T R A N S C R I P T

STANDING COMMITTEE ON THE ECONOMY AND INFRASTRUCTURE

Inquiry into electric vehicles

Melbourne — 9 November 2017

Members

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

Participating members

Ms Samantha Dunn
Mr Cesar Melhem
Mr Gordon Rich-Phillips

Witnesses

Mr Geoff Gwilym, Executive Director, and
Mr Steve Bletsos, Senior Research Analyst, Victorian Automobile Chamber of Commerce.

The CHAIR — The committee is hearing evidence today in relation to the inquiry into electric vehicles, and the evidence is being recorded. I welcome you both to the public hearing of the Economy and Infrastructure Committee. All evidence taken at this hearing is protected by parliamentary privilege; therefore you are protected against any action for what you say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege.

If I can ask you to begin by stating your name, your title, your organisation and the suburb in which it is based, that would be marvellous. We will then hand over to you for 5 or 10 minutes to do an introduction, and then we will ask some questions.

Mr GWILYM — Thank you. My name is Geoff Gwilym. I am the executive director of the Victorian Automobile Chamber of Commerce. We are on St Kilda Road in South Melbourne — it looks like Melbourne, but it is South Melbourne.

Mr BLETSOS — I am Steve Bletsos, senior research analyst at the Victorian Automobile Chamber of Commerce on St Kilda Road in Melbourne.

Mr GWILYM — I will start with some opening statements, and then if it suits you, we would just like to work through some of the recommendations that are in our submission that will shortly be provided to the committee.

I would like to start just by providing a broader contemporary view of the electric vehicle market and some of the positions that the VACC has on this matter. One of the things we would like to do is to try to encourage the separation of discussion around electric vehicles and the environment. In Australia, I think to our detriment, we have grown up with a view that electric vehicles are all about the environment. I think we need to shift that perception so that we have a proper conversation around the merit of electric vehicles and separate that from how we create energy in Victoria.

I think one of the challenges for us is that most vehicles that run on electric power in Victoria and in Australia generally actually run on energy created in coal-fired power stations. That is not a criticism; that is just a reality. I think that we tried to sell the dream of electric vehicles meaning a better environment. They do, but only if you create power in a particular way. Our discussion today actually separates those two issues. I think electric vehicles need to stand on their own merit in an argument around mobility, around the economics and around the way we use our road and infrastructure systems.

In some of the points we are going to raise today as well we will reflect on some of the unintended consequences of legislation. I have got a list here of announcements that have been made in countries that have decided to move away from petrol and diesel technologies. Depending on what country you are in, it ranges from 2025 right through to 2050. They are all but announcements. It is a very difficult thing to move a vehicle fleet — in Australia it is a 10-year-old vehicle fleet — from one type of technology to another.

We see in the UK that Theresa May is promoting the notion of having electric power-boosting devices fitted to petrol stations as a transitionary issue. I am puzzled by that because I do not know why you would automatically make the connection that if you get your fuel at a petrol fuel retailer that should be the same place you get your electricity from. I am not quite sure if that is well advised. However, we will look at those sorts of things when we talk about unintended consequences.

In making announcements around the use of electric vehicles in Victoria or more broadly in Australia, one has to consider some issues around employment and around the number of mechanics that are employed and associated roles that are employed around those mechanics. We know we have got something in the order of 87 000 mechanics in Australia who keep our vehicle fleet of 18 million vehicles on the road. If you transition to an electric vehicle fleet overnight, nine-tenths of those people will be unemployed. The average electric vehicle has got 17 moving parts, it requires very little maintenance and servicing, it does not need any oil, there is no system for exhaust, so you collapse a whole market very quickly.

The automotive industry in Australia is predominantly made up of small to medium-sized businesses — mum-and-dad businesses. If you push through or even start to make announcements around new policies for electric vehicles, I think one has to understand the effect that has on these small businesses and a huge downturn in the public's perception of what is going to happen with vehicles in the future.

Notwithstanding that, I think one of the big challenges in Victoria at the moment is that there is no policy on how we are going to use our vehicle fleets in the future. We have got some new rail going in, and we support that. We have got new road infrastructure going in, and we support that as well. But holistically, when we talk about vehicles per se, we do not have a policy around how we are going to use vehicles in the future. We would urge caution around a rash announcement by government, unless all of those unintended consequences are properly thought through, particularly those relating to small business and the employment of people in those businesses.

I would like to now pass over to Steve Bletsos, VACC senior research analyst, to talk a bit more broadly about the metrics in the industry, and then if we could very quickly just work through our key recommendations, that might provide an opportunity for some questions.

Mr BLETSOS — Okay. I would just like to talk about the impact of electric vehicles on the automotive industry and on Victoria's economy more broadly. Firstly, as Geoff mentioned, the automotive industry is a diverse industry. We comprise many different sectors and we employ in aggregate almost 103 000 Victorians, and over 96 per cent of the industry is small business. These 103 000 Victorians are employed in almost 18 000 automotive businesses. The contribution of that to the Victorian economy is $9.6 billion, which is approximately 2.6 per cent of Victoria's economy that the automotive industry contributes. The uptake of electric vehicles will have a disruptive effect on the automotive industry and hence the Victorian economy. The key automotive sectors that will be affected by electric vehicles are automotive repair and maintenance, fuel retailing, car retailing, car wholesaling and motor vehicle new and used parts retailing and dismantling.

The actual effect or impact of electric vehicles on the industry will depend upon the strength of the consumer uptake of electric vehicles over the next decade or more. Currently the uptake of electric vehicles is extremely low. Only 219 were sold nationally last year officially, down from just over 1000 in the previous year, 2015. The VACC, as part of its submission, has investigated two particular scenarios with electric vehicles. Firstly, a low uptake of electric vehicles from now until 2030 and what would be the impacts of a high uptake of electric vehicles from now until 2030 and the associated impacts. A low uptake scenario — we assume that under that scenario EVs would represent approximately 10 per cent of the new vehicle market in Victoria by 2030. Under a high scenario it would be double that — 20 per cent of the new vehicle market, we make the assumption.

So under a low uptake scenario we foresee, and our modelling shows, a reduction of approximately 1000 businesses and 3222 people approximately displaced as a result of a slow and gradual uptake by 2030. That would be equivalent to, say, a major vehicle manufacturing plant shutting down, such as Ford — it is a similar sort of impact there. So it is a moderate level of disruption we foresee through a slow and steady uptake over time. A high uptake scenario where 20 per cent of the new vehicle market will comprise electric vehicles by 2030 has obviously a more aggressive impact on the economy. Around 2000 businesses we forecast will be impacted and almost 6000 people displaced from their jobs. That would be similar to two manufacturers, Holden and Ford, shutting down in proportionate terms.

There are a number of issues on the policy front for government, we believe. We will go through these in the recommendations we have made in our submission. I will start with the first recommendation we have: the VACC would recommend that the Victorian government provide policy clarity with respect to electric vehicles in Victoria. What we mean by this is that we would like to see a framework which provides a clear road map for businesses regarding their regulatory responsibilities and to assist businesses to make the transition towards that sort of future. We need some sort of clarity, some signals, in a policy framework. That would aid businesses currently in making that transition. There is a lot of uncertainty in the automotive business community regarding the electric vehicles and their uptake, and some signals would be of benefit there.

Mr GWILYM — Thanks, Steve. I will pull our recommendations 2 and 3 together and respond to them. There is a concern that the introduction of electric vehicles in Australia will in turn connect road user charging as a new form of raising revenue that would be lost through fuel excise. So there was a nervousness that government may take an opportunity to see the introduction of electric vehicles as a means to increase incomes — this is a federal issue, but it may be a state issue as well — from road user charging as opposed to fuel excise. The VACC's position on this is that we would like to see efficiencies and economies given back to the consumers if they choose to use electric vehicles. That is not a subsidy, but what we do not want to see is the government seeing this as an opportunity to take more money out of the consumer's pocket, because of course when you use electric vehicles you are not going to achieve any income out of fuel excise. The next logical step

to do is go to road user charging, which in principle is not an issue, but it is if running a vehicle on road user charging by kilometre actually ends up costing me more than it would have done if I had have had a petrol or diesel vehicle.

So we just note as a cautionary note that there is a nervousness that the government may just join those dots and say, 'How to get less cars on the road? You charge them more, you get more excise'. Particularly if you took the view that a lot of consumers will use the electricity generated from their own home to power their vehicle, one way or another the federal government, and to some degree the state governments, should prepare for a significant decline in incomes from fuel. They need to prepare for that earlier and not see the consumer as the person who is going to top that bucket up.

Can you take recommendation 4, Steve?

Mr BLETSOS — VACC, under our recommendation 4, would recommend that the Victorian government instigate a detailed study into the impact of electric vehicles on Victoria's energy network, including emissions reductions and the overall viability based on a growing mix of renewable energy sources. What we are saying there is that, given the fact that we are moving more towards renewables in our energy mix, it is not clear the impact which a mass uptake of electric vehicles will have on the energy system. I do not feel that is well understood currently by the community and by business, and I think a study of that nature would be most warranted.

Mr GWILYM — Joined with the introduction of electric vehicles — the interesting thing with automotive is that it is transitional — even if you flicked the switch and everything changed tomorrow, you have got a 10-year bleed-out of the vehicles in the system at any one time, so any new technology in automotive is only new for a very short period of time and then it is old.

One of the things that the VACC has a deep interest in, and we have raised this with some ministers more recently, is an end-of-vehicle-life policy. Any announcements around a move to different technologies in vehicles will see more vehicles scrapped. One of the big challenges in Victoria and nationally is what we do with those vehicles in any transitional environment. Today in Victoria 65 000 tonnes of granulated plastic go in the ground every year from scrapped vehicles, 200 000 tonnes nationally of granulated plastic go in the ground in Australia. We do not have a coherent end-of-vehicle-life policy in Australia, in Victoria or in any state. Out of the hundreds of thousands of cars that we scrap every year, the metal is not a problem. We can recycle most of the metal componentry, but cars — and electric vehicles will follow this because they need to be lighter because the batteries are heavier — have more plastic in them.

The VACC is concerned that, even with the discussion around the introduction of new technologies, we have not yet solved the problem of what to do with the old technologies. We have not solved the challenge of what we do with the hundreds of thousands of vehicles that we scrap every year, and we would implore the state government and the federal government to consider this issue deeply because it is an issue and it will continue to impact, particularly as we buy 1.1 million vehicles a year. We drag them off to a recycling environment which is poorly regulated in Victoria, and we have deep concerns that a move to a new technology like electric vehicles will see an acceleration in the scrapping of vehicles and we do not have a coherent end-of-vehicle-life policy now. I think this work here today provides an opportunity for deeper thinking on that matter.

Mr BLETSOS — The uptake of electric vehicles will also require, on the training and skills front, new appropriate skill sets that encapsulate safety protocols and effective de-powering of electric vehicles. We at VACC recommend in particular the development of a new apprenticeship training qualification — a new certificate III qualification — specifically for emerging electric vehicle technician job roles. This qualification, we anticipate, would include appropriate theory and training in electrical and battery systems, diagnostics, programming and other core requirements pertaining to the service and repair of electric vehicles. I think it is imperative that such a new qualification be developed given the technological change that is going to impact on traditional mechanics and on new apprentices moving forward.

Mr GWILYM — Just to continue on with that, VACC has begun conversations with a major vehicle manufacturer with a view to developing a new certificate III in electric vehicle technology in order to anticipate a new breed of young people coming through schools that do not want to work on diesel or petrol engines but want to work on electric vehicle systems. We are currently in conversations about that and we believe that may be a new qualification that will have global implications.

We do have more recommendations here, but I think in the conversations that we have had on these that we have covered most of those off, and we would welcome questions from the committee.

The CHAIR — Marvellous. You have given us plenty of food for thought there, there is no two ways about that. Could I begin by asking how realistic is this? This transition from what we have currently to electric vehicles, is this pie in the sky? Are we wasting our time?

Mr GWILYM — No. It is not pie in the sky; it is real. Ironically, Australia is a leader in the adoption of new technology generally — in mobile phones and computer systems we were ahead of the world. When it comes to electric vehicles, we are behind the world. There is a resistor in Australia and it is primarily around price. The buying behaviour in Australia for motor vehicles — and I am not talking about the luxury end; I am talking about the average consumer — is around the price of a vehicle and the use of that vehicle. If electric vehicles hit parity with similar petrol or diesel vehicles, consumers will buy them. Range anxiety that used to be the issue with electric vehicles is not the case now. The average worker in Melbourne travels less than 50 kilometres a day. Most electric vehicles are 200, 300 or 400 kilometres. Personally I think it is a price issue. When mass production — and China has made an announcement about going into mass production of electric vehicles and they will push them globally. When they are cheap enough, people will buy them.

The CHAIR — Just on the matter of the viability of the power source, you say the average electric vehicle can travel 200 or 300 kilometres?

Mr GWILYM — Yes, easily. Well, the new ones travel 450 — the new Tesla ones.

The CHAIR — I was just thinking that in this job I can get in the car at 7 o'clock in the morning and I can still be going at 11 o'clock at night and in the course of that I might have racked up 600 or maybe even 700 kilometres. What happens to people who are in that position and they literally run out of power?

Mr GWILYM — The automotive market in Victoria needs to be seen as the layers of an onion — metro, outer metro, suburban, outer suburban, regional and rural. When we talk about the use of motor cars, we have to actually dissect it by those layers of an onion. There are some roles, like yours, Mr Finn, that actually go right the way through those onion rings because of the nature of the role. Right now you can get an electric vehicle that I could say, even with the air conditioning on and the radio on, you are still going to get 350 kilometres out of it. Boosting stations that will re-boost that battery within 15 to 20 minutes, they will be commonplace in five years. So your issue about 'How can I travel 600 kilometres in an electric vehicle?' is an issue that will be overcome by technology.

The CHAIR — So instead of filling up at a petrol station, which would be 5 minutes tops, we are looking at expanding that to 15 to 20?

Mr GWILYM — Possibly, yes.

Mr BLETSOS — Currently there are what are called level 3 chargers for public infrastructure for service stations, and they provide an 80 per cent charge in 30 minutes or so — up to 30 minutes. But that will improve over time.

The CHAIR — Mr Bletsos, you mentioned that the contribution of the automotive industry is — was it $9.6 billion?

Mr BLETSOS — Yes.

The CHAIR — How do we replace that? If that has gone, what do we replace it with?

Mr BLETSOS — It will not be gone. It will be trimmed down — the contribution will be trimmed down — but there are still other parts to our industry. But it will be affected. I have not done the actual metrics to that detail, but it is a $9.6 billion contribution and potentially up to 6000 in employment and 2000 businesses could go by 2030. That is a significant loss, and that has to be taken into consideration.

The CHAIR — Yes, it certainly does. You mentioned also that last year sales went from over 1000 nationwide to 219 — is that right?

Mr BLETSOS — In 2015 VFACTS sales of electric vehicles data shows that just over 1000 vehicles were sold, and last year, 2016, there was a huge drop down to 219.

The CHAIR — Why was that?

Mr GWILYM — Can I answer that, Steve?

Mr BLETSOS — Yes, sure, Geoff.

Mr GWILYM — The Nissan Leaf did not do it. My view is if electric vehicles had been introduced with something like a Tesla, the numbers would have been higher. The Nissen Leaf failed to capture the attention of the public on the basis of its size, its look and its lack of range at that time. So the early electric vehicles that came to Australia, I think, missed the mark in terms of the marketplace and the consumer buying behaviours in Victoria and Australia, and as a consequence I think the new Tesla vehicles — the high-volume Tesla vehicles, when they start producing them — that are a better looking vehicle and better appointed would have a totally different effect on the market. In some ways I could argue that the early introduction of what I might describe as not fit-for-purpose electric vehicles was not good for the introduction of that technology. A better vehicle would have given us better mileage and a better uptake, I think, amongst consumers.

The CHAIR — So what sort of vehicle was sold in the over 1000 — that was not the Leaf?

Mr BLETSOS — It would have been the Leaf and one or two other models. There is not an extensive range available in any case, so that could be a contributor to the problem.

The CHAIR — People were less than impressed with what they got?

Mr BLETSOS — Yes, I think so, and obviously the price — what you are getting for your money — is not seen as as good a value perhaps.

Mr GWILYM — Also, if I may, Chair, I think there was an early concept amongst consumers that if you are buying an electric vehicle, you are having a significantly beneficial effect on the environment. Well, it just depends where the electricity comes from. I think consumers learned that if you put a plug in a wall and you suck electricity out of it and it comes from a coal-fired power station, then your notion of having an environmentally beneficial outcome does not stack up. So I think that also impacted the degree to which people entered into electric vehicles.

The CHAIR — I was very interested to hear you, Mr Gwilym, talk about the vehicle end-of-life policy — and I was really hoping we could get away from that this week, but nonetheless we will approach it. What does the VACC recommend? What path do we go down here? If we go down this track of electric vehicles, obviously there are going to be a lot of cars that will have to be disposed of, so what do we do here?

Mr GWILYM — Well, there are a lot of cars that we dispose of now, so this is not actually just about new technology. The VACC has just undertaken some research with Melbourne University on this matter; we are going into a second stage, which is economic modelling. We believe that at some point the consumer needs to make a contribution to the scrappage of that vehicle. If I take an example of myself buying a new vehicle, there should be a levy on the sale of that vehicle that goes into a fund that assists with the scrapping of it. What happens in vehicle recycling is when scrap prices for metal are low there is a disincentive for recyclers to pick vehicles up. We have got councils in Victoria that have to tow thousands of vehicles out of ditches and parks and actually pay the recycler to go and recycle those vehicles.

What we have to understand in Australia and in Victoria is that because we have got a fluctuating market for metals, when that market is low you need to incentivise recyclers to recycle vehicles properly. We need to invest in the sort of technologies they have in northern European countries and eastern European countries that properly dispose of waste instead of burning them. You can generate electricity out of burning a lot of waste and scrub the air. We do not have modern recycling facilities that do that sort of thing in Australia. There has been very little emphasis on exploring these international markets and overseas countries where they have got these technologies.

At the end of the day somebody has got to pay for the recycling of a vehicle or to assist the recycler to do it properly. We still have backyarders in Victoria today chopping up vehicles. Now the Victorian government —

and we support the Victorian government — have moved on the legislation that we pushed for, which is the removal of cash for scrap, which means you cannot take a stolen car to a scrapper and get it crunched. It is harder to do that, and the chances are you are more likely to get caught. However, we still do not have a policy that says, 'This is our best practice model for recycling of vehicles, which includes all the fluids, all the gases, all of the plastics, all of the elements of the vehicle'. The only way that you can get support for recycling in that manner is you need to be properly registered by the Victorian government, you have to recycle a vehicle in a particular way. We know that it costs $375 to recycle a vehicle properly. If I ring a recycler today to pick up my car, they will give me $100 for it — not my car but my son's car; let me use a better example. If they pick up my car for $100 — it is an old car — it is hardly worth them picking it up, because it is not worth anything for spare parts, and if the prices for aluminium and steel are low, it is almost not worth them scrapping that vehicle.

You need to have a model that says that when prices for these things are low and because we want a particular outcome out of our recycling we are going to incentivise that. If I buy a vehicle tomorrow and as a consumer either through my registration or a one-off payment made a contribution, and sit that contribution in a vehicle recycling fund — even if you modelled that up at a 5 per cent rolling growth in it every year — you would have sufficient funds for accredited recyclers to draw out of that fund to properly recycle vehicles in the way that this state wants them recycled, world's best practice. That policy is not a particularly hard policy, but what you need sitting next to it is to understand the technology you need to recycle vehicles to world's best practice. Those examples are sitting in front of us; we know what they are.

The CHAIR — So you are suggesting that the consumer bear more of the cost of that recycling? Is that what you are getting to?

Mr GWILYM — I am indeed, and the reason for stating that is that the consumer is the beneficiary of the vehicle over a very long period of time. You need somebody to make that contribution, whether it is through rego or whether it is through a one-off payment, so that they do not keep passing the responsibility down to somebody at the end of that food chain who cannot afford to recycle it properly. The cars picked up by councils in ditches and in parks are not brand-new Audis and BMWs; they are worn-out old cars that are 10, 15 and 20 years old, and they are dumped because the people who own them often cannot even afford to get them picked up. We need a system that assists that process.

We did look at one council in particular last year. They had over 1000 vehicles a year that they had to pay to be towed and recycled. I think that is just a burden on communities, but it is also a burden on the person at the end of that food chain who cannot afford a decent car, who buys a crappy old car and cannot afford to get it towed when it does not work anymore.

The CHAIR — You do not think that will actually lead to more cars being dumped?

Mr GWILYM — No, because it is worth the recycler picking up the car. As a matter of fact, you are incentivising the process of getting worn-out old cars to the recycler, because the recycler might give you $150 for it. All of a sudden it is worth ringing the recycler to come and get it.

More than that, it is the waste that is going into landfill. It is this continual hundreds of thousands of tonnes of waste that we are putting into landfill. Granulated plastic will stay in the soil for thousands of years. There are ways that you can dispose of it in a more meaningful way, and there are some examples where you can generate energy out of disposing of that waste.

Mr LEANE — I am not really going off on a tangent but there is a federal scheme where the importers of televisions pay a levy for the recycling of them. I have been out to a plant where they recycle nearly everything — I think except for the glass.

Mr GWILYM — That is good.

Mr LEANE — But they would not be able to do that without their subsidy; it would not make sense. So it is an interesting track that you are on there, and a good one.

Evidence we have had, including yours, is that cost — and common sense about the markets tells you that too — is a big impediment for more electric cars to be on Australian roads. One interesting piece of evidence we have had is that surveys have said, and it varies from 50 to 70 per cent of people, that people have said they

would purchase an electric car if it was cost competitive. Getting back to what you said, Geoff, it will probably come at some time; there will be more and more of them.

Mr GWILYM — Correct.

Mr LEANE — And heeding your concern, what does the state government — and I suppose the federal government as well — need to do to assist businesses coming along with the change? You mentioned the mechanical businesses, the retail, the servicing, the fuel. I know you made some suggestions, but is there more that the government should be doing?

Mr GWILYM — I think transition in industry is achievable over time. I think short, sharp transitions are what provide a lot of damage in industry. Some of those are driven through incentive schemes. We have seen through pink batts and the introduction of LPG that they were technologies and processes that were incentivised by government that actually had quite devastating outcomes. But if you had stood back and let those initiatives run on their merit, some of them probably would not have got up at all, but others would have come in over a longer period of time, and LPG is a good example. LPG probably would not have got up at all if it had not been incentivised by government. This is some time ago, of course.

In some ways I could argue that government needs to stand back and actually let vehicle manufacturers manufacture vehicles that meet a community demand, and I think if the government wished to do that, then they should say that. I am not sure how a government can intervene without incentivising, because without incentivising I do not know what your message would be. It would be difficult to say, 'We support electric vehicles' — end of story. I think the government need to look to the market to determine the usage rates of electric vehicles and how they will be applied on our roads, and that will be through competitive manufacturing of vehicles and through, obviously, the introduction of them into Australia.

Notwithstanding if the government had an idea, and the VACC has promoted this in other circles, we could look at the design and manufacture of electric vehicles in Australia. While some people might take a view that, 'Geoff, we have actually just sent the automotive manufacturing market offshore', I still argue that when you manufacture electric vehicles you manufacture them in a different way than you do vehicles that have got diesel and petrol engines in them. You could argue that I have a sentimentality around this issue, but I think there is logic that says that if you were actually serious about introducing electric vehicles into Australia and a government wanted to lead that, then they should look seriously at the manufacture of electric vehicles in Australia, whether it be knockdown kits or full manufacture. I do not think this should be overlooked by government. Even though we have waved goodbye to the manufacturing industry — and the VACC did not support that in any way, are very unhappy about that — if you start to think about how you manufacture electric vehicles, it is a totally different argument around vehicles with large engines in them. I think that is when the government should not dismiss; they should have that in their sights.

To come back to your point, Mr Leane, I do not know if there is a role for government to make any statements at all unless they wanted to enter the market to manufacture electric vehicles. We would not support incentivising electric vehicles, because of the distortion it would make in the market and the effect of that being withdrawn. Only this week there is an article in Washington around the potential removal, the phasing out, of credits for electric vehicles. If you go into a market and incentivise a market and then you start to talk about de-incentivising that market, the roller-coaster and distortion you provide is phenomenal.

Let us say hypothetically we incentivised electric vehicles in Australia, a whole lot of people move to electric vehicles, a whole lot of mechanics go out of business, government withdraws incentives, people go back to diesel and petrol engines — not enough mechanics, not enough repair stations. So you have got to be careful, to come to your point, around what should government do. My view would be that government should stand back and let the manufacture of electric vehicles be at the forefront of your mind, whether that is domestically or offshore, and let consumers make choices about the vehicles that they drive based on the use of that vehicle.

Mr LEANE — I appreciate your response. I suppose the concern I was coming from was that at a point where these vehicles are affordable and there are more and more of them, that actually results in your right concerns, that there are industry players in the current fleet of vehicles that are going to possibly disappear and my concern is about what can government do. I am just thinking. There are expert committees advising governments over everything at the moment. I was wondering if there needs to be some real thought put into how, with those small businesses that you mentioned,

can we get on the front foot in ways to support them — maybe transitioning to the new industry, as in electrical vehicles — or what can be done? I suppose that is where I was coming from.

Mr BLETSOS — I think we mentioned earlier in one of our recommendations that if the government have in mind a framework, a policy framework, I think that should be made explicit to the business community, what they are intending in terms of an electric vehicle future, whether it be any sort of facilitation measures that business can take into their consideration regarding whether they are going to keep participating in the industry long term or not. So that will give a signal to business of the uptake for their own purposes to factor in, in the life span of their business, whether they want to continue in business.

Mr GWILYM — I think also training is an important thing here for transitioning businesses. One of the challenges for us is we have got an older population in the automotive industry, and there are some difficulties in transitioning some of those businesses through. It might be more about the provision of advice to small business around how to transition. Training is available in some areas around electric vehicles. We would like to see that continued. We would like to see continued government support for that. We would like government to support the qualification that the VACC is in discussions about, the new certificate III in electric vehicle technician qualification. We would like to see government support that. But probably the advice to small business about transitioning their business would be the most critical aspect, around how businesses start to think about, 'What does it mean for me, modelling up inside a business around viabilities of moving into electric vehicles?'.

The challenge of course is that when you have got a small introduction of a new technology over a long period of time, most businesses do not get a lot of that work; one business might see two electric vehicles a year. So that puts them in a very difficult long-term transitioning phase, but that is the nature of automotive. Automotive has done that for 100 years.

Ms HARTLAND — Thank you for your presentation. We heard a lot of evidence yesterday about the way electric vehicles — especially the ones that can be produced here or the components can be produced here — can recreate many of those jobs that have actually been lost in the industry. Do you see that as a viable future for new jobs?

Mr GWILYM — I do. I think that if you look at modern manufacturing techniques and if you took a view that low-volume, high-quality manufacturing is where the future for Australia is in vehicle manufacturing, it is something that should be modelled up by government in Victoria. I think it should be seriously looked at. We still have a huge capability in this state of people that worked in automotive manufacturing. I have worked in that industry myself. There is a huge capability in that industry that is still in our community, design and manufacture. I think that even if manufacturing under licence in Australia is realistic, I really think that we need to think through that.

If I may, with the forgiveness of the committee, when we stopped manufacturing in Australia, we told the rest of the world we can't make cars anymore. We were one of 13 countries that designed and made vehicles. When you send a message to the world that you don't make vehicles, that is not a good message to send. And it is a crying shame that the development of that technology and that capability over 90 years has been washed out in three years in Australia, and Victoria has borne the brunt of that.

In my previous job running one of the national skills councils for automotive, I spent a fair bit of time in other countries. If you go to India, go to Malaysia, even go to the UK, and you sit in front of a group of automotive people and you tell them this, 'Automotive is not on in Australia; we're moving out of that market', they say this, 'What do you mean?'. It is to the bemusement of every country I have spoken to that a country would make a decision to not support automotive manufacturing, and it is a shame, it is a crying shame for Australia. And I think here is an opportunity where Australia should be looking internationally at licensing the manufacture or part-build or knockdown build in Australia. It is a different concept when the four motors or the two motors sit next to you in a box that could have been made in Australia, but it is a less complex manufacturing environment and I think it is something that should be seriously looked at.

Ms HARTLAND — That was the thing that was really interesting from the evidence yesterday. A number of people were talking about manufacturing on licence, and they could really see a whole new set of jobs, especially for young people — apprentices — and I note that you mentioned that we need to be looking at what are the new apprentices. Can you talk a little bit more about that training aspect?

Mr GWILYM — There are 30 000 automotive apprentices in automotive at any one time in Australia, 10 000 new automotive apprentices. We are one of the highest employers of apprentices in all trades in Australia, and in Victoria. We know that there is a new generation of kids at school today that do not want to work on petrol or diesel engines; they just want to work on new technologies. This job is not like the jobs of the past. Trade roles are typically vertical. Sometimes the edges touch a bit, but generally in the automotive industry a diesel mechanic and a light vehicle mechanic and a body repairer and a spray painter, they talk at lunchtime but most of the time they are separate in what they do. The new jobs with the new technologies are jobs that are horizontal. So a new technician on automotive electrical vehicles needs to be able to repair the vehicle, needs to be able to download and fix IT codes, needs to be able to connect the vehicle to the home power system and maybe needs to look at faults in the home power system. So these new jobs are created horizontally, not vertically.

The introduction of electric vehicles in Australia and globally provides an opportunity to look at job roles that span across three or four traditional job roles. It is a very exciting time for us to recast some of these job roles, and there are young people in our schools that want to fill those job roles. This is a technology-driven job role that is still about manufacture, service and repair, and the fact that we are not in that is a huge shame for Australia, for our growth and development as a nation.

As I have travelled — I have been in the automotive industry for over 40 years; I have travelled to a lot of countries and seen automotive development — in most countries I have visited there is an Australian mechanic, there is an Australian diesel technician, there is an Australian body repairer. We have sent highly skilled tradespeople around the world to great acclaim for a very long time, and I think our narrowing of our market and our reach in automotive will damage that reputation and that reach. Those young people, most of them, come back and they bring that technology with them. I hate to say this, but in the global discussion on the automotive industry right now, we are serving orange juice. We used to be around the table; we need to get back around that table.

Ms HARTLAND — This could be a new entry into the market?

Mr GWILYM — I think so indeed. I am very excited about it, and I think feasibility studies should be undertaken.

The CHAIR — Gentlemen, thank you. We could spend the rest of the day very easily discussing the matters that you have raised, to say nothing of the matters that you would raise, I am sure, in any future discussion, but unfortunately we have come to the end of our time today. You will receive a copy of the transcript in two or three weeks. If you could just proofread that and let us know if there is anything that jumps out at you, that would be a marvellous thing. We thank you very, very much for a stimulating contribution and your assistance today.

Mr GWILYM — Thank you very much.

Mr BLETSOS — Thank you.

Witnesses withdrew.