are not the type of vehicle that Australians choose to drive, that being the light commercial and SUV. We want to push, as an industry, as quickly as we can to bring electric vehicles into the country, but they need to be at a price that people can afford; they need to have the amenity.

At the same time, we want to move to technologies where we are on that pathway to continually reduce emissions. In a sense, why set a target for one particular technology and dismiss the others? In my personal view, it is a bit like saying that we are just going to use wind power and we are going to dismiss all other forms of renewable energy—we are not going to have solar, we are not going to have hydro and we are just going to focus on one. Why would we do that when the policy objective is to reduce emissions?

MS CLAY: I am finding it a bit challenging to say that picking a technology that is based on renewables is like picking wind over solar. The difference between a hybrid and an EV is that a hybrid uses fossil fuel. Wind and solar do not use fossil fuel. I am a bit curious as to why, given how long a car lasts—20 or 30 years, if it is treated well—you would want governments to incentivise people to use fossil fuel cars when we have such good technology and can use cars that do not use fossil fuel.

Mr Griffin: I am not necessarily suggesting we incentivise; I am saying we do not want to disincentivise people. We do not want to penalise consumers who may not be able to afford the entry price for an electric vehicle and penalise those who cannot make that transition to an EV. What we would be afraid of, given the length of time that internal combustion engines stay on the road, is that people will just hold onto their old technology longer. That will have the perverse effect of increasing emissions, rather than moving them into lower emissions technology, as a transition into full electric in the future, as the choice and the variety of electric vehicles becomes more available and more affordable.

THE ACTING CHAIR: Just picking up on that, you have noted in your submission—and I think a few other submissions have noted this too—that making sure that we have equity and that there is opportunity for everyone in the transition is important. Mr Griffin, you were talking about the opportunities for people who will not necessarily be able to reach the price point of the cars that are coming in. How do you see this access to electric cars playing out in practice, and what do you think the government can do to better support everyone, on a range of incomes, to access these products?

Mr Griffin: First and foremost—and I think it is echoed through so many of the submissions and also in the submission to the federal government's discussion paper

on an EV strategy—is to have a fuel efficiency standard. We need to have those targets and a fuel efficiency standard in place. There is no doubt that that drives behavioural change and there is no doubt that it supports the car makers in Australia to make a case to their head offices to bring this better technology to Australia. That is the key point.

The other areas of importance, from our perspective, in order, would be infrastructure development to ensure that there is public and private charging available to meet the increasing demand; non-financial incentives—this could be access to transit lanes or free charging, whatever that might be; and fleet acquisitions. Some of these are actions that the ACT government already has in its strategy and is planning to do. Fleet acquisitions of EVs and then creating a second-hand market are absolutely critical. We totally support that.

Consumer incentives are the last on our list. That is on the basis that an incentive of around $3,000, give or take where you are in the country, may not be the game changer if you are asking somebody who might be used to spending $30,000 on a new car to move to a price point that might be $50,000-plus, currently. Incentives are terrific for those who want to access them, but they are not the big game changer.

THE ACTING CHAIR: What is the price point differential between electric and non-electric cars at the moment for similar models? I think, for example, you can buy a Kona in both electric and non-electric. Do you know what we are looking at there, on average?

Mr Griffin: It is very difficult to have an average point. In some cases, an internal combustion engine vehicle—I am not going to name a brand—may sit at $20,000. The EV equivalent might come in at $48,000 or $49,000. It can be significant.

THE ACTING CHAIR: Do you think it is fair to say that there is a barrier there for people on lower incomes to take up electric vehicles, with the way the market currently sits?

Mr Griffin: Absolutely. We have conducted our own research on how the market is looking at the uptake of EVs, and there is no doubt that there is support for EVs. If you asked a person on the street, "Would you buy an electric vehicle?" I am sure you would get the response, "Yes, but I just can't afford it yet," or "I am just not sure how I am going to charge it yet." I think there is sentiment in the market to shift.

This is where we are a little cautious about—as I used the term before—disincentivising people to move into new technology and lower emissions technology. If they cannot afford electric, they could look at other emissions reducing technology like hybrid and plug-in hybrid to start that transition, to move through. It would be better to get someone out of a 1999 six-cylinder Commodore and into a late model hybrid vehicle that might still be four or five years old, to be playing a part in emissions reduction, rather than hanging onto that Commodore for another 15 years and polluting while they try to save for an EV.

THE ACTING CHAIR: It is interesting, because supply has come up in a number of the submissions. This also goes to what Mr Page was saying in his submission about

how difficult it is to supply things. We have a very ambitious target here in the ACT. We want to reduce emissions. But there have been a few questions raised in the submissions as to whether those targets are reachable. I would like you to elaborate a little more on the challenges that might be faced and what needs to be overcome in order to reach those targets.

Mr Griffin: In terms of the targets, one of the great challenges is the range of vehicles that Australians choose to buy. It is very difficult to apply the term "EV" to all types of vehicles in the market when product segments can range from a compact car, a small car, a small sedan, a passenger car, a small SUV to a medium SUV et cetera.

In some of the segments, and particularly light commercial, as I alluded to before, electric vehicles are not being made in the volume or at a price point that is available to Australia. Research that we have commissioned through SMP Global shows that the production of light commercial vehicles from South Asia, where we get the vast majority of our light commercial vehicles, is not slated until at least 2033. The vehicles are simply not available yet. They will come. That is the greatest impediment. The vehicles that Australians choose to buy in volume are not being produced in volume as electric vehicles.

THE ACTING CHAIR: Mr Nargar, you represent one of the car companies. How does what Mr Griffin has just said stack up against the outlook that your company is working to?

Mr Nargar: Thank you for the opportunity to present to the committee today. It is a challenge. We are competing with the rest of the world for volume. We know that with our range of vehicles—and especially some of the ones that were launched last year and that will be launched next year—the consumer demand and the want to transition to those vehicles is so high that we are not keeping up in any markets, including Australia.

I have a car that is going to be launched in a couple of weeks time, the new Ioniq 6. That had a release last week, and those vehicles are all but gone again, as well as the Ioniq 5 that went at the same time. We are working hard to ensure that we can satisfy demand as well as we can. We actually have the problem that more people are upset that they cannot get hold of one of our cars and there is a small handful that can.

We do have another Kona coming this year, the Kona EV that is currently deployed within the ACT government fleet. That is going very well. I believe a lot of the nurses use that, along with the generation Ioniq. Some of those are coming up to their three-year turnover and will go to auction. Hopefully, that will drive the second-hand market here as well.

For a while, yes, all manufacturers are going to struggle with supply. That is not just driven by the resources that are needed for zero emissions vehicles—hybrid and fuel cell and battery electric. It is driven by the global supply of microchips and other things that were impacted by COVID. We are coming out of a very strange time. We are hoping to get all those resources. Hopefully, all the components that are needed for all vehicles—internal combustion, electric, hydrogen, whatever it might be—will start to sort themselves out towards the end of this year, but that is a global supply

chain problem, not just something for EVs.

THE ACTING CHAIR: If you do not mind me asking, what are the price points in the products that Hyundai offers for EVs in Australia?

Mr Nargar: We had the Ioniq, the original Ioniq. That was around that $45,000 to $50,000 mark. Kona was around the late 50s to 60s. We did introduce multiple batteries. We had a large battery to start off with, which is 64 kilowatt hours. We moved to a 33-kilowatt hour battery that reduced that price.

I would like to hope I am one of the greenest people in the automotive sector. I have been vocal for fleets to understand exactly how vehicles are used. Everyone says they want a vehicle with a 500-kilometre range, and the one we are launching in a couple of weeks time has a 614-kilometre range, but do you need a vehicle with a battery that size?

Having multiple sized batteries in our vehicles, in some of our models, has been great because we say to fleets, "Don't go for the biggest battery just because you want that 500k range. What is the average use of your fleet? If it is 20 or 30 kilometres a day, you certainly do not need a car with 500 or 600-kilometre range." Every third or fourth car you purchase almost equates to being a free car because you are not overpaying for a battery you do not need and do not use.

It is more about education. I think that is one of the biggest problems. My background is that before Hyundai I was with the NRMA, as a motoring writer, crash-testing cars and judging for Australia's best car awards. I have always seen that education is key here, and it is something that is lacking across the federal debate, states and territories, and industry associations, both the EV and hydrogen associations, which I was one of the founders of. It is really about trying to draw out: what are the requirements and what do we need to do to make things happen in this country?

My biggest frustration every day, as an EV driver and hydrogen fuel cell driver, is infrastructure. I tried to charge last night, when I drove down from Sydney. Unfortunately, the charger that used to live on London Circuit has now disappeared, so I had to wander over to Hotel Realm, over towards Manuka, to find a DC charger there. That was occupied. I had to drive laps around the block to try to get a charge, because the hotel where I am at, Avenue, has been told it cannot put DC chargers on the footpath outside the Marble and Grain restaurant.

It is the same in every city. It is the same in Sydney. Everywhere I go and present and talk about EVs, infrastructure is really lacking. We are saying that there are not enough EVs and there is huge market demand, but the infrastructure today is not keeping up, by a long way.

THE ACTING CHAIR: When you say, "the infrastructure", is that largely public chargers?

Mr Nargar: DC public, yes. I have a charger in my garage and have had for about five or six years now, and I still rely on public charging because work is paying for the electricity, so you can claim it back through a public charger invoice rather than

through the home. People do look at that, and I think the last people who were in the room were looking at infrastructure in residential buildings. That is all critical.

My biggest point is that, in working with Hyundai throughout Europe and America, I see in Berlin, Hamburg, Frankfurt and Stuttgart that there are chargers on nearly every power pole in some of those locations, especially Berlin. I remember walking down the street and there were cars plugged in all the way down the street, with power pole chargers. They are a solar charger. The car is sitting there all day, with paid parking and getting a charge at the same time.

DC charging is really lacking. We think the big opportunity is with the oil companies. Ampol has released AmpCharge. You have got BP with bp pulse. You have got the EV charging networks, Chargefox and Evie. It is still not enough.

I see the future of charging not just being at a service station, because they are in fairly convenient locations—7,000 are deployed around Australia. But why are Woolies, ALDI, Coles, McDonald's, Red Rooster, or whatever it might be, not the charging locations of the future? You are in there for 10, 15, 20 minutes, having a coffee or a burger or something and charging your car at the same time. We can have a massive network. We just need to start planning for it.

Driving back from Canberra a couple of weeks ago, I stopped at Goulburn. Two of the three DC chargers were dead. I lined up behind one gentleman. While I was waiting for him to come off, four more customers came in behind me, either coming back to Canberra or going back to Sydney, all frustrated. Given the public funding that is going into DC charging around Australia at the moment, why are there are no KPIs around uptime and whether they are down? One of those chargers has had a dead screen for over a year now. Why are we paying for more and more chargers that are built here in Australia to go overseas if they cannot supply parts for the chargers that the public have paid for already? I am quite frustrated with that, as a driver. There are some issues to solve there.

THE ACTING CHAIR: That was really interesting. Just going back to the Kona price points and the equity issues, with some of your EVs I think you are saying $45,000 seems to be about the entry price for those?

Mr Nargar: Yes. With ICE it might start at the mid-20s, but in the internal combustion version there might be three or four different model grades. In the EV there might be two model grades—a mid trim and a high trim. There may not be a low trim because people do not want a low trim with an EV drivetrain. Sometimes people want to compare apples with oranges, but there is not a low trim electric vehicle, so that does already put the price point higher. The dollar cost per kilowatt hour of a battery cell, or the kilowatts in a battery, is high at the moment. It is high because of global pricing and resources and the problem in the Ukraine with energy and gas.

THE ACTING CHAIR: What is the life span of the batteries going into cars? We talk about getting a second-hand and resale market and how that would be good from an equity point of view and give access at lower price points to people. I have a question about the battery life span. If it is deteriorating and we are giving the cars over when you need to replace the batteries, battery replacement can be quite

expensive.

Mr Nargar: Really good question. Yes. Our cars and those of many of our competitors have eight-year warranties on the battery. Our cars, internal combustion and EV, have five years on the entire vehicle, but we warrant the batteries longer than the cars.

Everyone says, "What do we do when the batteries wear out? How do we replace them? What are they going to do in their second life?" We can diagnose each individual cell in the battery. The cell is probably about three or four centimetres thick. Three cells come together to make a pack, six or seven of those come together to make a module, and there are probably 10 of those in a vehicle. We can diagnose each cell, each pack, each module, and replace it as required.

Everyone says "the battery" when it gets replaced. There is so much value in a battery, beyond the cells themselves. There is the casing, the computers, the wiring, the cooling system. There is so much other waste there that we do not want to see end up in landfill.

We did have a recall last year, where we recalled a number of cars—and some in the ACT fleet—and we managed to recycle 99.3 per cent of the battery. The parts we could not recycle were things like polystyrene foams and insulators between the battery cells and the casings. It is a good test for the market for recyclability—that it can be done. But we do see that batteries should be upgraded in the vehicles, and we only replace the cells and the modules or the packs that need to be replaced.

We have units in our dealers—and there is one in each state at the moment; they will eventually end up in every one of the 175 dealers—where we can rebalance those modules, those big packs that have multiple cells in them, and get them up to a higher rate and then put them back in the vehicle. It is about recycling what is already in the vehicle, rather than recycling when it is outside of the vehicle.

THE ACTING CHAIR: What is the replacement time on a battery? If I bought a car from you today, how long would the battery last?

Mr Nargar: People are saying 10, 15 or 20 years. We are not seeing the degradation in the current batteries as we have seen in the generation 1 Mitsubish I-Mievs, which were here 15 years ago, or the Nissan Leafs. They did not have cooling in the battery, and some of them still do not have cooling, but we have got, and many of our competitors have got, water-cooled batteries.

Batteries do not like being very cold or very hot, especially when they are charging, so we control that. When the car is turned off and at a charger, the car will actually turn the air-conditioning system on. Instead of chilling the cabin, it will use the air-conditioning system to chill the coolant to cool the battery down. By controlling the hot, the cold, the low voltage and the high voltage in the battery, we can control the state of the battery and protect the health of the battery. There are computers in the car to protect the health of the battery from those extremes of heat, cold and extreme charging.

Our cars are some of the fastest charging in the world. We can go from 10 per cent to 80 per cent in 16 minutes, and that is running off 800-volt, 350-kilowatt stations, which are going into places on the Hume Highway up to Sydney, and around Australia. The tech is there to get a good, quick charge if the stations are up and running. The tech is in the car and more manufacturers are coming.

I will say from a Hyundai sense, and as a consumer advocate from my past, that Hyundai will be successful when we have strong competition in Australia and more competition for both EVs and hydrogen fuel cell, and trucks and buses that are zero emission. The more consumer awareness there is, the more consideration of purchase, and the more the governments become aware and have supportive policy. When that happens, we get the right investment in infrastructure, both private and publicly funded infrastructure. For us, competition is key. We want to see more of it.

MR PARTON: My question is fairly broad, but I think it gets to the crux of the hearing. I will start with Mr Jennings and Mr Page. What percentage of vehicles do you believe Australia will have that are EVs in five years time? What is the biggest hurdle for us to get there, and the biggest hurdle, then, for us to get to the next stage? We have already heard a number of your ideas on it, Mr Griffin. Could we start with Mr Page?

Mr Page: I represent the Australian Electric Motor Co, who are a distributor of electric motorcycles and scooters in Australia. Thanks for the chance to contribute today. I think the biggest challenge to getting that point is the cost. It has been briefly mentioned. Battery technology is expensive. A lot of research and development needs to be done, and that cost has to be passed on in the price of the vehicle at the moment. Other countries have managed to subsidise that cost at this early stage, these formative years. I think at the moment for the segment that we are in, which is motorcycles, that is really going to be the biggest thing that holds us up.

We sell electric motorcycles that cost around 20 per cent more here than they do in America, and often more than 25 per cent more here than they do in Europe. There are a number of reasons for that. There is obviously distance, but there are customs fees. A petrol motorcycle from Italy, for example, attracts zero per cent customs duty, but an electric motorcycle from Italy attracts five per cent customs duty, which does not really make any sense. Electric motorcycles are not included in state-level benefits, incentives and rebates.

There needs to be more support generally. If we want people to move to this technology, I think there needs to be more support to help them get there. That could be GST exemptions; it could be plug-in vehicle grants. There are many other countries that are further along on this journey and that have proven policies that worked that Australia could implement. In my opinion, that is the biggest barrier—the price.

MR PARTON: All right. Mr Jennings?

Mr Jennings: I echo everyone else in thanking the committee for its time. I also want to echo every other contributor's underlying points about the fact that to get to any target relies on a lot of other factors, and one of those things is infrastructure. We

need the surety of being able to do the very basics, such as charging vehicles—and we know that the majority of people want to charge at home. Having that underlying infrastructure will give people surety that they can charge their vehicles.

Price is critical. I can give an example, and it is a bit of a follow-on from our colleagues at the FCAI in regard to vehicles. Regarding light commercial or commercial vehicles, the latest ute to be imported in Australia was $90,000 off the rack. Once you add electric car tax onto that, that is $117,900, so when you are comparing that utility to a Toyota Hilux, the price point is going to be critical.

So there is the price and there is the surety of infrastructure. As Scott mentioned about travelling, with the ACT being where it is, the surety of that infrastructure is important. Once you leave the ACT you have different levels of roads, different levels of responsibility: federal roads, state roads, council roads. Some of these council roads are very long. Who takes care of putting the infrastructure into charging and who takes care of the maintenance of that? Those discussions still have not been had at a national level.

So there are a lot of elements to be put into place. There are two things that we would say. One is the consultation with industry to make sure that any aim, any ambition, of any government is to reach what we all agree that we should be reaching. As the industry itself embraces this transition to an electric vehicle or zero and low emission vehicle future, there has to be that strong consultation with industry.

The other underlying part of the infrastructure is to ensure that vehicles that are driven on roads can be serviced, maintained, repaired and recycled. Where we see a big gap here is to ensure that the industry is ready, and that comes down to your service centres. That comes down to being sure that, if there is an issue with your vehicle, you can take it to an approved repairer and they will actually understand the vehicle and can safely de-power and re-energise that vehicle. This is one of the biggest issues, from our perspective, because that allows everyone to know. In the past they have driven their 1999 Holden Commodore and could drop it into a service station to get something repaired. If they do not have that surety, it is another back-end inhibitor to going into the market.

Mr Nargar: There is a lot of cost involved in it too. I will say that the ACT, for Hyundai, has been a leader in the adoption of EVs, and especially hydrogen fuel cell vehicles. One of the biggest fleets deployed in the world was here in the ACT, two years ago, with the Nexo fuel cell vehicle. Unfortunately, we maxed out the station capacity the day we opened the station. We are working hard with a number of departments and a number of ministers to look at how we can bring the right people, including our competitors—Toyota and others—to the ACT to build the infrastructure for hydrogen fuel cell.

But we had the first hydrogen fuel cell and EV training centres in the Southern Hemisphere, from what I understand, at Lennock Hyundai, here in the ACT. We are very proud that the ACT led that, and that we could continue to learn what the technicians needed, what needed to be done onsite. We spent a lot of money on evaluating how to safely service and maintain hydrogen fuel cell vehicles. It is a similar skill set; it is just more modules for a fuel cell vehicle, on top of the EV

training, but that was all done here in the ACT.

The first fire and rescue training package I developed was here, for ACT Fire & Rescue. We donated cars in the CIT and donated cars to Fire & Rescue to crush and to cut and to work on. I saw it as better for them to go to TAFE than into landfill, because we have got to crush pre-production vehicles.

We are going to continue to work hard with the ACT. I have spend a lot of time with Chief Minister Barr and Minister Rattenbury and others, and some great people in the department, to try to smooth the way for zero emission vehicles to have a great place here in the ACT. It should be the leader in the Southern Hemisphere. We are not going to catch up to Norway, but why can't we be Norway? But there are some big challenges. Electricity into some of the buildings is becoming an issue now, from what I understand. Maybe we solve that with hydrogen fuel cell vehicles that can be filled in three minutes at a service station. They are still zero emission. There are a lot of options there for the future.

THE ACTING CHAIR: On that note, we will have to leave it there, unfortunately, because we are now over time. Thank you. I think there are many more questions we could be asking. On behalf of the committee, I would like to thank you for your attendance today. A proof transcript will be sent to you. You are welcome to check that and provide any comments you might have back to the committee secretariat.

The committee will now suspend proceedings for morning tea. We will reconvene in seven minutes, at 10.50. Thank you again, everyone, for coming today. Mr Page, thank you for popping in, too, on Webex. Thank you very much. It is much appreciated.

Short suspension.

LE CORNU, MR PETER MICHAEL
CRAVEN, MRS ADELE

THE ACTING CHAIR: Welcome back to the public hearings of the committee's inquiry into electric vehicle adoption in the ACT.

The proceedings today are being recorded and transcribed by Hansard and will be published. The proceedings are also being broadcast and webstreamed live. When taking a question on notice it would be useful if witnesses used the words "I will take the question on notice", as this will help the committee and witnesses to confirm from the transcript which questions have been taken on notice.

We now have our fourth session today, and I would like to welcome Mr Peter Le Cornu and Mrs Adele Craven. I will confirm that you are appearing here today as individuals in an individual capacity.

Mr Le Cornu: Yes.

Mrs Craven: Yes.

THE ACTING CHAIR: I remind witnesses of the protections and obligations afforded by parliamentary privilege, and I would like to draw your attention to the privilege statement, which is the pink form on the table there. Could you take a minute to have a read of that and make sure that it is correct and then confirm for the *Hansard* that you have understood the implications of the statement and that you agree to comply with it?

Mr Le Cornu: Yes; that is fine from my point of view.

Ms Craven: Thank you; I agree to comply.

THE ACTING CHAIR: Thank you very much.

MR PARTON: Mrs Craven, you are a bit of a trailblazer in this space. Certainly from your submission, it is indicative that, although you are a trailblazer, you have certainly got your eyes open to the challenges. You focused a fair bit on public charging infrastructure, which is heading in the right direction but not fast enough.

Mrs Craven: I do not know if it is actually proceeding as fast as it could or should be.

MR PARTON: Yes.

Mrs Craven: I know that there are a lot of people interested in it and working on it, and we have innovation happening in Australia. But one of the big issues with public charging infrastructure currently is reliability. The chargers have been installed, but often there is only one in each location.

MR PARTON: And, if it is stuffed, you are stuffed.

Mrs Craven: Pretty much. It is very hard to plan around it. We are fortunate enough to have Teslas and can rely on the reliable and most common supercharger and destination charger networks. We plan our trips and where we are going to stay on our holidays around what is available. I think there has only been one occasion where we had to wait to charge, and that was for only a short period of time. There was also another occasion where the charger we thought we could use was not available or was not functional, but that did not turn out to be a big issue. We have done about 160,000ks, including with COVID lockdowns, in our electric vehicles.

MR PARTON: You have been driving an EV for a while, have you not—for a long time?

Mrs Craven: Yes.

MR PARTON: When it comes to those longer trips, is your charging anxiety becoming less and, if so, why?

Mrs Craven: It was at a very low level to start with but it is becoming less, because there are so many more chargers available. I am planning a trip to Broken Hill, with the NRMA EV drive days, which is something I would not have contemplated even six months ago, because the chargers are in place.

MR PARTON: You must be going up via the silver city, by Mildura; you would not be going the other way with your Tesla.

Mrs Craven: No.

MR PARTON: I have gone the other way. You do not want to be doing that.

Mrs Craven: It is a matter of planning.

MR PARTON: Peter, along the same lines in terms of the same question, you have been driving yours for a year or so.

Mr Le Cornu: Yes.

MR PARTON: Talk to me about your level of charging anxiety in that period.

Mr Le Cornu: It is all about planning. There is no doubt that there were challenges with the lack of chargers. For all EV owners, it all about planning where you go and making sure you know where the chargers are. I have read some horror stories about people who are trying to calculate the kilometres and everything else. I work on the basis that, if we are travelling, we stop every two hours and try and find a charging station at where you stop for coffee or whatever. When you are having a coffee break, you put it on charge, and half an hour is more than enough to bring it up to our levels.

You make decisions. If I am going to Queensland, I will not go the inland route. The NRMA have done a good job of getting chargers around, but there is only one of them. You can arrive there and, if it is broken or it is in use, then that is a problem. With the Tesla supercharger network, if you are going to Queensland, you go up the coast and

there are no problems at all. I have never had a problem with turning up and not being able to get a charger.

One of the problems with charging stations is if you charge up to 100 per cent but leave the car there, it is not available for someone to use, and with some of the public ones that happens. With Tesla, if you leave it there, you get charged for sitting time by the Tesla supercharge network.

If the ACT is looking at attracting people into the ACT, like tourists et cetera, then I think we do need banks of chargers. When we talk about chargers, put in a bank of chargers. Do not think about just installing one; install four, five, six or whatever that number is, depending on projected demand. Certainly that is the critical thing in terms infrastructure. It gives people confidence that they can turn up and the chances are there will be a charger available for them.

MR PARTON: Thank you.

MS CLAY: Thank you both very much for coming in. I am sorry I cannot be there in person. I have COVID, so I am staying home. In both of your submissions you talked about some education points about health benefits from EVs, and I do not feel that those points have come through that strongly in our messaging. Mrs Craven, I am particularly interested in the role of inspiration events and promotions in helping this transition. Could we have a bit of a chat about that?

Mrs Craven: Right now? It would take a while, but I was thinking today that it would be great to have some sort of inclusion of EV messaging. I would make the point that EVs are not just cars, and that point seems to be missed so often. We have multiple modes of electric vehicles in the ACT, and there is great progress being made on all of that.

It would be great to include the whole spectrum of benefits of electric vehicles into ACT events. We have some great events that happen all the time. It would be great to figure out some way of including in a message the mobility of getting around the city, the cleaner air, the greater convenience for families into what we are already doing.

I think that would also be an opportunity for a lot more organisations in the ACT to communicate and collaborate in that participation in existing events. There is the City Renewal Authority and we could talk to Dickson traders and different capacities and different committees. There are so many people who have an interest in the different themes that are associated with electric vehicles—like the clean air; the health impacts of having cleaner air; active transport, which needs help in terms of the smaller electric vehicles; mode active travel; independence; longevity of use, because there is the electric assistance to the transport component of the vehicle. I hope that makes sense.

MR PARTON: It does.

MS CLAY: I am interested in this multi-modal point too. We had an electric motorcycle representative in our last session but we did not get a chance to dig right in. But, apparently, we have federal government disincentives to electric motorbikes.

They are more expensive to bring into the country. Locally, we have things like the Sustainable Household Scheme that are available for EV cars but they are not available for electric bikes and they are not available for electric motorbikes. We also have a transport policy that very much recognises lots of different modes of transport. Do you think we are leaning a bit too heavily on cars and we have neglected the rest of the electric mobility transition?

Mrs Craven: I do not think it has had the same visibility. I think there is a lot happening and, yes, there are things like the disincentives. If I can, I would like to share an experience from yesterday. There are processes within the ACT government that have not caught up yet. When we first registered our second-hand Tesla, we had the rego check and we took the papers to the shopfront and they registered it as a Telstar sedan because they did not have Tesla in the dropdowns.

MR PARTON: What year was that? How long ago was that?

Mrs Craven: It was 2018. Yesterday we had a roadworthy check done on another car and the form was asking for an engine number—only one—but the car we have has two motors. There are also other points on the form that really are not applicable. The inspector made the point that ACT government processes are not digital yet; they are all still relying on forms. That is just an example of a number of things that need to be rethought and need to catch up to where we are now with electric vehicles. But it is probably going to change and accelerate the uptake fairly quickly, in my opinion.

MS CLAY: We have certainly heard from a number of people that our rego and local service people are not as familiar with electric cars as they are with fossil fuel cars. So that is a really useful reflection. Thank you.

Mrs Craven: If I can, I would like to add that there is salary packaging available for electric bikes in the ACT. So there are all these pieces, but it would be great to have the puzzle all put together.

MS CLAY: Thank you.

MR PARTON: Mr Le Cornu, you have highlighted that you think it would be a sensible thing to review taxation on vehicles and road funding. You have had a look at the Victorian path, which you think would potentially be a barrier to uptake—that that whole per kilometre road user charge.

Mr Le Cornu: My view is that, ultimately, we need something like that. I think there is a recognition that, if you are driving on the road, you contribute to the road costs. But, given that electric cars cost 150 per cent of what a fuel car costs, to then put another road tax on top of that is just insane. When you look at the figures that people pay in a year, it is not a lot of money, but it is a psychological thing and people just simply say, "Well, it is another tax on top if I have an electric car." Eventually, we need to have something. I think a simple system where all cars are treated the same and had some sort of tax related to usage would be a way forward.

MR PARTON: I am sure you just have a lot of natural conversations with people that you know about what is required to get you over the line and what the barrier is for

you.

Mr Le Cornu: Correct. No. 1 is affordability. As soon as people see $60,000 plus for a car, they say, "I am not spending that sort of money for a car." I still think that that is the biggest issue. The charging networks are a big issue in people's minds, and the other one is the initial cost. My habit is to keep cars for about 10 years and I reckon over 10 years, depending which calculation you use and what petrol price you use at the time, I will come out ahead over a 10-year period even now. But people do not see that; what they see is the initial price. A road tax at the moment would be a disaster in terms of discouraging people.

THE ACTING CHAIR: Mrs Craven, you noted in your submissions that—and maybe I cannot do this because you are appearing as an individual—the Tesla Owners Club has completed the survey of the membership, which had a series of findings that were not available when you put a written submission in. Are there any insights you can share with regard to that?

Mrs Craven: There was quite a lot in it. I am happy to forward a copy.

THE ACTING CHAIR: That would be helpful, yes.

Mrs Craven: We did it in collaboration with the Electric Vehicle Council. They seemed to want to strongly make particular points and not to be seen to promote Tesla. So I do not think that there can be more drawn out of it than what is actually there. The enthusiasm that came through the survey from the owners about the experiences of ownership were next level. The response to the survey was from half of our members, and half of them wrote some quite detailed comments, including the ease of use, the convenience of charging at home and the driving and owning experience in an electric car. Many Tesla owners have a second electric car, not necessarily a Tesla. So there were some strong insights there about electric vehicle ownership and never going back to driving an internal combustion engine vehicle again. So I am happy to share all the comments and the survey responses.

THE ACTING CHAIR: If you could provide a copy to the committee, I think that would be quite insightful. Thank you.

MS CLAY: Mrs Craven, you mentioned signage on chargers, which I was interested in. We have apps now but I recently had the experience when I was in Penrith and driving around and around and around looking for the charger that was on my app and I just could not see it. Do you think as we are rolling out our chargers that we need to put more signage up?

Mrs Craven: That is the thing that has frustrated me the most—driving somewhere, knowing there is a charger here somewhere in the shopping centre in the back far corner or you have to go all the way to the exit, and it is just before the exit.

MR PARTON: I am surprised there is not an app.

Mrs Craven: There is an app.

MR PARTON: An app that actually gives you a sort of a map that says, "There it is."

Mrs Craven: They are pretty good but, when you are driving in a supermarket car park, multi-storey car park, there is not the precise location. You could be on a different level. For example, the chargers in the new car park near the police station and the courts have chargers on every level. So someone who knows there are chargers and thinks these two chargers are being used on this particular level, do not know that they are on the next one

The signage is getting better but, like anything else we have signage for—pools, churches and petrol stations—those icons appear on our standard street signs, and there should be the same for the chargers for electric vehicles. There should be an expectation of clear signage when you go into a car park where you know there is a charger.

I am parked in the Canberra Centre right now. You go up the ramp and you can see the chargers as you drive in but it is not necessarily clear what level they are on, and the map actually shows them one block up. So there is a bit to do with getting the apps and the signage right. Just a little sign that says, "There's a charger this way", and—

Mr Le Cornu: I can certainly second that, because I have had that experience as well. It is mainly in shopping centres. That is where the challenge is.

Mrs Craven: Another member of IEVA, a single female driving a vehicle, has given me examples many times where you cannot be looking at an app while you are trying to drive to navigate to find a charger. It has been a road user expectation for a very long time to have signage as to where you need to go.

MS CLAY: Thank you for that. Mr Le Cornu, you mention in your submission how fuel efficiency standards might bring more EVs to Australia than we are currently seeing. In an earlier session we spoke to the Federal Chamber of Automotive Industries, who repeatedly told us that they would like the Australian government to adopt their voluntary fuel efficiency standard, which is quite different and much lower than the European standard that has been in place over time. We asked how that would work better than simply adopting the European standard. I think as far as we got was that we needed realistic targets in Australia and somehow our market was quite different with SUVs. Do you think that this lack of the standard global fuel efficiency standard is maybe holding our market back and is meaning that Australia does not have access to the EVs that we would otherwise be able to get?

Mr Le Cornu: There are quite a few distributors of cars from overseas who say that they have problems negotiating with a parent company to get cars into Australia. If they have got to meet European standards, they will ship the cars to Europe in preference to sending them to Australia. So I think the evidence is actually from the industry itself in support of the fuel efficiency standards as a way of trying to drive behaviour internationally.

We are one of the very few countries that have not adopted the efficiency standards and, in that marketplace, what happens is that cars will go somewhere else. Given that we are totally dependent on cars from overseas, it is an important initiative to take to

attract cars to come to Australia.

MS CLAY: That was very clearly explained. Thank you.

THE ACTING CHAIR: We have about five minutes left of this session, so do members have any final questions they want to put?

MR PARTON: Mrs Craven was talking about those Tesla survey results. When you are defining EV drivers Australia, you sort of go with the Teslas and the non-Teslas, do you not? Why are the Tesla drivers so enamoured with their vehicles?

Mrs Craven: I think that Tesla have multiple advantages over the other manufacturers. One is that they have the supply and that they are bringing the cars into Australia. We are probably going to hit 50,000 Teslas in Australia before too long. Something like seven ships, or maybe eight, have arrived this year. It is an experience. I think I offered to drive you once.

MR PARTON: Yes.

Mrs Craven: Teslas are built from the ground up, because they are a dedicated platform. That is often overlooked. They are built for safety first. There are so many examples of how a Tesla has prevented injury or death—not 100 per cent of the time, but you cannot expect that. Then there are the software updates. Every car we have is a better car now than when we bought it, because we get updates that happen on a regular basis. They have the entertainment in there, which is good when you are sitting waiting for something and not necessarily charging. The charging network just works. They are committed to supporting, the mission being the acceleration of renewable—sorry, I have just completely missed mentioning the mission—and I am on the committee! It is not just cars; Tesla also does the power walls, the solar panels and the big batteries. So it is a whole package. I am sure I have missed something, but they just work and they are just nice to be in. They have so many other features.

MR PARTON: Someone will probably show Elon this video, I reckon! We are not trying to sell Teslas; I just wanted to ask because I hear so much positive feedback.

Mr Le Cornu: From my point of view, I am a little bit more pragmatic in the sense that, when we were making the decision to get an electric car—and we have one car between me and my partner; so we share a car—we wanted something we could take away. So the criteria was that the car was able to do more than 400 kilometres distance. If I were making a decision to buy a car for around Canberra, as a second car, I would have gone with the MG—because it is $20,000 cheaper and everything else. We are now seeing BYD come onto the market. I was talking with a BYD owner the other day and they love their new car.

Again, it comes down to what you are going to use the car for. If it is a second car, why spend an extra $20,000 when you can get something that works perfectly well as a car around Canberra. I think the more electric cars we have the better. If it takes $20,000 less to get someone into an electric car, go for it. That is my view.

THE ACTING CHAIR: On that note, with two minutes left, is there anything that

you would like to add just before we finish up?

Mrs Craven: I have a list of things but I think the most glaring one is that there is so much misinformation, and often deliberate misinformation. Owners of EVs do not understand even a different model of their own brand. So we are going through this process of communicating the right information. That is going to be a challenge that we have to take on.

The NRMA are doing the drive days, funded by the NSW government—and I understand one is coming to Canberra. I have talked to the organisers about that. It will be a process for quite a long time to make sure that people have accurate information and any questions are addressed and any confusion is cleared up.

THE ACTING CHAIR: On behalf of the committee, thank you very much for your attendance today. It has been much appreciated. You will be sent a proof of the transcript, which the committee secretariat will be able to advise you on. I thank you for coming.

Short suspension.

MATTHEWS, MR ROBERT JOHN
VOGT, MR ALAN

THE ACTING CHAIR: In this fifth session today, we will hear from Mr Alan Vogt and Mr Robbie Matthews. I will ask you to confirm that you are appearing as individuals, and I will also ask you to look at the protections and obligations afforded by parliamentary privilege; the statement is on the pink card on the table next to you. Take a moment to have a look at that; then confirm that you understand the contents and will comply with the requirements.

Mr Vogt: Yes.

Mr Matthews: Yes.

THE ACTING CHAIR: We are not having opening statements today. We will move straight to questions. Mr Parton, do you want to go first?

MR PARTON: Yes. Mr Vogt, I am fascinated by your journey, as I am sure many people are. What you are doing is pretty interesting. Explain the whole concept that you have outlined regarding the use of electric vehicles to provide extra energy storage.

Mr Vogt: It was quite obvious to me, when investigating home storage, battery storage, hanging on the wall that the capacity of them was not huge. For a Tesla Powerwall, it is somewhere around 15 to 18, in its current second generation; for an EV, it is 60 to 80 kilowatt hours. It is massive. If you are someone who is driving around all day, that makes a lot of sense. You would probably be able to utilise a reasonable amount of that battery.

My thinking is, and certainly our situation is, that we use our vehicles occasionally, I go to work; I visit clients across town, pick up things and bring them back. But the rest of the time that vehicle is parked. It could be plugged in; it could be doing something—getting a feed of energy from our solar panels. If it is full, it disengages. But there are 80 kilowatts that I cannot currently use if I were to purchase an EV under the current scenario. That is one of the reasons why I have not bought one.

MR PARTON: What would have to change to allow that flexibility to do the reverse and actually take power from the EV?

Mr Vogt: It is technology that is being used elsewhere. Essentially, the abbreviation is vehicle to grid or vehicle to home. In the same way that you have a charger inverter, depending on need, it is pushing electrons one way or the other.

MR PARTON: That sounds pretty cool.

Mr Vogt: Yes, and if you extend that beyond the home, and apply a suburb or district rationale to it, all of a sudden, you may have an aggregated power grid because the batteries hanging on the wall and the batteries in the vehicles are able to contribute to the needs of a wider audience than just you at home. I am sure there is software and

ways of working so that it could be pulled off.

The thought occurred to me today, "What's a modern neighbour?" Historically, in the 50s or whenever, you would go next door, meet your neighbour and get a cup of sugar. If we are all sharing electrons, the modern analogy is, "Can I borrow a kilowatt?"

MS CLAY: Mr Vogt, I would not mind supplementing that. What is the barrier in going vehicle to home at the moment? If you bought an EV, would you be able to use it? Is there a technological reason at the moment or is it regulatory?

Mr Vogt: I think it is regulatory. I do not think there is a technological impediment. I am not watching this every day of the week, but my understanding is that vehicle to grid is available, let us say, in North America, and at present it is not permissible here. I may be wrong; also, with the access cost, the cost of that particular kit, it is in the early adopter category for someone in Australia, so it is probably quite prohibitive from a cost point of view.

Mr Matthews: I actually know something about this. Yes, I read about six months ago that they are using it a lot in the UK but the government in Australia—that could be a state government or a federal government; I do not know—has given the go-ahead for at least one kit that is doing it. They admit that it is quite expensive at the moment; I think they threw around a figure like $12,000. I believe that the technology is definitely here in Australia and it has been approved. I cannot give you details because that is not what we came here for—

Mr Vogt: When I looked, and this was a little while ago, it was probably around 18, and that is a big pill to swallow.

Mr Matthews: It is a big jump. They are using it all over the place in the UK and there are people who swear they are making money just by acting as batteries for the grid because there is a rebate tariff and it is a handy place to store excess power.

Mr Vogt: Yes, I think it is a sensible viewpoint to think of an EV not just as transport; it is storage, and it is much more: it is a very clever re-imagining of how to get around, and it is also a perfectly valid mechanism for storing energy. It could be shared or it could just be used by you.

MS CLAY: Thank you, panel members, for that; we will put that to the minister later in the day and see where we are up to with progress. Mr Matthews, you have a lot to say about our chargers. I jumped in and had a look; we got submissions last year, and I wonder whether things have progressed a little bit. When you submitted to us, we did not have any public chargers in Belconnen, and I think we have a few now.

Mr Matthews: If you do, they are very well hidden, and I have not—

MS CLAY: I saw that there was one in the mall, one in the Labor Club and one in Ginninderry, but that is only three for 100,000 people, so it is pretty—

Mr Matthews: Okay; I have words about that. I have tried three times to charge from the one in Ginninderry. You need to get a card from ActewAGL, except that they

passed over the handling to EV, so I got a card from them, and it still does not work. To be fair, this was a few months ago, but I did actually think, "There's a new charger; I wonder if it works." It does not.

MS CLAY: Yes. I guess that is not very—

Mr Matthews: At least, I was unable to get past the problems of being able to access it.

MS CLAY: This is really helpful. Yes, that is quite different from when you rock up to an EV charger or something; you have it on your app and you have a credit card. We have seen maps coming out as to where the government intends to put in public chargers, but a lot of the concern seems to be about what you have just said: it is whether it is actually working when you show up, and it is maintenance.

Mr Matthews: To the absolute best of my knowledge, at the current time the only charger in northern Canberra that is publicly accessible is at Stripey Sundae; that is a private one, but they will let you use it. So far I have not found any, and I have been keeping a regular eye on PlugShare and all of the other things, and they are just not there. The most northerly one is, I think, the one at the airport, and that is in a hotel.

MS CLAY: What is the impact of not having those available right now? Do you think that is making people—

Mr Matthews: It is not great. There are two issues here. If you are just driving around Canberra and you have access to a power point, it is not a problem. You have to work very hard to actually run out of power while driving around Canberra. Overnight charging is fine; it all works good.

If you live in an apartment and the body corporate does not allow you to put power points in the garage, you are relying on public charging, and that is not an option. At least two of my friends are seriously considering EVs, but currently that is a stopper. There probably should be legislation so that a body corporate cannot stop you putting chargers in. Norway has done that. There is actually right to charge legislation. If you have a house, that is fine; you can work it out. If you live in an apartment complex, you are at the mercy of the builders, the developers and the body corporate, and there are no rules, currently, as far as I know, that say they have to provide power.

MR PARTON: Those two individuals who mentioned to you that they cannot do it, they are apartment dwellers?

Mr Matthews: They are apartment dwellers and they do not have access to power, so they would be entirely reliant on public charging, which is very thin on the ground at the moment.

MS CLAY: We had a couple of good sessions this morning on the problems in apartments, and it is certainly a good point. Chair, I am happy to pass over for your question.

THE ACTING CHAIR: Mr Matthews, you note that you have a Nissan Leaf

40 kilowatt EV. What is the range on that?

Mr Matthews: Normally, about 200. That is nominal. I have never quite dared push it that far. Apart from anything else, when you get an EV, you have to learn to gauge how accurate the range estimates are, what you can do to stretch the range and what you can do to not stretch the range. One of the things I discovered very quickly was that you cannot go highway speeds up hills and expect to get all the range.

I also found that if I took it easy—80 or 90k—I could in fact stretch it, which I needed to do, on one particular stretch of my trip up north, because there were two chargers at inconvenient locations, and I had to go about 180 kilometres, and that was a bit nerve wracking. It was getting to the stage where I was thinking, "The light's come on. I really hope the charger is working when I get there."

THE ACTING CHAIR: When you are looking at range anxiety and being able to access chargers on different trips and so forth, there are the metrics they usually use, like, "There's on average 200 kilometres, so we'll put chargers 200 kilometres apart."

Mr Matthews: That is too far. 150 is the most I would want it, and that is because I am driving a 40-kilowatt car. These days that is an affordable car. The MG EV that the previous person talked about is an affordable car for a normal person. You can get a brand-new one for about 40K. That will get you 200 kilometres; but, honestly, you do not want to be arriving on empty, because it is not good for the battery and it is not good for your—

MR PARTON: Mental health?

Mr Matthews: No; well said. In fact, on the way up I did misjudge, because there was a charger that said it was open, but the plug for my car was not working and, after further research, I discovered it had not been working for months. I did not have enough power to get all the way to my next stop, because the next one that I could have charged at was broken down, and the next one beyond that was just beyond my range. We ended up pulling into a hotel and plugging in there overnight. That was okay; it worked. I had allowed time for it, but it is still not ideal.

Mr Vogt: Riding electric bicycles appears to be training me to be a future EV owner, because range anxiety is there, too. In fact, while riding an electric cargo bike with my daughter, who has special needs, we ran out a kilometre before home. I was watching that little blinking one bar on the bike, and we just missed out on that occasion.

Mr Matthews: I also ride an e-bike, and my wife has an e-trike.

Mr Vogt: Yes. It is a tricycle.

Mr Matthews: Recumbent or upright?

Mr Vogt: No, this one is a leaning into corners, front-wheelie-style one.

Mr Matthews: Sorry; that is getting off topic. With range anxiety, it is legit, but some of it is just that electric cars, for a lot of people, are still new. Almost all of us have

been driving petrol cars all of our lives. We know how they work. We know how they behave. We know their little ins and outs and idiosyncrasies, and there is a little bit of a learning curve.

Having said that, I am fine. I am now quite confident, and I think, "As long as this charger is working, I'm sweet. We can definitely get there; not a problem." But it took a while to gather that sort of inbuilt knowledge.

MR PARTON: How long have you been driving the Leaf?

Mr Matthews: Just on a year.

Mr Vogt: Anxiety is one interpretation of it. Adopting different behaviours in how you engage with your vehicle is probably the less confronting term. A friend of mine has one of the Volvo EVs and she has a house at Tathra. The behaviour that she needs to adopt in order to get from Canberra to Tathra and back again has a lot to do with the time that she may go down there, and particularly when she returns. She knows that she will have to stop in Cooma, but if there is an event on in Jindabyne or Thredbo, she will totally change when she leaves because she knows that there is an ice block's chance in Hades of getting that charge when she needs to because of all of the other people coming from somewhere else to use that infrastructure. It relates strongly to the infrastructure and your journey.

Mr Matthews: That is a large amount of what my submission is about. As I said, around Canberra, yes, more chargers would be very nice. A fast charger somewhere in Belconnen or Gungahlin would be great, thank you very much, if we could move that along.

However, a lot of Canberrans will mostly need fast charger networks in New South Wales, as we are trying to get down to, say, Batemans Bay. As I said, this is 40-kilowatt. These days, it is probably at the low-ish end. I am very dubious about getting back from Batemans Bay, because by the time we come up the hill from the coast, all of the calculations I can find say, "Yes, you're going to be running on fumes," and it is still another 50k to the nearest charger.

We really want to encourage places like Braidwood and all of the other places that Canberrans regularly go through to their holiday destinations to put some chargers in. I do not know what we can do to encourage that; but, seriously, it is something we need to think about.

THE ACTING CHAIR: Mr Vogt, you were talking about tricycles and e-bikes. It just got me thinking: how much of the focus for your mobility needs is on electric vehicles and how much are you open to other forms of transport modes to get around and do what you need to do?

Mr Vogt: For getting our daughter around?

THE ACTING CHAIR: Yes, yourself and your daughter.

Mr Vogt: We do have e-bikes, and for a run down to the local shops and in to

Belconnen Mall, it is more enjoyable to ride an e-bike; if the weather is good, we will go for it.

Mr Matthews: Parking is way easier.

Mr Vogt: Yes, you are right—way easier. It is more about the purpose of that journey that will determine whether it is a bike or whether it is a vehicle. Our daughter goes to a special school a few suburbs away in Belconnen. We simply cannot get there on a bicycle in any meaningful, safe way, so that is a vehicle journey 100 per cent of the time.

THE ACTING CHAIR: Mr Matthews, did you say you have a tricycle?

Mr Matthews: Yes, I have a selection of e-bikes and my wife has an e-trike. We use it quite a lot for going to the mall. If I have a doctor's appointment in town, we will normally ride in, if the weather is okay, because the parking is easier, and it is a pleasant ride.

In terms of public transport, I have a bus that goes past the front door of my house that goes all the way to the airport. I have never got around to taking it, because I can ride quicker. There are very few places that the bus can go that I cannot get to quicker on the bike, and I get my exercise.

I have ridden on the light rail. It is great, but it will be another 10 years before it gets out to my suburb or my general area. At the moment I approve of it. It is a good thing, but it is not of much immediate use to me yet, so I will just hop on my bike most of the time.

MR PARTON: Which suburb are you in, Mr Matthews?

Mr Matthews: Belconnen. Melba, specifically; Belconnen is our local region.

THE ACTING CHAIR: You mentioned that it would be great to have a charger in Belconnen or Gungahlin. What is behind that view?

Mr Matthews: There are times, as Alan said, when you do need to plan ahead a little bit more because the charging, especially charging at home, will be overnight, at least. If I have run it very low, it can take 20 hours to go from empty to full. At least once I forgot to plug it in and I had places to go, and I thought, "It would be really nice to have a fast charger somewhere near me, to quickly top up, so I can get around." If I am doing a lot of running around—it has been known to happen, with a lot of trips and things—it would be nice to say, "I'm getting a bit low. It would be nice to just pop in here and quickly charge up," whereas at the moment I have to drive all the way across town to fully charge up quickly, and it is actually not worth it, because of the power I use to get there.

THE ACTING CHAIR: The closest fast charger to you, then, would be—

Mr Matthews: One that I am aware of, and where there is parking, is in Fyshwick. That is okay. That works fairly well. I can plug in at IKEA. They are not fast but they

are free. I know there is one in the car park over there; that has been pointed out to me. I have never tried it because I cannot get parking there.

I do not know of any that are even vaguely on this side of town. As I said, there is a place called Stripey Sundae, which makes ice cream. It is in Federation Square or thereabouts. That has one, but it only has one, because the owners put it in so that people can use it if they want to.

MR PARTON: Favourite flavour?

Mr Matthews: Vanilla. I am very basic!

MS CLAY: With respect to this issue of regional charging, this has been a barrier for a long time, and it is quite hard for the ACT government to fix our regional charging situation. For instance, with Braidwood, we have been told for the last few years that a charger is being built there, and it is still not there.

Mr Matthews: They have to finish the car park.

MS CLAY: At a state level, what could the ACT government meaningfully do to speed up this regional charging, because it is a barrier for people here?

Mr Matthews: It is New South Wales; it is not ACT. I understand that there is a limit to what you can do. I would be strongly pushing, "Hey, if you put in a charger, you will bring tourists. You absolutely will." There is a town to the north of us—

MR PARTON: Jugiong?

Mr Matthews: Jugiong, yes, and there are a lot of people pulling off and queuing to use the charger there. They are going to the local eatery and generally doing touristy things while charging up and waiting. I would never have pulled off the road at Jugiong before, but there is a charger there, so we went there. That is not the one I was thinking of; there is another small charger in one other town starting with "G" that is to the north of us. I want to say Gunning, but that may not be right. Regardless, there is a charger there, and the fact that it existed was worth our pulling off the road and having a cup of coffee while the car topped up. It was not even a big charger, but it was there.

MR PARTON: Is it Gundaroo? Is that where it is?

Mr Matthews: Gundaroo; that is it. Friends of ours who also have electric cars have said, "Wow, it would be really nice to be able to stop and charge somewhere that's not a service station." They have a small child. They did a trip similar to ours and they were stopping at service stations. There was nowhere to play; whereas if there was a charger in a small town next to a park, they would have absolutely jumped at it and done touristy things while they were there.

Mr Vogt: Maybe ACT government can do a mobile fast-charging roadshow on a semi. Pull it into Braidwood, up against some parking, and show the town what it could do. How do you introduce it? It is a bit hard.

THE ACTING CHAIR: On that note, is there anything else that you would like to add before we finish today?

Mr Vogt: No.

Mr Matthews: No.

THE ACTING CHAIR: Thank you very much. On behalf of the committee, I would like to thank you for your attendance today. The secretariat will be in touch with a copy of the proof transcript. If you have any questions, let them know.

Hearing suspended from 11.47 am to 12 pm.

SMITH, MR JOHN LEO

THE ACTING CHAIR: We will commence the sixth session of today's hearing. I would like to welcome Mr John Smith, who is joining us via Webex. Mr Smith, can I ask you to confirm that you are appearing as an individual today and not as part of a group or an organisation?

Mr Smith: Yes, that is correct.

THE ACTING CHAIR: I would also like to remind you of the protections and obligations afforded by parliamentary privilege. You should have had the privilege statement sent to you. Could you confirm that you have read and understood the implications of the statement, and that you agree to comply by them?

Mr Smith: Yes, I have; thank you.

THE ACTING CHAIR: We have received your supplementary statement. Thank you for sending that through. We might go to questions.

MS CLAY: Thanks for joining us, John. It is good to see you. You have put in a really detailed submission, and I thank you for that. There is an awful lot in there that we would love to unpack. I will start with accessibility. I read your submission, and I had not thought about accessibility of chargers. We have a real need for more charging stations everywhere; I had not thought about accessibility of those. Also, you have had a bit of a journey with accessibility of hand controls on your EV. Can you tell us what the ACT government could be doing differently now to make sure we are not setting up long-term problems in the future for accessibility?

Mr Smith: Sure. The main thing is that there is a lack of standards in Australia. There are definitely standards in the UK and US, which I sent through to the committee. The territory, and Australia, need to set up these standards now. For me, as a disabled driver, being able to drive and be independent has been a fantastic boon to me. It has meant I have been able to work and do everything I want to do in my life.

If the charging facilities are not accessible, it means that, with the shift to EVs—and I have an EV—it will possibly lead to people like me being excluded. We should get in on the ground floor. There is already some infrastructure in place. For instance, I have a Tesla Model 3, and I use the Tesla Superchargers. I cannot reach the charging points. I need to have somebody with me in the car to charge the car if I am on a trip. Around town, it is fine; I just plug it into my garage.

We need planning to take into account the disability needs. If the charging system is designed for people with a disability, that means it is designed for everybody. There will not be anybody who is disadvantaged, whether they are elderly, parents with strollers and all those kinds of things. If we plan for disability, it makes it accessible for everybody.

I had a quick look at the UK proposed rules on how to plan for that. They specifically point to public infrastructure. They include some of the things which I had thought

about. For instance, we should be making sure that, in planning for new buildings, when there are charge points put in, at least some of them will be accessible to a person in a wheelchair. That is all about movement around the vehicle, movement with the wheelchair, being able to reach the equipment, being able to see the screen, being able to read what is on the screen, and being able to pay or whatever—use a transaction to pay for the charge.

With the Teslas, of course, it is automatic. You plug it in, it charges your car with electricity, and it charges your bank account at the same time. That works fine. With others, you need to have either some sort of app, an RFID card or something like that.

The main point I am making is that if we do not plan for it then it will not happen, and we will end up with a system that is great for a lot of people, but it will completely exclude people with a disability.

I looked online last night; there was an advertisement about new Evie chargers opening in the Northern Territory. They had two beautiful Evie chargers but they were on a concrete plinth with bollards around them. I thought, "How is a wheelchair going to get anywhere near those things?" It is a real issue. Already they are putting in new infrastructure that is not wheelchair accessible. I think that is a real issue.

MR PARTON: I am astounded that this issue, as you have outlined it, exists. Do you have any accessibility issues with a regular petrol station? Surely, they have all been constructed over a period of time so that someone who is in a wheelchair has no problem accessing them.

Mr Smith: I would not say there is no problem, but they are generally accessible. I have found that the pumps are at a height so that you can get at them; you can lift the hose pipe off and plug it into your car to fill it with petrol. I have done that in the past without too much difficulty. It is just a matter of how you park your car. Generally—I will not say in every case; it is a long while since I have been in a petrol service station—even when they have bollards, the bollards were not right in front of the actual pump and the equipment, so you could get to it.

Definitely, with the electric vehicle charging system, it has not been that way. I went to a charge point at Cowra, in the west. There is an NRMA charger there, which is great, but it is in a car park which is on a slope, which is not good, for a start; and it is built on a plinth, so it is quite a nightmare, as it is quite high—probably 18 inches. There would be no chance of being able to access it and handle that.

There is always an issue with access in shops. There are even places in Canberra where you come to one side of the road and there is a cut in the gutter so that you can get the wheelchair down. But on the other side there is no cut, so you cannot get up the other side. Those sorts of issues still exist. It is something you have to constantly keep working on.

With the EV chargers, there appears not to have been much thought given to it at all. Everywhere I look where there are new charging systems going in, they are not really making them accessible. Yesterday, they opened a new one in Sydney which is attached to a power pole, which is a great idea. It is a slow charge. You plug your car

in. Once again, from what I could see—and I have not seen them personally, but from what I could see—there was no gutter cut so that you could get up and get access to it. They are some of the issues.

MR PARTON: Staggering; thank you.

THE ACTING CHAIR: I want to pick up on that, too. Mr Smith, what would make a number of these charging sites accessible? What would need to happen to make the sites accessible for you to use the public chargers?

Mr Smith: The actual charging equipment itself needs to be at a height that you can reach. There needs to be circulation space. The car park where you put the car needs to be wide enough so that you can get the wheelchair alongside the car and get in and out. At the moment there are standard car park type things.

With a Tesla Supercharger in Sydney, if I were to park there, and assuming I could reach the cable, which I cannot, but if I could, and another car parked alongside me, I would be stuck because the car parks are not wide enough for me to get circulation access alongside the car. That is why disabled car parks are much wider, to give you that circulation space for the wheelchair. That generally does not exist with EV infrastructure at the moment.

They are some of the things. It is all about the height and circulation space, and being able to physically do it. In the case of some, I am assuming that, as they get faster, the really high-speed ones, those cables will be heavier and there will be an issue about the weight of those and how that is supported. The other thing is the length of the cables. With Tesla, for instance, their cables are only just long enough to reach the car if you reverse in. You have to be very careful about how you reverse in, to get it lined up properly. With Tesla starting to open up its chargers to other vehicles, there will need to be longer cables and things like that. There needs to be some way of making sure that they are manageable.

THE ACTING CHAIR: Going back to your submission, I particularly note that you had to make modifications to your car. In adopting an EV, we have heard from a number of people today that it is a relatively larger undertaking than a non-electric vehicle car, a combustion engine car. When you were deciding to purchase, and knowing that you would have to make modifications, how did that influence your decision-making? What sorts of things did you consider in that or what did you not have the ability to address because of where the market is at and the range of products available?

Mr Smith: I am not exactly sure what you are asking me. Are you asking about the decision to purchase a vehicle, or is it about the equipment? I will run you through it. I looked for a vehicle that I could get into, which would have the range and which would do what I needed. I was looking initially at the Nissan Leaf, the long-range Nissan Leaf. One of the disadvantages with that was that at the time—they may have changed—it did not have electrically operated seats to adjust the driver's position. When you do not have legs that work, moving the seat backwards and forwards is very difficult. I needed something with full electric seats, and the Nissan did not have that. That was a mark against it.

I looked at the cost, and the cost of a Tesla at that stage was only $10,000 more. It actually worked out to be less than that. It was only about $5,000 or $6,000 more, when I bought my Tesla. That was another factor. I was able to test the Tesla out. I could see that the seats were adjustable. I could get in. It had a big enough boot to put my wheelchair in. There were a number of issues.

I then had to work out how to get hand controls. In my petrol car, I had what they call push/pat controls—push the control forward to brake forward; rotate, or pat, the control downwards to accelerate. You could put those in a Tesla. It would mean they would have to cut the dashboard and you would have to lose some airbags and all sorts of things. They are the cheapest, and they are still probably about $3,000 or $4,000.

The one that I have, as I set out, is an item by Fadiel Italiana. It has a push-forward brake; the brake is always a direct link to the brake pedal, but the accelerator is a computer-controlled little knob on the end of the control. When I went out to the fellow who put it in, out at Queanbeyan, he spoke to the people at Tesla to understand what he needed to do and what was possible, with installing it.

You need people who understand; he is a motor engineer. He put that in. It took him several days to put it in and to calibrate it. It has to be carefully calibrated so that the effect that you get with the hand controls is the same as what you get with the accelerator. That cost over $7,000, so it was a fairly substantial expense for me. I wanted to drive a vehicle that was not polluting the atmosphere. I do need a vehicle. As much as I support public transport, it does not generally run where I need it to run at the times I need it to run. When you are in a wheelchair, you do not get a lot of options. That is why I need a vehicle. But I do support public transport where possible. Does that answer your question?

THE ACTING CHAIR: Yes, it does; thank you.

MR PARTON: There has been a discussion with a number of witnesses at the hearing about cost and equity issues with regard to entry into the EV market. You have raised some pretty interesting points in your submission, Mr Smith, regarding there needing to be more of a focus on the second-hand market, to consider assisting more at the lower socio-economic end to get into the market. Do you want to expand a little more on your thoughts there?

Mr Smith: It is quite clear that EVs have an expensive up-front cost. Their running costs are exceedingly low; and, if you have solar, they are virtually zero. If government and other fleet users are purchasing, they generally turn them over every two to three years, and that would create a second-hand market for EVs that is much more accessible to people. Despite a lot of the doubt that is out there, the batteries are not dead after two years, three years or even eight years, when the warranty runs out. There are a lot of vehicles that are still running with hundreds of thousands of kilometres on the clock and many years of service. The batteries are great; there is no doubt about that.

There are people buying second-hand vehicles that have been imported into the

country from Japan, on second-hand lease, and they are all checked for their batteries and so forth. When you are getting a car, you know pretty well the quality of the battery.

The issue is that there needs to be a bigger second-hand market. At the moment the market is really tight for any vehicle. Buying any car is difficult because of the demand. There is no problem with the take-up of electric vehicles here. The problem is with supply—getting them out there to people, especially in the ACT. If there was more supply at a lower price point, and you will get that with a second-hand market from a fleet and so forth, I think that would be really useful.

Can I make one comment, going back to the hand controls? One of the comments that I have heard from other people with disability is with the difficulty of getting vehicles modified for wheelchair access—the ones where they have the ramps at the back and they run them up into the back of transit vans and those sort of things. The problem there is that the batteries normally take up the floor pan, so that the battery is on the floor of the vehicle. Of course, you cannot cut away the floor of the vehicle if there is a battery in the middle of it.

I am not sure how we overcome that, but the manufacturers need to address that issue. That will mean that people who need to put wheelchairs into the back of vans to transport their family member around, or whatever, will be stuck with petrol vehicles for a long time, unless there can be some arrangements made to allow for battery-operated vehicles that do not have the battery in the floor, so that they can put the ramps in, to get the wheelchairs into the back of the van. That is something that needs to be thought about.

THE ACTING CHAIR: We have only a couple of minutes left. Ms Clay, you might want to ask a final question. Mr Smith, if there is anything that you want to raise in the three minutes we have left, please do so.

MS CLAY: Mr Smith, I am not going to ask a final question. There is so much in your submission about our motor registry needing to upskill, and about the fuel efficiency emission standards that we need. Can you tell us the last thing that you think we should listen to? Take us to where you think you should go.

Mr Smith: Okay. There is a lot about fuel efficiency standards, but that is basically a commonwealth issue more than a state issue. In terms of knowledge, when I got my car registered, there was clearly a lack of knowledge about what EVs were and how they operated. I was asked to put the handbrake on. There is no handbrake in my car. It is not there. There are things like that. It is understandable; they were new, and there was a lack of knowledge. I am sure that people will have upskilled since then because of the number of EVs coming through.

There is a need for things like learner driver training on EVs. As far as I know, there is no driver training school in the ACT with EVs. There could be, but initial inquiries do not reveal any. I did mention some of those.

In terms of what we can do in the ACT to improve EV uptake, it is definitely about providing charging and making sure that that is also accessible to people in units. I

live in a house. I have my own garage. That is great. For a lot of people living in units, they do not have that access. It is about the charging. That is where we really need to concentrate; often they are the people who can afford to buy the vehicles.

THE ACTING CHAIR: Mr Smith, thank you for joining us today. The secretariat will be in touch with a copy of the proof transcript. If you have any other questions, let them know. Again, thank you, on behalf of the committee, for your attendance today.

Mr Smith: Thanks very much. I appreciate the opportunity.

KILLEN, DR GEMMA, Interim Chief Executive Officer, ACTCOSS
BASSETT, MISS LYNDSAY, Senior Policy Adviser, ACTCOSS

THE ACTING CHAIR: For the seventh session today, I would like to welcome the witnesses from ACTCOSS. I would like to remind witnesses of the protections and obligations afforded by parliamentary privilege. Can I draw your attention to the privilege statement, on the pink card that is on the table? Would you mind taking a moment to have a look at that? When you are comfortable, please confirm that you understand the implications of the statement and that you agree to comply with it.

Dr Killen: I understand, and I agree.

Miss Bassett: I understand, and I agree.

THE CHAIR: Thank you very much. We are not having opening statements, so we will proceed straight to questions. I will ask the first question. I was quite interested, when I read the ACTCOSS submission—it has come up already today—in the question of equity and finding opportunity for different incomes, backgrounds and needs. As we heard from the last witness, there are issues around disability access, as to the take-up of EVs. I would be interested to hear from ACTCOSS as to some of the obstacles you have identified in the transition, and any ideas that you might have that could make the transition to electric vehicles more equitable.

Dr Killen: The main barriers that we have identified are around cost of electric vehicles, the regulation of the second-hand electric vehicle market and infrastructure—people who are living in multi-unit dwellings who do not necessarily have the control to be able to install charging infrastructure, and people who are living potentially far away from existing charging infrastructure and cannot access it.

With respect to some of the things that we have discussed in our submission, we discussed making sure that the entire transition and climate mitigation strategies take into account people on low incomes—not necessarily subsidising electric vehicles for people on higher incomes at the expense of making sure that public housing is energy efficient, for example. We also have suggestions around regulating the second-hand car market and making sure that other kinds of electric vehicles are also available—e-bikes, e-scooters, e-motorbikes and things like that, which come at a much lower cost.

THE CHAIR: Picking up on the regulation of the used car market, what are some of the concerns that you have identified there that would need to be addressed to make sure that the transition is equitable?

Dr Killen: I am far from an expert on cars, but we have heard that there is currently no way to determine the life of an electric vehicle's battery when someone is buying it second-hand. They could pay quite a significant price and not have very much working life left in the car. We need that to be regulated. We need to make sure that the electric vehicle second-hand market has accessible prices attached to it as well. We know that sometimes in the second-hand market electric vehicles can be a similar price to new ones.

THE ACTING CHAIR: What would be an accessible price for an electric vehicle, for someone on a lower income?

Dr Killen: That is a great question. We had a bit of a look. A cheap second-hand car that is not electric might be about $5,000 or under. We suggested, from our research, that a second-hand electric vehicle might go as low as $20,000, so there is a significant gap there.

MR PARTON: Four times as much, isn't it?

Dr Killen: Yes.

MR PARTON: At that lowest entry point.

Dr Killen: Yes.

THE ACTING CHAIR: What are the risks and vulnerabilities that come up for people who will not be able to transition to electric cars? To play devil's advocate in this, does it matter if not everyone transitions? Will people be left behind? What is ACTCOSS's view on what we need to do to support the transition for everyone?

Dr Killen: Our main concerns are the rising cost of fuel and the rising cost of registration. I have had a few calls, particularly from people with disabilities in the last month, who are saying, "At the moment I can't transition to an electric vehicle, even if I could afford it. I'm concerned that there will be extra costs in my registration as time goes forward." Obviously, the ACT is planning to stop registration of combustion engine vehicles in the future. That will be a significant concern for people who cannot afford to transition or for whom an accessible car is not available in an electric format.

MR PARTON: My question flows on from the things that you have already said, Dr Killen. We were discussing this topic at the pub last night in Gungahlin. Collin said, "The EV transition is a revolution for people on high incomes who live in stand-alone houses, and other people will miss out." Would you have agreed with Collin, if you were there?

Dr Killen: I think so. At the current stage that is what we are seeing. People, especially people who are using subsidies, probably can afford them already. They are often buying an electric vehicle as their second car, whereas people who need a car, who live in a multi-unit dwelling or are renting, have much less access. As we understand it, the price of electric vehicles will go down rapidly, as the technology advances, and the cars will become more affordable. But if we do not have the infrastructure available, particularly for people who are not living in standalone housing, it will not make as much of a difference.

MR PARTON: That entry is the problem, isn't it?

Dr Killen: Yes.

MR PARTON: There is a constituent that we were dealing with on another issue

whose car—they are driving a 2005 Toyota or something like that—has some clutch issues. They were staring down the barrel of, "Do we spend $3,000 fixing this car or do we try and buy another car for $4,000?" They are not going to $20,000. There is no possible way they can go to $20,000; they cannot do it. It is not even in the ballpark. I do not know how we close that gap. Do you have any specific ideas, specific potential recommendations, as to how we close that gap?

Dr Killen: It is tricky. If we are going to subsidise the cost of electric vehicles, we need to make sure that it is targeted towards people on low incomes. The research that we have seen from the US suggests that things like no interest loans are taken up largely by people who can already afford them. Again, I am not an expert. I think we would need to do some modelling about how we can make sure that people on low incomes are being targeted by the policy and by things like rebates and cost measures.

MS CLAY: Dr Killen, I am interested in opening up government support for things that are electric transport and that are not cars, because they are a bit more accessible for some people. At the moment we have the Sustainable Household Scheme, which is $2,000 to $15,000. It is not open for electric bikes; it is not open for electric motorbikes; it is not open for scooters. It is really just for EVs and other things that you put on your house.

When I have asked the Chief Minister why we cannot include other things, he says that administration costs are difficult and he says that he does not wish to provide subsidies for things that are hobbies. Are you telling me that you have people, low income people, who would use those things as a primary means of transport and who would find it really useful if they had help?

Dr Killen: I believe so. Obviously, it is not suitable for everyone. I think that there is a market in the low income quintiles for things other than vehicles—electric-driven bikes and scooters—as a main form of transport.

MS CLAY: If we included things like that, would you be concerned that people would use them for fun rather than using them for transport, or do you think it would be possible to design a scheme that made sure we were putting subsidies into genuine transport?

Dr Killen: You could argue the same about cars—that people also use them for recreation. The main concern would be about making sure that they are safe, so that the community are safe when we are using electric bikes and electric scooters in a widespread way. There should be some regulation of what kinds of electric bikes, scooters and motorbikes are available. Other than that, I do not think I would be necessarily concerned that people, especially people on low incomes, were spending money unnecessarily on something that would be a hobby, rather than a main mode of transport.

MS CLAY: Since you put in your submission last year, things have moved on, on our just transition. I certainly heard all of the concerns that you raised about where our money was going. We have since brought in home energy programs, seven-star building standards and energy efficiency standards for rental homes. Have we progressed in the last eight months on that just transition?

Dr Killen: In some areas, yes. We are still concerned about the disproportionate amount in the zero interest loans—it is hard to keep track of all of the different schemes—as opposed to what used to be called the vulnerable household scheme. I think it is now the Home Energy Support scheme.

One thing that we are concerned about at the moment, in relation to the Home Energy Support scheme, is that we have been told most of that funding is going towards insulation upgrades in public housing, which we absolutely support, but it means there is no money for gas transition upgrades in public housing and for low income people to replace gas appliances with electric appliances.

I refer to the disproportionate amount of money that is going towards people that might already be able to afford solar panels or electric vehicles, as opposed to the amount that is going to low income people to manage the current transition requirements. That remains a concern for us.

THE ACTING CHAIR: Dr Killen, my question goes back to the point of e-bikes, e-tricycles, scooters and other types of transport, as opposed to electric vehicles. Would you recommend that we approach with caution the idea that those could be a replacement for a car for people on lower incomes because we cannot overcome the price barrier, or do you think it is okay to take that approach?

Dr Killen: There are a lot of low income people who will need to use a car, but perhaps some of that car usage can be replaced with an electric bike, for example.

THE ACTING CHAIR: ACTCOSS has always been a big proponent of public transport access. Could you share your views on, as we look as this EV transition and move to electric vehicles, what role public transport, and other modes of transportation other than cars, should be playing in how we are making equitable access to the city through transport?

Dr Killen: Obviously, we are very big supporters of public transport, and widespread and accessible public transport in the city. Again, it is not suitable for everyone, particularly for people with disabilities at the moment, as it stands. We have been encouraging the government for some time to investigate the cost-benefit analysis of free public transport in Canberra. That is something we continue to advocate for, because we think it would help people to use public transport more often, which would also help with climate mitigation.

THE ACTING CHAIR: If I were to summarise, would you agree that a continued focus on public transport should be a key priority for the government?

Dr Killen: Absolutely, yes.

THE ACTING CHAIR: That was my final question. Is there anything that you would like to add before we finish?

Dr Killen: I think that is everything that we have—

THE CHAIR: You have covered it; okay. Thank you very much for your appearance today. The committee secretariat will be in touch, and you will get a copy of the proof transcript. If you have any questions, let them know. Thank you once again.

Dr Killen: Thank you. Good luck with the rest.

LAWLESS, MS ELLE, Executive Director, Conservation Council ACT Region
CATHRO, DR WARWICK, Transport Working Group, Conservation Council ACT Region

THE ACTING CHAIR: Welcome back everyone to the eighth session today. We are powering through them. We have the Conservation Council of the ACT Region here and I would like to welcome witnesses today. I would also like to take a moment to remind you of the protections and obligations afforded by parliamentary privilege. When you are comfortable, confirm that you understand the implications of the statement and that you do agree to comply with it?

Dr Cathro: Yes.

Ms Lawless: Yes, happy with it.

THE ACTING CHAIR: As we are not having opening statements, we will proceed straight to questions.

MS CLAY: Thanks for coming in today. I very much enjoyed your detailed submission and also the notion that whilst we are transitioning over, we need to make sure that we are not doing a one-to-one car switch—that we are actually reducing our cars where we can. You covered a few things like shared car use, cars as a service. We have had a pretty interesting history in Canberra with some of those business models. They seem quite difficult to make work, do they not? GoGet failed. We have Car Next Door at the moment. What do you think, as a government, we could do to make sure we are not simply replacing the entire fossil fuel fleet with an entire EV fleet? That we are actually reducing the number of our car dependency as well?

Ms Lawless: Thanks for the question, Ms Clay. Before I pass over to Warwick, we believe strongly that EVs play an important part in reducing our emissions but that we need all modes of active travel. So that includes public transport, bikes and e-bikes, and walking, and cars as a service not just as individual car ownership. So, yes, we really strongly advocate that it would be a disappointing outcome if we were just to see EVs replacing ICE vehicles one to one on that basis. But, Warwick, I will let you expand on what more can be done.

Dr Cathro: I am here as the Convenor of the Transport Working Group of the Conservation Council and as a member of the board of the council. As Elle said, we need to look beyond just one-to-one replacement, important as EV uptake is. We recognise the existing ACT government policies in terms of having an active travel plan and support for public transport and so on.

We wanted to contrast car ownership with the use of cars. I mean, people use cars now as taxis, Uber and so on but it would be a great outcome if we could increase car sharing. If you look at people commuting to and from work, it is like an average of 1.1 people in each car. It would make a great difference if there was more like two or a bit more than two. As Jo Clay said in the question, there have been schemes for using cars, like GoGet and other sort of sharing schemes, that have not really worked. We are aware of the possibilities in the future for autonomous vehicle fleets. In fact,

autonomous cars were recognised in the ACT's Transport Strategy, mentioned a few times, and this was published in late 2020. Around the world you currently have pilot services like Waymo in Phoenix and San Francisco, and AutoX in Shenzhen, and so on. But, in my personal view, widespread use of autonomous vehicle fleets is not going to happen until the next decade.

The benefits are striking. There has been modelling done for Canberra which indicates that an overwhelming majority of transport journeys in Canberra could be catered for by a fleet of 40,000 cars. That is one eighth of the number of cars that are currently registered in Canberra—cars which are idle most of the time. I think the big obstacle here to having that kind of transition is community acceptance. Even with all the evidence in the world about safety, and so on, I think community acceptance will be difficult. You probably need something like a demonstration city somewhere in the world. San Francisco or something, where the evidence is very clear that accidents are down, road deaths are down, the cost of travel is down. You need some sort of evidence like that before you are going to get community acceptance in my view.

MR PARTON: When are we going to put Canberra forward as a potential trial city?

Dr Cathro: Well, I think that is the kind of barrier that you have.

MR PARTON: Yes.

Dr Cathro: In my view, this should not be contrasted with public transport. You could regard this, especially if it was a government owned fleet, as another form, alternative form of public transport. In the ACT Transport Strategy, there was reference to future further trials of autonomous vehicles. I think we would welcome that. We would also welcome serious analysis of modelling that is being done by transport economists. Possibly an over-long answer to your question, Ms Clay, but I am happy to take more.

MS CLAY: No, not at all. That was a great answer. We have actually had a number of submitters today talk about EVs that are not cars. About electric assisted bikes, electric motorbikes, scooters, the whole range of mobility devices. I was interested in unpacking that a little bit because the ACT government policy is very positive with multi-modal transport. It has a lot of glossy brochures that talk about how we need to link up all of these things but most of our policies actually favour cars, EVs and cars. Most of our policies, like the Sustainable Household Scheme, are not open to those other modes of transport. Do you think we could do more to actually support and encourage those other types of transport?

Ms Lawless: Ms Clay, those schemes could actually include subsidies for other modes of electric transport, including the scooters, the motorbikes, the bikes. That helps with equity issues around cars being really unaffordable for the majority of people, whereas those other modes of electric transport are at a lower cost, but if they are subsidised then more people can use them, more people can be reducing their emissions overall and also be able to get around the city too.

MR PARTON: I want to get back to the crux of the inquiry, which was specifically about the barriers to EV vehicle adoption in the ACT. I understand the scenarios you

are talking about are also very important. But in regard to the barriers for EV uptake your submission does mention, as do many others, that the absence of home charging for most of our apartment dwellers is a longstanding barrier. You said that that needs to be urgently addressed. How would you address that?

Dr Cathro: Okay, well first of all, things have actually changed even since our submission. We now have a National Construction Code which, at least for new apartment buildings, mandates that 100 per cent of the carparking spaces have to be capable of EV charging.

MR PARTON: Hallelujah!

Dr Cathro: So that has happened since. In terms of existing apartment buildings, though, first of all we commend the advice that has been given by one of our member groups, the Australian Electric Vehicle Association, on retrofitting. There are things that can be done in existing apartment buildings using the owners corporations power, central power and so on. But also, in providing some financial support to owners corporations to improve the electrical infrastructure in those buildings. We commend those recommendations. There is also the possibility of public charging being readily useable by apartment dwellers, such as companies like JOLT and others who have almost on the street options for medium speed charging.

MR PARTON: Where do they have them? Where does JOLT—

Dr Cathro: Currently in Sydney and Adelaide, I think, I am not sure exactly. Later witnesses could probably expand on that.

MR PARTON: Yes. Because there is not a great deal on offer in suburban areas of the ACT, is there?

Dr Cathro: There is not. There is not, for sure. There are no rapid chargers in Weston Creek, for example, and I could go on for other towns. There are actually fewer medium-speed chargers than there were; some of them are being removed currently. So I think it would be good if there was more information about what is happening with charging infrastructure. Again, this is not the prime concern of our organisation. I think later witnesses from the EV Association could probably expand on that.

MR PARTON: Yes, yes.

Ms Lawless: We would also recommend there be a public charging station at Braidwood too.

MR PARTON: Yes, that has come up. Obviously, that is outside the control of ACT government, but surely the word will come from here to there.

Dr Cathro: Well the beneficiaries would be Canberra drivers.

MR PARTON: And Braidwood itself.

Dr Cathro: Yes.

THE ACTING CHAIR: We have already had a bit of a discussion about how replacing cars one for one is not actually the answer, because, while it might help with emissions, it is not going to help with other issues such as congestion or access to transportation for those on low incomes for example. So I wanted to get an idea and clarity from the council as to what you think our priority should be for the transport response and transport policy, as opposed to looking at emissions in isolation—so trying to contextualise them into that broader policy task of what do we do with transport policy and where do we go?

Ms Lawless: Cars do play an important role but we do want to see the whole system examined, especially public transport and bike infrastructure. Warwick, I will let you expand on that.

Dr Cathro: Here is an example. Currently the ACT government has something called a path priority list, which looks at all of the issues with bicycle paths and footpaths that need to be addressed. There are about 600 projects on that list. There does not seem to be any sort of budget support for it, for addressing that backlog of work on bicycle paths and footpaths. Meanwhile, roads like Athllon Drive are being duplicated. I would have to argue you could fund more work on active travel infrastructure by simply slowing down the pace of duplication of roads such as that. That might be a controversial view, but I think the balance needs to be struck in terms of active travel infrastructure versus things like road duplication.

THE ACTING CHAIR: That is one road, but if we are switching everyone over to EVs and people are taking on all these cars and they think it is great for the environment so they are getting a second car and whatnot, we are creating a bigger demand on our roads, which would have to be met by a response. That is just a reality, I think, of how the world works already.

Dr Cathro: I understand.

THE ACTING CHAIR: I guess where I am going with this is we have had a lot of discussion and obviously the focus of the inquiry is EVs, but should we take a step back. My question is actually, how much do we look through the EV prism as a solution for all of our problems? And how much do we say, no we need to refocus on these other fundamentals? That is what I am trying to get out of the crux of the issue, the sense of where do we actually place this EV transition in the broader context of transport needs?

Dr Cathro: First of all, we have to get to zero emissions by 2045. That is an overwhelming imperative. Transport will play a very big role in that. There is no getting around the fact that EV uptake is going to make probably the biggest contribution to achieving that target. There are issues like used EVs, which I think previous witnesses have mentioned. There are things that can be done, although a lot of this falls in the federal government jurisdiction. Another point here is the importance of collaboration across jurisdictions. The policies that drive EV uptake are spread across federal government and state and territory governments and the whole thing needs to harmonised. There are issues like disincentives for internal combustion engine vehicles, which the ACT government has started to do with the recent

announcement on registration fee algorithms. We have talked already about electric bikes, and there have been references to having incentives for e-bikes in the zero emission strategy, but it has not happened yet. I have not seen any timetable or scheduling of that. That is another important topic. So public transport, electrification of privately owned vehicles, promotion of active travel, and improved active travel infrastructure all have to be melded together into a sensible and coherent framework.

Ms Lawless: To further expand on that, Ms Orr, in the wider context of how we reduce emissions, getting people out of ICE vehicles will make the biggest difference in terms of reducing those emissions. But I think the government should be looking at, how we improve our public transport infrastructure and reliability to get people not into an EV that they maybe cannot afford but onto public transport.

THE ACTING CHAIR: Would it be fair then, as a summary of the line of questioning we have just had, to say that from a removing emissions point of view, transitioning to EVs is critical. However, as a transport task it is actually getting people out of cars that should still remain the priority.

Ms Lawless: Yes.

THE ACTING CHAIR: Is that a fair summary?

Ms Lawless: Well, cars play an important role, we understand for some people with disabilities or with young families, all sorts of reasons. Yes.

THE ACTING CHAIR: Yes. Okay.

Dr Cathro: For shorter journeys, less than 10 kilometres, cycling, e-bikes, walking could play an important role in moving people into more sustainable forms of transport.

THE ACTING CHAIR: I agree.

MS CLAY: When you put in your submission, it was quite some time ago, and I think we were waiting on federal government discussion papers. I am just wondering if you have had a look at where the new federal government has moved on with its EV policies. Are things now, in March 2023, at a better state for EVs nationally than they were when you first lodged with us?

Dr Cathro: First of all, one of things that happened is the National Construction Code, so that is one positive. I think around the time we lodged our submission, the changes to fringe benefits taxes had just been confirmed. The big thing is the national EV strategy. We are yet to see the shape of it and to see whether it includes measures like fuel efficiency standards and what kind of structure will be in place for incentives that make sense across the states and territories and the federal government. We have come a fair way, but the shape of the national EV strategy, I think, will be critical.

THE ACTING CHAIR: Is there anything that you wanted to add that we have not talked to today before we finish up?

Ms Lawless: I think adding on to what Warwick just said, that collaboration with other jurisdictions will be essential.

THE ACTING CHAIR: I would like to thank the witnesses for appearing today. We are going to have a break now for lunch. The committee will resume at 2 o'clock. Again, thank you for appearing. If you have any follow up questions, please just speak to the secretariat and they will be in touch with a proof of transcript.

Hearing suspended from 12.54 to 2.00 pm.

CAMPBELL, DR PETER, Committee Member, Australian Electric Vehicle Association, ACT
CZUMAK, MR RICHARD, Branch Chair, Australian Electric Vehicle Association, ACT

THE ACTING CHAIR: Welcome back to the public hearing for the committee's inquiry into electric vehicle adoption in the ACT. The proceedings today are being recorded and transcribed by Hansard and will be published. The proceedings are also being broadcast and webstreamed live. When taking a question on notice, it is very helpful if you say the words, "I will take that as a question taken on notice." This will help the committee and witnesses to confirm questions taken on notice from the transcript.

In this session, which is session 9 of the hearings today, we have the Australian Electric Vehicle Association ACT. We welcome witnesses. I would like to remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. If you would like to take a moment to have a look over that and, when you are comfortable, can you please confirm that you understand the implications of the statement and that you agree to comply with it.

Dr Campbell: Yes, I have read the privilege statement and agree to comply with it.

Mr Czumak: I have read the privilege statement and will comply with it.

THE ACTING CHAIR: Thank you very much. We are not having opening statements for these hearings, and we have not had anything provided, so we will go straight to questions.

MS CLAY: Thanks for coming in today. I am sorry I cannot be there in person. I am stuck home with COVID. There was an awful lot in your submission that was extremely helpful, and hopefully the government will agree with all of it. We had a really big session this morning on apartment barriers, and I know AEVA has got a lot of experience in that. I know the Wattblock tool that New South Wales seems to have is helping people out. We do not have a tool like that in the ACT, do we?

Dr Campbell: Not that I am aware of. Wattblock have provided a lot of excellent resources though, and they are definitely worth working through. I think the New South Wales government also, possibly derived from Wattblock, has its own advice pages you can go to.

Something else to mention about New South Wales is that some time very soon they will be announcing a grants program for strata properties generally. As an AEVA representative I was on part of their consultative group, so I have got an idea of what their thinking was and how they were developing that. Assuming it comes out the way it seemed to be developing to the consultation group, I think it would be an excellent thing to pay close attention to as it comes out and to see if the ACT could emulate something like that.

MS CLAY: How is that different from what we already have with the Sustainable

Household Scheme and the small body corporate scheme that has been announced to assist with the upgrades?

Dr Campbell: I cannot say, ultimately, what the form of their grant program will look like, but I guess the key difference was that rather than having a small grant spread across everybody, they were seeking to do a bit of hand-holding of individual owners corporations through scoping studies—having had a scoping study, they would then come back and receive some support for whatever they work out is best suited to their particular building.

What they hoped to get out of it at the end was a series of example projects, or model projects—"we have a bunch of big apartment blocks with all the parking in the basement, and they did it this way and that worked" or "we have a bunch of low rise where everyone's parking was directly below the unit, and they did it this other way", and so on.

MS CLAY: Thank you. That is very helpful.

MR PARTON: Can I just get in on the back of that, because Ms Clay is somewhat more well versed on Wattblock than I am.

THE ACTING CHAIR: What is Wattblock?

MR PARTON: What is it? How does it work? Who set it up? What is the premise?

Dr Campbell: Some years ago, the City of Sydney council—whatever the local government—commissioned a study on charging in apartment blocks, and so on. Wattblock are a group of people who do consultancy—not just for EV charging; that is just one of the things they do. If you wanted to do general energy efficiency upgrades in your apartment block, you could go to them and they could give you advice on that or do a study for you. It is wattblock.com.au. Within that site they have a bunch of excellent resources. There is a long report that is what they prepared for the City of Sydney a couple of years ago which says, "Do you want to do EV charging in your apartment block? If so, here is some of the basic information you need to know about how charging works and how EVs work." And so on. Then, "Here is a flow chart you might follow with consultation and some examples of consultation questions for what the members are interested in."

One of the really key messages it had, though, was that you may not—"you" being an apartment block—necessarily jump to the perfect, ultimate solution that you would have when there are 100 per cent of owners with an EV. Part of what you might do in a scoping study is work out that up to a certain percentage of EV ownership you can cope by just using the existing power points that happen to be in the car park. You may not need to do anything until you have got, say, 10 per cent—"here is a way you might handle that kind of ad hoc temporary arrangement; these are the kinds of owners corporation rules you might want", and so on. Then it said, "this is the threshold where the building's electrical supply capacity is going to need something better than just plugging into the power points" and "then you'll need to do this better thing, and then, perhaps, that will get you to 70 per cent, and once you are at that percent, then you will have to do this ultimate solution".

MR PARTON: Certainly, what we heard from contributors earlier from apartment blocks was that quite a number of them gave the indication that they were feeling around in the dark, and they did not know what to do, how to do it and when to do it.

Dr Campbell: Yes, and that does not surprise me. I think part of the trouble is that the best answer of what to do where you live may be different to where someone else lives. By way of example, where I live, we have got about half our unit owners who can charge from behind their own meters because their parking is attached to their individual town house units—sorry, maybe about a third can do that. Then there is another cohort who could charge, but they would require permission to run cabling across a few metres of common property to parking spaces that are allocated. Then there is another group who, if the first two groups do that, there is enough capacity remaining in common property supplies for—to be shared among the people who cannot do the first. So, we have kind of got every situation in one place.

THE ACTING CHAIR: In summary then, Wattblock is a good little matrix for helping figure out what you need to be doing in a strata operation.

Dr Campbell: Yes. That City of Sydney report takes you through the processes, and the resources the New South Wales government has produced are more recent but attempt to do the same thing in a more concise form. Wattblock have everything from a slide deck to show to a meeting of owners, and the summary at the top—but then they also have a 100-page report about all the detail all the way through.

THE ACTING CHAIR: And it sounds specific to the individual building—the Wattblock. Have I got that correct, or is it still generalised?

Dr Campbell: It is general advice, where they are saying that if your building has got "this", then you will probably have to go down this track, but if your building has got "that" you would go down this other track.

THE ACTING CHAIR: It is interesting. As Mr Parton said, we had a lot of people saying that a bit of a "how to" guide or a clue card would always be helpful, so it is good to hear that there is a good example out there.

Dr Campbell: Yes. I would say there are two examples that would be great to plagiarise from.

MR PARTON: I note that your submission makes the point that EVs are not just cars, and that there needs to be more encouragement on the uptake of e-bikes and scooters. What would you see is the primary mechanism to achieve that?

Dr Campbell: As an electric vehicle association, we are not just about cars.

MR PARTON: Yes.

Dr Campbell: We think electrification of transport in general is a good thing. I guess we are probably a bit weaker on particular mechanisms to encourage the uptake of that.

MR PARTON: But you are flagging that you think it would be important—

Dr Campbell: Absolutely.

Mr Czumak: It is a broader part of electrification across the transport spectrum. In Canberra we have already moved, through public transportation, to introduce light rail. We have introduced electric buses, so we are broadening the uptake there, and in time there will also be goods vehicles—light goods vehicles, vans, e-bikes and scooters, in terms of micro mobility, are an aspect of that. We already have the Neuron scooters, and the Beam scooters around Canberra giving people the opportunity to experience that, and then purchase their own, and e-bikes are also available. Those rental schemes provide an impetus for owners to evaluate them, without having to necessarily buy one, see the benefits and then buy them from there. There are some mechanisms in place which already assist that and, potentially, other small supports could support those who are on a more reduced budget and enable them to get in to an electric form of transport, which may then ease their daily commute or ease their ability to get around.

THE ACTING CHAIR: I was reading through your submission and the part about the ACT government's role in providing charging infrastructure. I wanted to get a bit of an understanding on what have been some of the challenges that you, and the people within your group, have experienced in trying to use the public charger network.

Dr Campbell: By way of comment, I guess most of our members, if they have got EVs already, are necessarily biased as people who have found EV ownership to be relatively easy—so, they are probably tending to have their own carports.

That said, reliability of chargers has been a substantial issue for the longer trips away, so we can similarly say, people who are visitors to Canberra need reliable charging when they come to Canberra. One of the things with public charging is to think about the variety of purposes it serves. It is not just people living in Canberra. A lot of people living in Canberra will never use the public charger or hardly ever. I hardly ever use one in Canberra, and I have been driving EVs for over a decade. I hardly ever use one here, but I use them any time I go away from Canberra. Other people come to Canberra, so part of it is about supporting tourism.

MR PARTON: Isn't it.

Mr Czumak: To add to that—there are differing user classes in terms of those who are domestic users, or local users, who generally want a quick charge to get themselves home, or to charge during the day in the workplace or in some sort of public place such as a supermarket car park. At the moment, in parts of Canberra we tend to have what we call a "charger desert" through Belconnen and Gungahlin. There are chargers coming, but they are not there yet. It is about rolling out a range of chargers of the right mix to provide for both local users and visiting users over the course of time. We understand it will take some time to actually physically achieve that rollout, but it is about proximity to chargers and the number of chargers to meet the increasing number of EVs that we see on the roads.

MS CLAY: We had a comment about the state of EV servicing for second-hand EVs, and we have had a bit of conversation with various witnesses today about how important second hand EVs are for equity, so that people who cannot afford a brand-new shiny car can still get the benefits. What is the current state of access to getting second hand EVs serviced in the ACT at the moment?

Dr Campbell: Essentially, you can take a car to a dealer. If it is a "brand X", you take it to a "brand X" dealer. There is no reason why they should not be able to service it. The only ones I have got some questions about are the grey import leases, where Nissan, I think, do not really want to know about them.

Mr Czumak: Essentially, that is my understanding as well—that the original equipment manufacturer would be responsible for any repairs, but warranty may not necessarily be honoured in the same way that it would for something that has been purchased locally.

MS CLAY: So the warranty is a consumer affairs issue rather than a lack of skills availability?

Mr Czumak: Yes, correct.

MS CLAY: Certainly, a lot of manufacturers did comment to us negatively about grey imports.

Mr Czumak: Certainly, skills development is another area where I think, with increasing EV adoption, the ACT could drive opportunities by being able to build skills in the ACT. CIT already has a program in place, and the ACT could become a leader nationally by focusing on developing those skills locally to look at both addressing repair needs for original equipment manufacturer vehicles and imported vehicles.

It potentially leads us to the point where the ACT, in terms of its leadership in EV repair, could be seen as a centre of excellence nationally in much the same way as our legislation is leading many other jurisdictions in terms of the support for EVs and their adoption.

THE ACTING CHAIR: Just to clarify: grey imports are?

Dr Campbell: There is federal legislation under which you can import vehicles from overseas, and they are deemed to comply with Australian design laws if they complied in Japan, say. An agent will go to auction and buy a second-hand Nissan LEAF that is three or five years old in Japan, import it here, there are a bunch of checks that occur here, and then it can be sold-on here.

THE ACTING CHAIR: Those ones are or are not covered by warranties?

Dr Campbell: Nissan does not really want to know about them.

Mr Czumak: Generally, they are not covered by a warranty which would be valid

in Australia.

THE ACTING CHAIR: We will wrap up there. Thank you very much for coming in. If you have any other questions about today's hearing, please let the secretariat know. You will also receive a proof transcript for *Hansard*, so keep an eye out for that. Once again, thank you on behalf of the committee for attending today.

Dr Campbell: Thank you very much.

Mr Czumak: Thank you.

Short suspension.

MARKS, MR SAMUEL, Sustainability and Future Transport Manager, Australian Trucking Association

THE ACTING CHAIR: Welcome to the tenth session today. We have the Australian Trucking Association. I would like to welcome Mr Sam Marks. I remind you of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. Can you please confirm that you understand the implications of the statement and that you agree to comply with it.

Mr Marks: Thank you. Yes, I understand and agree.

THE ACTING CHAIR: We do not have opening statements, so we will jump straight into questions.

MR PARTON: When we had the motor traders—Hyundai and others—in this morning, one of the things they pointed to is that the mix of private vehicles that Australians buy, as compared to Europe for argument's sake, is very much weighted to light commercial and SUV vehicles, which makes it much more difficult for us to transition the majority of the private fleet to EVs.

I would have thought that applies tenfold when it comes to your industry, so I am looking for an opening reflection from you on how tough it is for the trucking industry in Australia to go down the path that is being advocated.

Mr Marks: I would describe the heavy vehicle sector a bit differently to that sort of a description of the light vehicle sector. You can look at heavy vehicles in terms of their use case, essentially. There are the urban trucks, and despite our vast distances, the majority of Australia's trucks are, essentially, urban. Then you get heavier weights, et cetera, and those trucks. You have got your regional transport; you have got your long-distance transport and you get different variations of that long distance—whether it is a B-double running up and down the Hume Highway or whether it is a road train running between Perth and Darwin. For that heavy and remote end of the fleet—yes, there are a lot of challenges, and they will not be open to electrification in the short term. In terms of the urban fleets, those electric trucks are here today, and there are even plans to manufacture them in the country, so that is definitely doable.

MR PARTON: At all levels here of entry to the market we are seeing that that initial up-front cost is a problem, and I am assuming that is the case, even when it comes to the light trucks.

Mr Marks: Yes. Roughly speaking, an electric truck can be two to three times the cost of its diesel equivalent, so that is a huge price barrier, especially for an industry that is predominately small businesses and predominantly very tight margins. The industry will shift in time due to the costs coming down and the fact that the electric trucks are cheaper per kilometre to operate—

MR PARTON: Of course they are.

Mr Marks: But that initial price barrier is certainly delaying the transition. I guess

part of our focus is around how we bring forward the date when it is economical for operators to transition so they can access those cheaper running costs and make a direct contribution to reducing emissions.

MS CLAY: I enjoyed your submission. It certainly sounded like you are ready for a bit of government leadership to help the freight industry. In the ACT, we have an EV strategy that is looking at trucking and freight by the mid-2030s, but it actually sounds like the trucking industry is trying to move now, and you made a lot of practical suggestions like exempting electric trucks from curfews, presumably because they are quiet.

It sounds like there is a need for some kind of loans or credit to help people buy into the market in the first place, noting that they will save costs over time. Do you think the time for government to assist with this freight transition is earlier than the 2030s? Do you think it is now?

Mr Marks: Yes—to answer shortly and briefly. There are different segments, so some of those segments will not be able to transition today, but some of them definitely are able to. Just before Christmas, and after we wrote the submission, there was the announcement from Team Global Express, with federal government support, putting 60 electric trucks into western Sydney, which is quite a big announcement in a global sense and happening in Australia. Then you have got plans from Volvo, for example, to manufacture them in south-east Queensland.

One of the reasons I have suggested that you look at it in segments is, when you are looking in places like Europe and the United States, those urban trucks are approaching cost parity in the next few years, whereas long-distance transport is a few years after that. Sometimes people look at trucking and focus on the long distance part of the freight task, but because it is such a diverse industry, there is no reason for the challenges in long distance to hold back electrifying what we can, especially in a city like Canberra, where it is a predominantly urban fleet.

MS CLAY: Thank you for that. I note you often talk about electrifying the fleet. We have heard a little bit about hydrogen in freight in our submissions, but, frankly, we have not heard a lot, and I have to say that most of the trucks I have seen out on the roads seem to be conversions or straight electric trucks. Are you hearing from your industry that there is a big role for hydrogen, or are you hearing that the electric batteries are probably meeting most of our needs?

Mr Marks: We adopt a technology-mix approach, so electrification has a big role to play in those urban fleets. When you start talking line haul and the distribution supermarket work coming into Canberra, say, from Sydney and Melbourne—the deliveries to Woolworths and Coles and the like—then you are starting to talk hydrogen, once you get over about 500 kilometres a day in distance travelled. Then, when you start looking at the heavier, remote end of the fleet—once you start talking road trains and the like—we still may be talking internal combustion engines but on alternative fuels.

That technology space has a bit of a way to go, but battery electric trucks are here now. The hydrogen models are expected towards the end of the decade, so that is

coming, but it is not here yet. The biggest challenge with hydrogen is going to be the cost, because electricity is cheaper to charge up than diesel, but hydrogen is currently more expensive.

MS CLAY: The other thing that leapt out from your submission is that you made the point—and a few people have talked about health—that 60 per cent more people are dying from emissions than are dying from car crashes. For me, this fits in with your point about whether electric trucks might not have to comply with the same curfews that regular trucks do. Do you think there will be a lot of public benefits and acceptance of electric freight vehicles because they do not cause the smells and the emissions, and they do not make the noise?

Mr Marks: Yes, essentially. We think government regulation has a purpose, but it should be fit for purpose. If the purpose is to regulate vehicle noise, and the impacts on residents and the like, then when the vehicle technology changes, and it does not have those same impacts, the regulations need to keep up with that.

In turn, that then provides the industry with an incentive. We saw through COVID, in particular, and the toilet paper challenges, that relaxation of curfews in some of the bigger cities did help to address that. Interestingly, some of the work that followed from that showed there were not the level of complaints about it that I would have expected.

THE ACTING CHAIR: I wanted to pick up on the hydrogen aspect too, because it is not something we have had a huge amount of discussion about. I wanted to get an indication from you of how the trucking sector views the future of hydrogen versus electric. You have already made the comment that, at the moment, electric is cheaper, so obviously that is going to be taking people's attention towards electric, but how viable do you see hydrogen as, and what role do you see it playing in the future of trucking, say, as opposed to electric?

Mr Marks: There is certainly a lot of interest in industry in hydrogen, and it has certain advantages, especially around refuelling time. For trucks, essentially, time is money—keeping them on the road and keeping them moving. So, the time that an electric truck would take to recharge is potentially a downside, depending on how your business is structured

Hydrogen has benefits around how a business operates, and has similarities to how they operate already, with that sort of flexibility that is so ingrained to trucking. The biggest challenge with hydrogen is really the cost factor. Some of the projections, overseas at least, around when hydrogen meets cost parity with diesel are even behind the electric projections. We need access to affordable, renewable hydrogen to make that work.

THE ACTING CHAIR: Thank you; that answers my question.

MR PARTON: You have spoken a little about the practical barriers in transitioning. I am focussing on that urban fleet. How much of a problem is battery weight, and how much of a problem is range?

Mr Marks: The disclaimer on any of these answers is it depends a bit on your business, because so many people use their trucks in different ways. The weight is an issue, in particular, as the trucks get larger—

MR PARTON: Yes, I can imagine.

Mr Marks: So to use a Volvo example—they have a rigid truck that is going into western Sydney. That is here, and that works for distribution and the like. They are currently trialling a semi-trailer-type combination in Queensland, but the weight limits on the front axle of a truck in Australia are quite out of step with, say, what the standards are in Europe, so it is harder to bring those trucks in and to have the ability to carry freight on the trailer, because you are using up a lot of your weight with the battery.

MR PARTON: And range—obviously you touched on it in terms of the upside for hydrogen is that you can get a similar sort of range. When the margins are small, you do not want to be getting the vehicle off the road to charge it in the middle of the day, do you?

Mr Marks: That is where we think some sort of—and there is not really any of this yet—public, fast charging for trucks would help, because—

THE ACTING CHAIR: How long does it take to charge a truck?

Mr Marks: It depends on the model and the battery, but to use the example of the Volvo FL Electric again, which gives you up to 300 kilometres range—if you charge it with AC charging, so if you charge it in your depot overnight, that is about 11 hours, whereas with DC charging you can do it in two. That downtime is definitely an issue, but it depends a bit on how you use it.

It is also worth mentioning there is another sort of business out there that is working on battery swapping. The truck has to be stationary for five minutes and they pull the battery out of the truck—

MR PARTON: A bit like gas bottles?

Mr Marks: Essentially. It is like a swap-and-go.

THE ACTING CHAIR: So rather than spending two hours charging you just get a charged battery and then they charge the other one?

Mr Marks: Yes, and then you charge the battery until the next truck arrives. They just put a B-double into South Australia this week.

MR PARTON: Right; there you go!

THE ACTING CHAIR: There is some innovation going on out there.

Mr Marks: Yes, exactly.

THE ACTING CHAIR: We are just about at time, Mr Marks. Is there anything you would like to add before we conclude today?

Mr Marks: Thank you for your time. The main points I would make are that if we address some of the regulatory barriers, and address the financial barriers and infrastructure charging barriers, then we can bring forward that point where industry can make the transition. If we bring forward that point, the cumulative emissions from trucking between now and 2045 will be lower.

THE ACTING CHAIR: We will conclude there. The proof of transcript will be sent out to you for review. If you have any questions, please just have a chat to the secretariat. On behalf of the committee, thank you very much for appearing today.

Short suspension.

BRIDGFORD, MR DAVID, Acting Secretary, United Firefighters Union ACT Branch

THE ACTING CHAIR: We have session 11 with the ACT Branch of the United Firefighters Union. We have Mr David Bridgford appearing today. Thank you very much for attending. Can I ask you to look at the privilege statement. Once you have had a read over that, let us know that you understand the implications, the protections and obligations afforded by parliamentary privilege and that you are happy to comply with the statement.

Mr Bridgford: I have read the statement and I understand.

THE ACTING CHAIR: Thank you very much. We do not have an opening statement so we will go straight to questions.

MR PARTON: Mr Bridgford, depending on how much YouTube you watch, there is a fascinating narrative from people that as we move forward with more EVs making up a higher percentage of the private car fleet, this is going to lead to more vehicle fires. The submission from the United Firefighters Union suggested that the EV fires were no more common than other vehicle fires; it is just that they are different in terms of managing them. How are they different?

Mr Bridgford: Well, I suppose initially it is probably the hazards. A car fire by itself has a certain set of hazards that as firefighters we have come to expect. Obviously, there is heat and toxic chemicals. But as far as EV vehicles go, we are now seeing a whole range of new hazards. The toxicity of the materials that are released during combustion are a lot worse or have an ability to work around our PPC or PPE. I suppose they are different and new hazards. So obviously the toxicity, as I said, and the run-off or the contaminant that comes from an electric vehicle car fire. We are now seeing more and more hydrofluoric acid in the run-off, as well as the directional flame that is coming from vehicles. Traditionally your normal car fire, as it catches fire, will burn and give off heat in all directions. What we are seeing now is that when the batteries are involved, they are actually giving a directional flame that is the same amount of heat in kilowatts or kilojoules or megajoules, whatever you like to use. It is being given a single direction as what a normal car fire gives in a full 360 direction.

MR PARTON: Okay. So it is much more intense—

Mr Bridgford: Yes, absolutely.

MR PARTON: —at that point. I am making an assumption that you are a coalface, on the ground guy. I do not know why. Because you just look like a fireman to me.

THE ACTING CHAIR: He also told us he is a firie.

MR PARTON: Yes. So have you dealt with an EV fire?

Mr Bridgford: Yes.

MR PARTON: How many?

Mr Bridgford: Only the one that we are aware of, but I suppose you cannot really tell. We do not always get enough information when going to them that they are what they are. But certainly post-fire, if you can get enough of the vehicle that you can find a VIN or the remains then, yes, you could identify it.

THE ACTING CHAIR: On the fire risk from vehicles, the discussion we have just had seems to imply that it is the vehicle itself. I am wondering if there is any fire risk that you see associated with chargers per se or is it largely in the vehicle?

Mr Bridgford: Yes, absolutely. So I probably could not talk as much to the chargers themselves, but certainly the charging component or when they are charged. Dr Paul Christensen, I think he is referenced in our submission, talks about the mechanisms that actually create the fire or fire conditions in EVs and one of them is certainly charging, yes.

THE ACTING CHAIR: From a risk perspective, when is a fire incident more likely to happen: when it is charging or when it is driving?

Mr Bridgford: Good question. So definitely when there is an impact, a massive one, and that could be either an impact with a car or driving over an object if the battery is on the ground.

When the battery is charging it certainly is a higher risk. However, definitely the information we have been given and we have found through research is that if they are charged in line with the manufacturer's recommendations and the manufacturer's chargers, they are very safe. It is when someone either creates their own hybrid system or uses a different charger for a battery, then absolutely there is definitely an increased fire risk if you are using the inappropriate charger for the battery while you are charging it. Also fast charging seems to be where you potentially will get a higher risk or a higher incidence of fires as opposed to the slow charge, or the 11-hour normal 240 volt charge.

MS CLAY: I would love to have a chat about how we set the standards, the regulations. There are a few reasonable calls in your submission, Mr Bridgford. The first was a call for an Australian standard on charging infrastructure. We do not have one at the moment?

Mr Bridgford: Not that I am aware of.

MS CLAY: Interesting. That does make a lot of sense that we would need one. There is also a call that the ACT firefighters would be involved in setting standards on EV-ready buildings. I am assuming, probably, particularly on apartment buildings. I am assuming this is about basement fires. Is there a need for some consultation there about what sorts of standards would apply?

Mr Bridgford: We believe so. We certainly think so. We would be anticipating or hoping that we could have a consultation with our fire safety engineers. In our mind that would not just be limited to apartments. My understanding is that under the

current legislation—we have, I would say, drawn a long bow to actually try to enforce anything—it is for new builds. Also, there is a recently released document. The AIBS have released a document or a statement that talks about the introduction or the installation of charging equipment in new buildings as well as those refurbished. We would see that it is not just related to apartments, but that would certainly be probably one of the bigger risks.

MS CLAY: Yes, that is great. Similarly, we have had a huge call from bodies corporate in particular for some clearer information from government about how to do this. So I am feeling like those two strands might actually match up quite well if government is able to put them together.

The last strand I wanted to pull out was the problem for first responders if they attend a crash and they cannot identify whether it is an EV or not and a need for number plate labelling. I think we are making good progress on that here in the ACT, but I do not know how visually easy it is for a first responder who shows up at a crash to see numberplates and things. Is there anyone in the world who is doing this really well?

Mr Bridgford: It is a good question. I have no idea, to be honest. Certainly, a standardised indicator either on the numberplate or on the vehicle would be fantastic. You talked about the numberplate identification. That would be a technology which I think would be fantastic, however we certainly do not have access to that information on our database. I am not sure what kind of things would need to be navigated to give us access but that would be phenomenal, to be able to turn up to an incident knowing in advance that it is an EV.

THE ACTING CHAIR: Just on the sticker question, someone mentioned to me the other day that if you have an EV you have to get a sticker. I am happy to own up that I have an EV and I do not have a sticker. Is the sticker compulsory at this point in time?

Mr Bridgford: I do not believe so.

THE ACTING CHAIR: So, you are saying something like the sticker being compulsory would help.

Mr Bridgford: Yes. A standardised sticker too would be, I think, the key.

MR PARTON: It has got to be absolutely clear as soon as you rock up—

THE ACTING CHAIR: As to what it is, yes.

MS CLAY: I am assuming police obviously know from their database what type of vehicle something is but then the rest of the first responders do not have access to that information. That is probably the information gap at the moment, is it?

Mr Bridgford: Yes, absolutely. So our comms team do not have access to that information. I am sure that there are a whole lot of issues that would go with access to that information and whatever protections would need to be put in place around that, but it would be a phenomenally powerful tool to have that information.

THE CHAIR: Yes, I can imagine it might be, to know when you are going to an accident what kind of car and even maybe to know which truck or which gear to be taking. You might make some different choices.

MR PARTON: You mentioned in the submission that specialist training for firefighters would be a very sensible thing in this space. Is it safe to say that when it comes to the battery fires that there is more risk, there is more danger, for those who are at the scene than with a non-battery fire?

Mr Bridgford: Yes, absolutely.

THE ACTING CHAIR: Is that because of the intensity of the fire?

Mr Bridgford: Well, it is a number of things. It is the intensity. It is also the single direction of the flame that we talked about. And, as I said, there is hydrofluoric acid, which is coming off most, definitely not all, but certainly a lot of EV batteries that are involved in fire. There is also—I do not know how much time we have—we have thermal runaway, which is a massive issue. Has anyone talked about that?

MR PARTON: No. When I saw it written I was not even sure what it meant.

Mr Bridgford: It is basically the cascading effect if one of the cells is damaged or punctured. It releases heat and then it will continue throughout the entire battery system or the majority of the battery system. So that in itself is extremely hard to stop. There are a lot of heavy metals in the actual battery systems. We found that, as in the submission, up to 24 times the safe amount of cobalt was found in the PPE of firefighters who attended an incident. Then you also have what we call a vapour explosion. So it is not necessarily that it is just alight. If the battery is damaged and it is heated, it releases a whole lot of gases. Now, those gases do not just sit at the ground level or rise and go away. They create a flammable vapour which can explode. That is definitely something we are not seeing in normal cars.

MR PARTON: Is it not bizarre? Having not been involved in it, your first thought as an outsider would be that if you remove petroleum from the equation you are going to be sweet, but that is not the case.

Mr Bridgford: No, absolutely not.

MS CLAY: We heard a little bit in your submission about different equipment, different techniques needed to fight battery fires and EV fires. Do you feel that the ACT fleet at the moment has what it needs to deal with this transition as we go forward?

Mr Bridgford: Personally, I do not think so. However, we get to see a lot of these kinds of incidents or a significant amount. I think we definitely need to have a lot of research, going forward, on what the capability is and what is around in the market. Europe or some of the European countries are well ahead of us. I think the issue is that it is such an ever-changing and rapidly evolving technology that whatever we introduce now may not be relevant in a couple of years time. So I think that

organisationally we need to be able to be both proactive in the strategic realm but also very reactive because the technology is changing so quickly, and even though we know more about the hazards they are changing as the technology evolves. I think the answer is no, but I also do not think we can just, at the drop of a hat, turn around and come up with a solution.

MS CLAY: It is going to have to be incremental, by the sounds of it.

Mr Bridgford: Yes, I believe so. It is interesting.

MS CLAY: In the submission we had two EV fire accidents summarised and I think they both happened at battery storage facilities. That was the state of affairs halfway through last year when you submitted. Have we had a lot more or are we still sort of at about the same?

Mr Bridgford: As far as battery energy systems go, I believe it is still the same. I know of two more incidents with EVs. Yesterday we received an email about an incident in New South Wales where someone had purchased some batteries online and created their own system. That is a serious concern for us: what happens with second- and third-life batteries and what regulations are there around that?

THE ACTING CHAIR: We have heard quite a bit today from apartment bodies corporate and stratas about retrofitting buildings in particular, and how they are not necessarily clear on how to mitigate potential hazards, or how to do installations that are safe and will meet up with electricity loads and so forth, and lots of various bits and pieces. I would be interested to get your perspective on what are the safety hazards that we would need to be looking out for when retrofitting, particularly from an electricity load capacity, and what sorts of things we would need to put in place to perhaps start to mitigate those?

Mr Bridgford: I probably cannot give you much information. Certainly, the electricity loading is well outside my scope. I did speak to our fire safety engineers this morning and we did discuss the issues that are fire related. I can certainly go into that.

THE ACTING CHAIR: Yes, that would be good.

Mr Bridgford: Certainly what they are hoping to see is some really tight regulation or some really good guidance around ventilation. Certainly fire loading. As we discussed, although the heat wattage may be the same as a normal vehicle, it is now very directional, so spacing locations within the actual building are going to be really important. What was the remainder of the question, sorry?

THE ACTING CHAIR: Yes, just those things that we need to start looking at. So the considerations are not just, "We can do it, so we will put it in." From a safety perspective, what measures do we need to be taking to be mitigating risk?

Mr Bridgford: Again, it is not really my area of expertise, but I think we would definitely love to see some consultation that our SMEs or our fire safety engineers are actually involved in. It is very rare that we and AFAC agree on a certain position. At

the moment we are in furious agreement about where we go forward with this and a lot of it is about legislating and getting some specific guidelines around what it is going to look like and what it should look like. I suppose that is kind of their specialty. I mean, I do vertical rescue.

THE ACTING CHAIR: Yes, okay. It is a question that is more for the engineers.

Mr Bridgford: Yes. I believe so.

THE ACTING CHAIR: Okay, great. That is good.

Mr Bridgford: Sorry.

THE ACTING CHAIR: No, no, that is fine.

MR PARTON: No, you have done good, mate.

THE ACTING CHAIR: Is there anything you would like to add, Mr Bridgford?

Mr Bridgford: No.

MR PARTON: You have survived.

THE ACTING CHAIR: You survived. The next one will be a breeze now. Thank you very much for coming in. If you have any questions, just liaise with the secretary. They will send you a proof of today's transcript for you to review. Again, thank you very much for your attendance. It has been very interesting.

Mr Bridgford: I appreciate it. Thank you very much.

THE ACTING CHAIR: We are now going to break for afternoon tea. We will be back at 3.55 and I believe we have various ministers from the ACT government appearing.

Hearing suspended from 2.54 pm to 3.55 pm.

STEEL, MR CHRIS, Minister for Skills, Minister for Transport and City Services and Special Minister of State
DAVIDSON, MR GEOFFREY, Executive Branch Manager, Development Coordination Branch, City Services, Transport Canberra and City Services Directorate
ANDERSEN, MS JOSEPHINE, Acting Executive Director, Education and Training Services, Canberra Institute of Technology

THE ACTING CHAIR: Welcome back to the public hearing of the committee's inquiry into electric vehicle adoption in the ACT. The proceedings today are being recorded and transcribed by Hansard and will be published. The proceedings are also being broadcast and webstreamed lived.

When taking a question on notice, it would be very helpful if you could say the words, "I will take that question on notice." This will help the committee and witnesses to confirm questions that have been taken on notice from the transcript.

In our 12th session for today, we will hear from the Minister for Skills and Minister for Transport and City Services, Mr Chris Steel MLA, and officials. Can I remind all witnesses of the protections and obligations afforded by parliamentary privilege? I draw your attention to the privilege statement, which is on the pink card that is on the table. Once you have had a chance to look over that, could you please confirm that you understand the implications of the statement and that you agree to comply with it?

Mr Steel: I understand the privilege statement.

Ms Andersen: I understand and agree to the privilege statement.

Mr Davidson: I understand the privilege statement.

THE ACTING CHAIR: Thank you very much. We are not having opening statements; we will proceed straight to questions, and we will start with Ms Clay.

MS CLAY: It is nice to see you this afternoon, Minister. I am keeping my germs at home. A lot of witnesses today from different groups have talked about multimodal transport in the EV context; it was quite interesting. Mr Page from the Australian Electric Motor Company—a motorcycle company—told us that electric motorbikes are not included in state schemes like the Sustainable Household Scheme and they also have higher customs import duty.

We also heard from ACTCOSS, who were a bit concerned that some of the cheaper options that are electric transport but not EVs—like scooters, e-bikes and electric motorbikes—are not included. We heard that same messaging from the Conservation Council, from AEVA and from quite a lot of individuals.

It struck me, though, that your transport policies are very strong on multimodal transport. Do you think that we are doing enough to include electric transport that does not involve EV cars but involves other EV vehicles? Could we do a better job of including those in some of our incentive schemes like loans or grants?

Mr Steel: Those incentive schemes fit under a different portfolio minister. You may wish to ask questions of the relevant ministers in relation to that.

THE ACTING CHAIR: Would that be Minister Rattenbury?

Mr Steel: Both Minister Rattenbury and the Chief Minister and Treasurer. You may wish to ask them about those various schemes and the eligibility criteria. As a general principle, we know that there are high up-front costs for purchasing electric vehicles, and we have certainly seen in other jurisdictions that incentives have been used in a wide variety of different ways to try to make it easier for people to meet that up-front cost. We have, of course, done that through the Sustainable Household Scheme, through a loans scheme with no interest, in order to incentivise people to take up electric vehicles and meet that very high up-front cost.

The same high up-front cost does not necessarily apply to smaller items like bikes, for example, including electric bikes. I think that is one of the reasons why it has not been included in the scheme. Certainly, those ministers can talk to those different portfolios.

MS CLAY: We heard quite strongly from ACTCOSS and from a number of people that, if you are on a lower income, those cars are out of your market—probably any car—but other items would be within your affordability. Do you think we have enough policies to help with our multimodal transport going forward?

Mr Steel: The key thing that I am focused on as transport minister is encouraging people to use public transport and making sure that that is a zero emissions choice. That is why we are rolling out the zero emissions bus fleet, with the target of transitioning the entire fleet by 2040 or earlier. If our buses are not zero emissions then people do not have that choice to be able to choose a sustainable form of transport.

Most people, for the longer trips, will want to choose either taking a car or using public transport. Making sure that we get that transition underway has been my focus, and that is certainly what we set out in the zero emissions transport plan for Transport Canberra.

THE ACTING CHAIR: We heard quite a bit from ACTCOSS about this; a few others—the Conversation Council, if my memory is correct—went into this. We were talking about the prioritisation of responses. Certainly, decarbonising transport emissions is a priority from an environmental point of view. How does that mesh with transport priorities? Decarbonisation is not the only transport priority, if I have read my papers correctly. Can I get a little bit more insight into your thinking on the policy that is there as to how we decarbonise as well as progressing transport policy beyond decarbonisation?

Mr Steel: Yes, it is an important point, because even if the buses are not at zero emissions, they are still a much lower emissions form of transport because more people are using them. More than one person at a time is using a bus, so we can bring down our emissions overall if we have more people using public transport and also, of course, if we encourage active travel and other sustainable modes of transport.

Certainly, encouraging more people to use public transport is a big part of the Transport Strategy. COVID was a significant setback for cities around the world, but we are starting to see people return to public transport, which is great. Making sure that they have modern buses when catching public transport is important in encouraging people to use public transport. A new ticketing system and those sorts of things that will make it easier and reduce barriers to using public transport are important.

Obviously, light rail has played a significant role in encouraging people to use public transport who did not use buses before, on stage 1, and we want to extend those same benefits down south, so that we can grow our patronage on public transport overall, integrated with a bus system that, hopefully, will be electric in the future.

All of those things work together to try to encourage people to use public transport. I will hand over to Geoff Davidson, because TCCS is working on multimodal network planning. As we plan for the future of transport in the city, we will take a multimodal approach to encourage all of those forms of transport that are sustainable and will help us to bring down emissions.

Mr Davidson: As the minister mentioned, the Transport Strategy does provide a very strong vision and some policy directions around meeting climate change objectives for the government. The key policy document relating to accelerating the uptake of electric vehicles and removing barriers is the Zero Emission Vehicles Action Plan.

However, the Transport Strategy does provide for that policy direction to be complementary to those policy documents. The multimodal network plan that the minister mentioned will seek to apply the vision of the Transport Strategy and its policy directions in order to identify where we are now and where the gaps are between that vision and the current transport network. It will look very much at a multimodal approach, looking at all modes, and confirming the modal priorities for the network. It will also be underpinned by a "movement and place" philosophy.

In relation to electric vehicles, that multimodal network plan is still in development, but it is likely that it will include some recommendations, both infrastructure and non-infrastructure related, to further support the rollout of electric vehicles.

MR PARTON: I am mindful that we will probably experience, as we did with the first question, some question areas that perhaps are for the other minister, so just head me off if that is the case here. I know that you guys deal in part with the rollout of public charging infrastructure.

Mr Steel: Yes.

MR PARTON: Can I ask that here?

Mr Steel: Yes. I am responsible for public land, yes.

MR PARTON: I understand that there is a target of at least 180 public chargers in the ACT by 2025. Certainly, based on the feedback that we have had in this committee

room today, there is a belief from those who are chugging around in EVs at the moment that we are moving too slowly in the provision of public charging infrastructure. How can we accelerate that rollout?

Mr Steel: Under a different minister and different portfolio, work has been done to provide direct incentives or grants to support that rollout. Certainly, they would be best placed to provide an update on where that rollout is up to. I think it is around 70 chargers to be rolled out across the territory over the coming years, and some of those have already been installed.

In relation to my responsibilities for public unleased land, we certainly recognise that, while some chargers will be installed on private leased land, as they have been at Tuggeranong Hyperdome, Majura Park and other places, there is potentially a role for government to play in making available public unleased land, particularly through surface car parks; that is the main opportunity for charging to be installed.

We have been talking with stakeholders about the development of new charging infrastructure operations policy and guidelines. That discussion is ongoing, and we will see guidelines put out to charging operators so that they have a very clear set of policy directions about where they can install chargers and what types of chargers they install, what design guidelines we have for the actual parking spaces themselves to meet accessibility standards and a range of other standards.

MR PARTON: Please excuse my ignorance. If we are heading for 180—I do not know how many we have out there at the moment; 80—none of them are actually holus-bolus run by ACT government; they are all run by private companies?

Mr Steel: That is a question to ask the Environment, Planning and Sustainable Development Directorate and the relevant minister.

MR PARTON: Okay. Are you confident about reaching the target of 180 by 2025?

Mr Steel: That is a question for them. Certainly, the role we are playing is: how can we make it as easy and clear as possible through guidelines to charging operators so that they can install them on public unleased land through car parks?

We have seen that in other jurisdictions where public car parks have been used for charging, but we need to make sure that it is functional and meets all of the design requirements. They should go through a streamlined process, but still a process to have those approved. That is the process that we are going through at the moment with them.

MR PARTON: That is probably enough from me on that. I am happy to examine it with Shane. I know we are very short on time.

Mr Steel: The guidelines are my responsibility. It is worth thinking about this.

THE ACTING CHAIR: The policy sits with Minister Rattenbury; however, you have a role in the implementation?

Mr Steel: The use of public unleased land for charging is my responsibility. We have been implementing the guidelines, and Geoff Davidson can say a few things about what sort of considerations we are talking with industry about to make sure that they are supported to roll out more.

Mr Davidson: This is an action item of the government's Zero Emission Vehicles Action Plan. That action is for TCCS to develop design guidance and policy requirements for proponents that are seeking to install public charging stations within ACT government car parks; that is both off street and on street. That policy document is currently in its initial draft. There has been some industry consultation undertaken on that. It provides a range of different criteria around the design guidance, and some policy requirements, for example, to ensure that there is interoperability provided by those charging stations to meet the needs of various consumers.

Mr Steel: Considerations have included what type of chargers there should be—whether it is making sure they have the universal chargers, like type 2 Mennekes chargers as well as CHAdeMO options available for certain vehicles that only have a CHAdeMO connection, particularly for DC charging.

We also need to think about heavy vehicles, because charging will need to be provided for heavy vehicles as they transition as well. There is a new universal standard that is being adopted internationally called MCS, but most of them use the type 2 DC charging, which is known as CCS2.

We have also been talking with them about some of the issues around site selection and what might be an appropriate site for them. For example, we are mindful that some of these car parks may be on the land release program. We want to make sure that if something is installed it does not have to be ripped up a year or two later. We are looking at what is an appropriate lease term or licence term for the provider to be able to operate charging, as well as, of course, the parking configuration and design issues.

We will work through that and publish that in due course, but we want to have that in place as soon as we can. Whilst people can already come to us and seek to install chargers, this will make the process a lot easier and clearer for providers who may wish to set them up in the future.

THE ACTING CHAIR: I want to ask you a question in your capacity as Minister for Skills. We have had a lot of evidence today from various witnesses talking about upskilling people and tradies, making sure that they have a good understanding not just of the electric vehicle maintenance but the supporting infrastructure maintenance and needs. I want to get an idea of what we are doing to make sure that we have that capability in our workforce here.

Mr Steel: I might hand straight over to CIT, because they have been working on this for some time. Certainly, the charging is part of that discussion as well.

Ms Andersen: In relation to upskilling opportunities, throughout 2022 CIT was delivering two short courses. One of those short courses is definitely focused on safety. It comprises two units around de-powering vehicles and inspecting and

maintaining vehicles. The other short course we have been offering is around vehicle inspection and servicing.

Moving forward, however, we are looking at delivering the new certificate III apprenticeship from term 2 for light vehicles, cars, and the same apprenticeship for heavy vehicles from semester 2. That will include a much broader range of skilling opportunities. We will continue to develop short courses in response to industry needs around upskilling existing workers as well.

THE ACTING CHAIR: That goes to vehicles, but in regard to charging infrastructure, is there anything to help people work through the particulars of that?

Ms Andersen: Yes. We are working on a short course right now for delivery under the fee-free TAFE initiative, which will focus on installing and maintaining charging stations.

MS CLAY: Minister, we have heard from a number of people that one of the biggest barriers to uptake at the moment is supply. A number of submitters set out the impact of Australia's lack of fuel efficiency standards. It was explained quite simply in many of those submissions. When a manufacturer is selling a petrol or diesel car into a market, there are fuel efficiency standards. They also have to sell EVs into that same market in order to meet the standard.

We also heard from the Federal Chamber of Automotive Industries, who wanted fuel efficiency standards. They said quite strongly that we should not have the internationally accepted standard that is already in place in many other countries; Australia should come up with its own standard and that this would somehow drive availability of cars, EVs, in Australia.

Can you tell us where we are up to with fuel efficiency standards and how this might help supply, and whether you think we should stick to the internationally recognised standard or invent our own?

Mr Steel: This has been on the agenda of infrastructure and transport ministers for years. Until the last federal election, there had been very little action in relation to fuel efficiency standards. A draft regulatory impact statement was prepared on the introduction of Euro 6 emission standards, but that did not go to emission standards for CO_2. The government had not actually agreed to adopt Euro 6, either. Both are important to public health and reducing emissions across the entire transport sector. Indeed, industry was calling for the adoption of Euro 6 standards—the heavy vehicle industry, the freight industry, and advocates in the light vehicle space as well.

Following the election, the federal government hosted an electric vehicle summit. At that summit the federal government indicated that they were intending to tackle the issue of fuel efficiency standards, which are critical to sending the right signals to vehicle manufacturers—OEMs—that we are a place that wants zero emissions vehicles and that they should be supplied here.

At the moment, unfortunately, some OEMs are not supportive of the introduction of fuel efficiency standards, and many of those make up the membership of the Federal

Chamber of Automotive Industries. They include Toyota and some other car makers who are not supportive of moving to fuel efficiency standards. As a result, that particular organisation, in my view, has put forward what I would describe as quite a weak set of standards compared to what we should be moving to and what Europe has already moved to.

We need strong fuel efficiency standards if we are to see the market share, the number of vehicles available on the Australian market, grow. Until we have those standards in place, we will continue to be a dumping ground for less efficient vehicles that end up costing Australian motorists more.

It is critical, particularly, to make sure that we have affordable models on the market. That is one of the key barriers at the moment—the cost of these vehicles. There are far more different models available in overseas markets that have fuel efficiency standards in place. It is one of the reasons why that is the most critical piece of the puzzle, out of everything, including incentives. The regulation is absolutely critical.

With the federal government now looking very closely at this, I believe that they are moving towards developing the necessary work required to put those in place. That will, of course, include the development of a regulation impact statement to be considered. This has to take place at a national level, under federal legislation; it does cover the field in this area. It is up to them to put in place the design standards that are applied to all new vehicle sales.

We are certainly relying on them to do that, but we want to be part of the discussion as well. We have been involved in early discussions, as part of the development of a new national electric vehicle strategy to support those standards. There will be further detailed discussions as they develop those new standards.

MR PARTON: Mr Steel, your government has flagged likely changes to the parking codes for new apartment builds so that in many instances there would be no car parks provided for quite a number of residential dwellings going forward. As a minister in this space of convincing more and more people to transition to EVs, how problematic will that be for EV owners who inevitably will purchase some of those car-park-less apartments and will not have the option to charge their vehicles in their home overnight because they simply will not have a car park?

Mr Steel: There will be charging options available and fast rapid charging available throughout the city. There are already chargers available for people that need to use them.

MR PARTON: There is one available on the north side at the moment. There is one available on the whole of the north side.

Mr Steel: People will find those opportunities as the charging network grows and they can charge their cars, like they do at an ordinary bowser at a service station around Canberra. I was talking to Ampol recently. I know they are interested in rolling out EV charging through their network of service stations in the future; so there will be those opportunities available for people.

I appreciate that at the current level there are not a large number of those rapid chargers, but it is growing over time, particularly with our government's commitment to support some of those rapid-charging options for people that do not have the opportunity to charge in their multi-unit residential apartment block.

There is also the opportunity for those people to talk with their body corporate. Ultimately, many of them would be members of their body corporate and they can start influencing their body corporate to make investment decisions on retrofitting that type of infrastructure.

MR PARTON: We are talking about new apartment buildings. In theory, the car parks that were provided would already have the infrastructure; it is just that these particular owners or renters would not have access to a car park.

Mr Steel: We are in a period of transition where there are a lot of legacy apartment blocks that do not have that infrastructure because the technology was not available when those apartments were built. That is why there will need to be consideration by bodies corporate of installing that type of infrastructure, and that is an investment decision for the bodies corporate and their membership.

MS CLAY: We heard from Hyundai that they are recycling all of their batteries and they are getting a 99 per cent recovery rate. The last update in estimates was that we are expecting, in June 2023, a national product stewardship scheme for batteries. Are we likely to get a national scheme or a local scheme for recycling batteries like Hyundai is already doing?

Mr Steel: There are national product stewardship schemes in development in relation to this, but I am happy to come back. It is obviously something that is not the direct responsibility of the ACT government. It is an Australian government responsibility under the product stewardship scheme arrangements, which are national arrangements. I am happy to come back on notice and provide an update on behalf of the Australian government.

THE ACTING CHAIR: On behalf of the committee, thank you very much for your attendance today. If you have taken any questions on notice—and I believe there was one—please provide your answers to the committee secretary within five business days of receiving the uncorrected proof *Hansard*. Once again, thank you for your attendance.

Short suspension.

RATTENBURY, MR SHANE, Minister for Water, Energy and Emissions Reduction
WRIGHT, MS FIONA, Executive Group Manager, Climate Change and Energy, EPSDD
MALOUF, MS ROS, Senior Director, Climate Change and Energy, EPSDD

THE ACTING CHAIR: I welcome the Minister for Water, Energy and Emissions Reduction, Mr Shane Rattenbury MLA, and officials to today's hearing.

I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement, which is the pink sheet on the table next to you. Once you have had a moment just to read over that, can you please confirm for the record that you understand the implications of the statement and that you agree to comply with it.

Mr Rattenbury: Yes; thank you.

Ms Wright: Yes.

Ms Malouf: Yes.

Mr Rattenbury: Yes, I think we are all familiar with them. Thank you.

THE ACTING CHAIR: Great. As we are not receiving opening statements today, we will proceed straight to questions.

MR PARTON: We touched briefly with Minister Steel on the rollout of public charging infrastructure, which, as you know, falls sort of between the two of you. I just wanted to ask some of the questions of you that he was not able to answer. We have heard a lot of feedback from EV drivers about what they see as the lack of public charging infrastructure. I know that there are plans in place to get to 180 by 2025. I just want to know if (a) that is going to be achieved and (b) if it is at all possible to accelerate that rollout.

Mr Rattenbury: I think the question that sits before your question is: what charging infrastructure do we need? The ACT is different to other places in that we have a higher proportion of people who live in semidetached housing or who have off-street parking where they can charge. We have been considering this question quite carefully.

You have, really, two primary users of public charging infrastructure in the ACT. One is tourists and visitors who need to charge while they are here; and the second is apartment dwellers, be they owners or renters—

MR PARTON: Yes; some of them.

Mr Rattenbury: Yes; because many of the apartment buildings do not have the infrastructure in the underground parking lots.

The research we have done indicates when you look at areas in Europe—where, again, they do not have as many people with off-street parking—the model they are using there is when you need to charge, you go to the supermarket, or you go to the gym, or when you go out for your coffee you use public charging infrastructure, rather than trying to retrofit it into apartment basements, which can be really expensive.

That side story goes to: why do we need public charging? It is probably predominately for those two groups. That sort of shapes how we are thinking about where we need charging and how much of it we need. So the modelling we have done is where the 180 you spoke of in 2025 comes from. Our thinking is that will be enough to meet those groups.

We are also starting to see private people provide it in addition. That might go to your point re acceleration. But, to answer your specific question, yes, we are confident we will get to the 180 by 2025. Our first tender went very well, and we are getting ready for our second tender this year.

MR PARTON: When you say "private people", I do not fully understand exactly what the government's role is in this rollout. I am sort of the belief that so much of the charging infrastructure is actually run by private enterprise.

Mr Rattenbury: Yes.

MR PARTON: So it is an incentivisation from government? Is there any charging infrastructure which is holus-bolus run, managed and maintained just by ACT government?

Mr Rattenbury: No. The role that we play in our tender—and Ms Wright might seek to add to this if I miss a detail—is that we essentially called for it, created the market, if you like, and provided a degree of subsidisation for these earlier phases. The expectation is that, in the medium to longer term, you will see the private sector simply stepping into the space. But we are wanting to be deliberate at this point in time about getting it rolled out.

MS CLAY: Minister, we heard from the trucking industry earlier today. I know that you have got trucking and freight in the EV strategy, but I see that it is slated to come on later in the piece. It certainly sounds like that industry is ready for some assistance now in the transition.

In particular, we were told that urban freight is certainly ready to go electric, and we heard a lot of really interesting regulatory and incentive things—for example, that that industry has the same need for loans with upfront costs, as everybody else does; and that there are regulatory issues where diesel and petrol trucks cannot move at night because they are noisy, but electric vehicles are silent. Do you think we need to bring ahead our trucking and freight EV strategy a bit closer?

Mr Rattenbury: Thanks, Ms Clay. In light of that evidence that the committee has received, I think it is something we might want to reconsider. I think it reflects how fluid this space is. Things are changing quickly, and various industries are getting on board. Some are not; some are.

I think it is fair to reflect that, when we put the strategy together, we were focusing on the lower-hanging fruit and trying to get momentum in the private vehicle space, because, with 64 per cent of the ACT's greenhouse gas emissions coming from transport, we have to get moving in that space. So we were looking for the places we felt we could make an impact.

The ACT is not historically seen as a big place for freight and trucking, and I think we have felt that other jurisdictions would tend to take the lead on that. But the evidence that has come from the association is interesting, and I think we need to have another look it.

MS CLAY: Thank you. In particular, today they seemed to take some lessons from COVID and from the changes on urban freight that happened during that time. So it might be worth revisiting that.

Mr Rattenbury: Thank you.

THE ACTING CHAIR: We have heard quite a bit from a number of witnesses today around the equity of, particularly, the Sustainable Household Scheme and the way the incentives are directed, and I wanted to start looking at this a little bit more. I am sure you have heard already that providing loans to people who can purchase the cars was not seen as necessarily getting to the people most in need. I wanted to get a clearer idea of your thinking around how you can support people on lower incomes and people who are not necessarily in a position to act of their initiative—or their means, is probably a better word to put it—to actually start to transition so that they are getting the benefits that come from reduced fuel costs and whatnot.

Mr Rattenbury: I think this area is a real dilemma. Everyone here is familiar with the fact that the vehicles are not cheap at the moment. They are quite expensive. My view is that the people we should be targeting are the early adopters in an industry that is really in its infancy in Australia.

Owing to, I think, particularly the discouragement by the previous federal government, the uptake of EVs in Australia is far lower than comparable OECD countries. So we are behind, and so our vehicles are still quite expensive. I do not think there is a realistic model in which a low-income household is buying a $64,000 Tesla, no matter how much government support you give. My sense is that we need to be really mindful of the equity issues going forward.

The approach we have taken in the ACT in promoting as much as we can, and particularly the government fleet, the creation of a pool of second-hand vehicles earlier than you are going to see in other jurisdictions. We had 9.6 per cent of new car registrations last year in the ACT as EVs. Those vehicles will start to come into the second-hand market, and I think that is where you start to create the opportunities for lower income households.

Those low-income households are not buying new cars anyway; they are buying second-hand cars, generally. I am not seeking to put any value judgement on anything; I am trying to reflect how I think we all understand how the world works.

My sense is that the best approach at the moment is to try to improve the second-hand vehicle market in the ACT. It is certainly one of the reasons we extended the various government concessions to second-hand vehicles. I think that is particularly important in that equity discussion at the moment. But that is an issue that I think will come a little bit later as the whole sector matures.

Ms Wright: Can I add to that?

Mr Rattenbury: Yes, certainly.

Ms Wright: In addition to the points the minister raised, I think there is a lot of work happening at the commonwealth level on fuel efficiency standards. I think that is really key to unlocking the broader international market. If international companies are then giving us the full range of their services, then we can see further competition and the driving down of those prices for the vehicles that we want to see here.

THE ACTING CHAIR: Minister, I just want to go back to your comments on the used car market. It is so hard to come up with things that do not sound like a terrible pun, like when we say "accelerate the market" or something like that! It has been a challenge all day. But I digress.

In looking at wanting to create that used car market faster than what might happen of its own volition, we heard testimony today from ACTCOSS where they said even the cost of a second-hand electric vehicle is quite high, proportionate to what you would pay for a normal one.

Mr Rattenbury: Yes.

THE ACTING CHAIR: Going back to this equity issue, I agree with you that it is a complex area and it is one of the more difficult ones, but it is also one of the more necessary ones, I would argue, which is why I want to push on a little bit and just get a greater understanding of what thinking may be there on ways that could actually start to address what is a little bit of a wicket problem, really.

Mr Rattenbury: I think that is a really fair summary of the situation. If one tries to think about the policy levers that are available to the ACT government in this context, Ms Wright's point about the work of the federal government here is particularly helpful, because it will see new models come to Australia and the like. But, really, your main pathway is some sort of significant financial subsidy to close the price premium.

There is a price premium. If you wanted today to start making EVs available to lower income households, the only way I think you can do it is a straight cash subsidy to close the price premium. In all the discussions I have had and the thinking I have tried to do about it, I cannot see any other pathway at the moment. If the committee has heard something, we would be really pleased to receive those recommendations. But that is the only pathway I can see.

MR PARTON: I think ACTCOSS suggested when they spoke to us that, based on their information, the absolute base level vehicle as an ICE vehicle is about $5,000

and an EV about $20,000.

THE ACTING CHAIR: That was used vehicle prices.

MR PARTON: Yes, for the used vehicles.

Mr Rattenbury: That sounds about right.

MR PARTON: When you are talking about four times as much, it is almost impossible to bridge that gap, is it not?

Mr Rattenbury: That said, Mr Parton, the Sustainable Household Scheme could bridge that gap. If you have the $5,000 to buy a car and we can give you a $15,000 interest-free loan you can get to $20,000. Also, if you have an interest-free loan you can use the savings that Ms Orr has identified to potentially pay the loan back over the course of 10 years. So perhaps that is the one thing that I think, in your example, would close the gap.

MS CLAY: Might I supplement on that?

THE ACTING CHAIR: Sure.

MS CLAY: In that same conversation, Minister, we had suggestions from AEVA, the Conservation Council, ACTCOSS and a number of others that one way to overcome that just transition issue is to include other electric vehicles that are not cars, such as scooters, e-bikes, electric motorbikes and things like that in some of our subsidies and loans. Have you considered including that, given that we have quite a strong multimodal transport policy?

Mr Rattenbury: The Chief Minister has the lead responsibility of the Sustainable Household Scheme. I think adding those types of vehicles to the scheme could be useful. It depends—you want to think about the price point for them. E-motorbikes, I think, generally cost about $15,000, so could fit neatly into the scheme. Once you are down to an e-bike, you are looking at, I think, depending on your model, $1,500 to $3,000 or $4,000. So, yes, they could be eligible as well. As I said, we have thought about stamp duty initiatives on some vehicles, I think. Ms Malouf might help me on that. Do motorbikes get stamp duty exemption as well?

Ms Malouf: Yes.

Mr Rattenbury: Thank you, officials for helping me out. So some of those measures are in place. But I suspect there is more room again, and I would welcome any recommendations from the committee, from the evidence you have received.

THE ACTING CHAIR: Mr Rattenbury, I appreciate that it has been put forward as a lower cost option and it would be something that could start to address these equity issues within the scheme, but it still does not sit quite right. Just say you have a disability. ACTCOSS were not only representing people on lower wages; they were also talking about people with disabilities and other needs that would need to have a car, where a bike or a scooter just would not be equitable. These are the complexities

we are grappling with. So is just saying that we will put scooters, e-bikes and all these things into the scheme just a little bit of a simple solution to what is a very difficult problem?

Mr Rattenbury: I agree with you about the complexity of the problem. We cannot solve everybody's individual circumstances perhaps right away. What we are trying to do is maximise the number of people that can benefit from the scheme. I think we need to recognise that this is a transition from where we are today in 2023. The policy positions the government has put out there are 80 per cent to 90 per cent new sales by 2030 and looking at 2035 as a big changeover point. So we are talking about a 12- or 15-year transition. I think the average vehicle age in the ACT is nine to 10 years.

So partly what we are trying to do early in putting these policy positions on the table is also get people to start thinking about what might work for them and to create certainty for industry that there is a demand for the vehicles in the ACT. At an anecdotal level, I think it is working. At the EV summit that was held in the ACT last year out at Exhibition Park—and all the exhibitors had open days on Saturday and Sunday—they had something like 10,000 people come through over two days.

MR PARTON: Yes, it was huge.

Mr Rattenbury: That says to me that the community is thinking. Not many people there went and bought a car on those two days. But a lot of people are starting to think, "My next car is going to be an EV." Whether that is in two years or five years, I think the community education role that we are playing in the discussions about having the policy settings is useful, but we still have a lot of problems that we have got to work through.

THE ACTING CHAIR: We have heard it referred to as low-hanging fruit—and I think you also referred to it in this way—in terms of what we are doing now. These more complex areas really do seem to go to equity issues and how we deal with individual circumstances—so they are poorer, which is why I am going on about it. When do we start thinking about the answers to those issues?

Mr Rattenbury: We are thinking about them now, but the pathways are not clear. If n I talk about the low-hanging fruit, as I touched on earlier, there are a whole lot of people who would go out tomorrow and spend $60,000 or $80,000 on a car. That is not how I see the world, but there are people who have that much money and that is what they do. There is no reason those people should not be buying an electric vehicle. There is a set of models available that will have the range, the size, the vehicle types, and, if you have $60,000 or $80,000 to spend on a car, you should be buying an EV today, unless you have a really good reason not to.

But that same opportunity is not available in the lower price ranges, and that is the work that we have to do. I think the sorts of policy measures we are putting in place are building us towards a place where, over the next decade, those sorts of vehicles will become available. That is what we are trying to work towards.

Ms Wright: Just backing up that, we are seeing more and more manufacturers providing vehicles in that kind of lower price point range. Granted, they are not

flooding the market. But, coming back to that earlier point I made, we have actually seen the evidence that the limited supply market is what is keeping that price high. We have actually got some modelling that shows that. We see the second-hand vehicle prices beginning to fall as that kind of easing happens over the next few years, and certainly by 2030. I know that does not answer your question for what is right here and right now, but that is where we are moving towards—

THE ACTING CHAIR: I appreciate, Minister, that we are moving towards it and we are thinking about it and we need to get the answer, and we have also set ourselves some pretty ambitious targets to meet. What is the point at which we have to have the answer?

Mr Rattenbury: I do not know that there is a definable answer to that question, other than we need to be very focused and we need to keep thinking and keep working on it.

THE ACTING CHAIR: Okay. Are there any other questions on that?

MR PARTON: No.

THE ACTING CHAIR: I have just thought of one more, but I have taken up a lot of time. Mr Parton?

MR PARTON: Mr Rattenbury, we have heard from a number of apartment complex representatives today, and also in written submissions, who simply do not know how they are going to proceed to the point that any more than a handful of EVs could be charged on their premises, because of so many issues. Some of them are very old buildings and some of them are only actually quite new but they have a lack of infrastructure and the absence of sufficient power coming into the complex without major upgrades to electricity infrastructure.

One of the things that shone through from a number of those representatives today was that they are not sure who is going to pay for it. They are hoping that the cavalry is coming in the form of the ACT government and that somehow there will be more assistance. They are also mindful of the fact that there is a lack of equity for someone living in an apartment as opposed to someone living in a standalone dwelling in the assistance that is given. How would you respond to their concerns, as minister?

Mr Rattenbury: In terms of support we are seeking here, part of it is simply what I might call informational support—so providing expertise to help apartment buildings think about what they need. That is down to simple things like helping people understand that what is known as trickle charging is quite adequate for most electrical vehicle purposes, and you do not need to go and put expensive chargers in all over the place; you can simply put power points in. That may or may not work, depending on your electrical circuitry. There is, I think, a lot of variation in the types of problems that apartment buildings face. So that is where the support we provide to them is in terms of being a point of information, which is, I think, quite an important start for apartment buildings.

MR PARTON: Does the transition from gas to electricity create an even greater hurdle here, particularly when it comes to the provision of instant hot water and the

drag that that has on the available power? Will we see a stack of apartment and multi-dwelling buildings that simply cannot draw enough power to heat the water and power the majority of vehicles within them without major infrastructure changes within that building but also outside of the building?

Mr Rattenbury: A clear part of our pathway to electrification of the ACT is an understanding that we are going to need to upgrade our electrical infrastructure over the next two decades or so. Through that work, some of those issues will be addressed. But if you have an old apartment building that has gas cookers all the way through it and gas hot water, we have some major retrofitting issues to work our way through.

MR PARTON: You have, and, ultimately, who is going to pay for all that? The infrastructure work that we are talking about is not just within those buildings; it is also the electricity supply into them from outside the building. I am assuming that this will ultimately lead to it being rolled into power bills for everyone.

Mr Rattenbury: Just as right now electrical infrastructure upgrades are applied to electricity bills, that work will continue.

MR PARTON: It is a lot of infrastructure upgrades, is it not?

Mr Rattenbury: There is. But, at the same time we are seeing cheaper electricity coming through as well. Renewable energy is the cheapest electricity out there. That is supressing prices at one end but, at the other end, there will need to be infrastructure commitments, yes.

MR PARTON: All right. Thank you.

Mr Rattenbury: Just on that, we have seen the federal government commit $20 million to help support that, and we will be able to access some of that money. It will come from a range of places. Similarly, just as we are talking to people about the change from gas to electricity, we are saying, "Do it at the end of device life." There is a point when your heating system or your gas cooker will break down and you are going to spend x-thousand dollars anyway. I think that is a really important part of this transition.

MR PARTON: Right.

THE ACTING CHAIR: I just want to go back to the information and being a source of information. We have heard from a number of multiunit residents today that they would actually like more information from the government and like the government to be a single point of truth. I have a two-part question for you. Can I get an understanding of what information you are providing now and also what potential there is for greater information or more easily accessible information to be made available?

Ms Malouf: I would like to say that there is a simple one-fix program that we could run for multiunit developments that would solve all the problems, but it just does not exist. Every multiunit development is slightly different in its makeup of number of car parks per residence and number of apartments. So we are not thinking this is an easy

problem to solve.

We have an advisory service that multiunit owners can come to to get specific advice for their site. It will determine charging needs. Referring back to the minister's comment on what type of charger you need, potentially we would give tailored advice through our technical advisers for that individual site. So, if they come through to my team, they can actually go out and do a site assessment and give some advice in that space.

Potentially we would say to some complexes that upgrading a new substation is not required—that what we need is a demand management process put in so that you are charging later at night. I am showing my age, but I liken it to how grandparents used to call you after seven o'clock at night on a Sunday so they got cheaper rates. With later-at-night charging when you are in bed anyway and so you are not using your vehicle, the demand is less and you do not need to upgrade that substation.

So it is not the first point of call that people assume they need to get those chargers in. We would suggest that there are other options available. For some unit complexes it may be not a good idea to put in a charger. My team also looks after the public charger rollout. We would suggest potentially putting blocks of fast chargers in places with service stations and the like, so that people can go and charge in 15 minutes or 20 minutes and actually get that charging infrastructure.

THE ACTING CHAIR: I think that is positive. It is interesting, though, because we have heard from a lot of witnesses who are grappling with these issues and they are saying it would be great if there could be a service or if there could be something provided. Maybe this is more of a comment than a question, but I take that as a recognition that there is a communication gap to bridge there.

The other part we have heard from a lot of the witnesses today as well—they have noted the $2,000 as part of the scheme that can be put towards chargers in common areas—but they are actually saying the advice is more important. I guess my question for you, what I am throwing out there, is what opportunities do you see to start to broach some of these gaps and get this information to people faster and more easily?

Ms Malouf: It is a reasonably new service that has happened. Appreciating that, we can go direct to body corporates, and we certainly suggest if the committee is getting any of those inquiries to send them through to us and we would be more than willing to have that conversation. Now we have staffed up in that space we will start approaching body corporates and owners corporations to say, "This service is here if you would like to utilise it," and a bit of myth-busting, I suppose, saying "Maybe you do not need what you are being told by industry is what you need."

THE ACTING CHAIR: There was definitely a preference put forward by a number of the witnesses today that they wanted to have chargers in their space so they can charge it overnight. Then they do not have to do anything that I think—you know, paraphrasing—would be an inconvenience for them.

Mr Rattenbury: As opposed to driving to the petrol station?

THE ACTING CHAIR: Well, the example that was given to us was like, "Well, if you are on a share scheme, am I going to have to go down at 2 am in order to charge my car?"

Mr Rattenbury: Sure.

THE ACTING CHAIR: So there was a little bit more validity in it than, "I just do not want to go down to a petrol station."

MR PARTON: But even just going to the petrol station, even at a rapid charger, it is still a bigger exercise, is it not?

Mr Rattenbury: It is an interesting conversation. People say, "I want to be able to just charge in my parking space." But at the moment people are habituated to driving to the petrol station so they do not consider that to be an imposition, is the point I was trying to make.

MR PARTON: Yes. Sorry. Okay, that is a valid point.

Mr Rattenbury: I do not want to diminish some of these issues, either. There is a lot of work to do in the space but I think we are in a space where we are also learning new habits.

THE ACTING CHAIR: Yes. I think that is a fair observation that there are certain things we do now in order to allow for diesel cars to be active. I think with EVs—putting those aside, because I agree with you, Minister, they are probably not the biggest issues in the world to overcome as part of this challenge—it is more issues around if everyone in the complex has an EV and they have two chargers, are they going to have to go down at 2 am or 3 am? So, we are getting into some different territory there. There are also things around charging times. Obviously it takes a while sometimes, depending on the voltage that you are using, to actually do the charging. So I think these are not unfair questions. From the evidence we have heard today, it seems there are just some buildings that, for all practicalities, are just not going to be upgraded any time soon. I think that is probably a fair observation. So how do we actually start to make it possible so that they are not left behind?

Mr Rattenbury: Yes. I think your initial point is that there is a dearth of information for some people. There is a lot of uncertainty. People have lots of questions. I think that is fair enough. We are stepping into new technology that people are not familiar with. That is why we set up things like this advisory service, to try to use the expertise that the government has built; we have learnt a lot of lessons particularly in developing our own charging systems for our own fleet. So we feel that is a really useful contribution we can make in that first instance. To your second point, where a building is not suitable, I think that is an interesting question. If a building is facing a six-figure sum to upgrade the electrical network, it might be better that they just use the local charging point down at Woolies when they go to get their groceries. That will be a choice for them—do they want to spend a six-figure sum upgrading the electrical network or do they want to use the network of public stations? These are the questions that we will need to work our way through.

THE ACTING CHAIR: Ms Malouf?

Ms Malouf: Potentially we can join the two projects we are delivering a little bit together. So if there are unit blocks in key areas that cannot upgrade without that six figure, do we target that as a place where we put our public charging stations so it has the convenience of being local?

THE ACTING CHAIR: Has any consideration been given to the provisions of the Unit Titles (Management) Act to allow for the installation or the easier installation of electric chargers? We have had a bit of evidence saying the act has been written in a way that does not necessarily make it easy because it has not been a problem or something the act has necessarily had to deal with.

Mr Rattenbury: I have not received specific representations about that. You might recall we did change the act a number of years ago around needing lower majorities for sustainability investments in bodies corporate. I think we need to have a look at whether this issue is covered by that change or whether we need to do further work.

THE ACTING CHAIR: Yes, because there is a bit of conflicting evidence, I think, that has come through today. Some have indicated they believe it is covered by the sustainability infrastructure provision and some have said it is not. There has also been a bit of discussion around special privileges and access—how that would work, particularly within common property areas. I think that is a big issue within basements. So, going to how can we actually make the act work so that people are not having to jump through a huge administrative burden—where if the will is there to do it, it is possible to do and as easily as possible.

Mr Rattenbury: Yes. I think we need to take an action point there to have a look at the act and check whether it is serving its purpose. It might be a tweak where we simply adjust the provisions and even provide an example.

THE ACTING CHAIR: But it is fair to say that the thinking has not necessary turned specifically to that issue?

Mr Rattenbury: No. If the committee wants to make that recommendation that would be fine, but we will take that out of today anyway.

MS CLAY: Minister, we heard a bit about grey imports today. That is one of the ways people can get a slightly more affordable car in Australia, but we heard concerns about servicing and warranties. AEVA told us that there was no problem finding people in the ACT who had the skills to service a second-hand or a grey import car but that the problem was manufacturers refused to respect the warranties if those cars were serviced. Some manufacturers like Nissan had opted out altogether. It actually sounds like it is a consumer affairs problem rather than a skills problem. Is there anything the ACT can do to make sure people can access those cars and can get them serviced, that those cars are running well and that people have warranties and insurance for them?

Mr Rattenbury: Having not heard the specifics of the evidence, Ms Clay, I am not exactly sure. What I do know is that grey imports are covered under Australian

consumer safety law and the seller must meet the associated legal obligations. So in the broad, grey imports are like any ordinary consumer good. Where these issues may arise is I know there are very specific issues around design rules and similar for vehicles, specifically. Then if the manufacturers are taking that stance, that is something we might need to have a look at.

MR PARTON: Minister, why are hybrid vehicles so maligned by the ACT government in the push to lower emissions in the private car fleet? If there are hybrid options available that are cheaper than full EVs and they would lead to a serious reduction in emissions, why would we not embrace the good, even if it is not perfect—indeed, noting that you yourself are driving a hybrid?

Mr Rattenbury: I do not.

MR PARTON: Don't you?

Mr Rattenbury: I drive a full EV now. I have driven hybrids in the past.

MR PARTON: Yes. Sorry, I had a funny feeling it was a hybrid. My apologies.

Mr Rattenbury: No, that is okay. I do not know that it is accurate to say the ACT government maligns hybrids. I think hybrids have been an important technological advancement. There has been a lot of learning in the development of them. Companies in that technological cycle will move from hybrids into EV technology. It is sort of a progression. So I would never make a negative comment about a hybrid.

What I would say though is, if you are investing in a new vehicle today, the future is zero emission vehicles. At the end of the day, a hybrid is still an internal combustion engine. It still produces emissions. It produces less emissions. Certainly, back to the earlier conversation about benefits and savings, you can buy a hybrid now at quite a decent price. So in terms of the just-transition, they might well play a role for people who cannot afford a straight-out EV at the moment. They are better but they are not a zero emission vehicle. Ultimately with a zero-emission target for the ACT, that is where we need to get to.

MR PARTON: Good answer, thank you.

Mr Rattenbury: Just one other thought on that hybrid question, as my brain has just caught up there. I think the other thing to say about hybrids, Mr Parton, is that they are a mature technology now. The government does not need to support hybrids. They are going just fine. In terms of government intervention, you will see the ACT government putting effort into promoting zero emission vehicles because they are an immature technology and need that lift, whereas the hybrids are just regular, ordinary, available vehicles. So that is probably one place where you will see us putting effort into promoting zero emission vehicles and creating subsidies and incentives, but not for hybrids.

MR PARTON: Still banning new registrations from 2035 though?

Mr Rattenbury: Sure. But that is because they are an ICE vehicle. And by 2035, if

we are not getting towards a zero emission future, this planet is cooked.

THE ACTING CHAIR: Thank you for appearing today. If you have taken questions on notice, please provide them to the committee secretary within five days of receiving the Hansard uncorrected proof. If you have any other questions, I am sure the secretary can help you out. But thank you. I think that pretty much brings us to the end of our hearings for what has been quite a long day.

MR PARTON: It has.

Mr Rattenbury: It sounds like it.

THE ACTING CHAIR: Yes. So, on behalf of the committee, I would just like to put on the record, that we thank all the witnesses that have appeared today and are helping out the committee in their inquiries. I also would like to thank broadcasting for all their wonderful waves letting us know that we are actually being recorded as we go through this. Just for members of the committee, and other members in the place, if you wish to ask a question on notice, please upload them to the parliament portal as soon as practicable and no later than five business days after today's hearing. So, with that, this meeting is now adjourned and everyone can go home.

The committee adjourned at 5.04 pm.