

## **Green Drive Day, 8<sup>th</sup> April 2018, The Joinery, 111 Franklin Street, Adelaide SA.**

In what was billed to be the most comprehensive electric drive day to date in Australia, a cavalcade of the some of the latest electric vehicles were on offer for test drives recently at the Green Drive Day in Adelaide. The day was hosted by the Australian Electric Vehicle Association (AEVA), South Australian Branch and was part of a bigger program, Charge Together South Australia (SA).

The Charge Together SA program is jointly funded by the Australian Renewable Energy Agency (ARENA), EVenergi, SA Power Networks and the Government of South Australia. The City of Adelaide and AEVA are also two of many ongoing partners in the program. The program aims to identify the barriers to electric vehicle (EV) adoption in Australia by conducting critical research and then provide recommendations on breaking down these barriers. Ultimately it hopes to see South Australia a leader in EV adoption with thousands of EVs on the road by 2020. Success of the program here in SA will see it also rolled out nationally.

The day started with a number of official opening addresses. Mr Paul Koch, Chairperson AEVA SA, provided the initial welcome and acknowledgement. He also set the scene, including the role AEVA had in hosting the day.

Mr Greg Partridge, AEVA National President spoke of the role AEVA has had over the last 44 years in advocating for electric mobility and the initiatives that are in train nationally; in particular the rolling out of charging infrastructure along major routes and at high profile destinations.

Mr Daniel Hilson, CEO EVenergi, the company that is managing the Charge Together SA program, touched on the large penetration of renewables in SA and the perfect match that makes when coupled with EVs. He also called on South Australians to embrace EVs and to lead the rest of Australia in this space.

The City of Adelaide Lord Mayor, Mr Martin Haese, spoke of the Council's move to become a carbon neutral city and the role electric vehicles play in achieving that goal.



Finally, we were honoured to have newly installed SA Senator, Mr Tim Storer present at the event and be part of the opening presentations.



Senator Storer demonstrated a depth of knowledge of electric vehicle adoption, in particular highlighting the many benefits, including economic, that flow from switching to electric vehicles. He also made a commitment to push the cause for electric vehicles in parliament. It was great to hear that there will be a strong advocate for electric mobility within the parliament.

It is fair to say that Australia is lagging behind many parts of the world where EV uptake is bounding ahead. Some of the impediments to adoption include concerns over range, price, public charging infrastructure and availability of a choice in models. The Green Drive Day provided a chance to look closely at these concerns and in particular, test drive vehicles that now have great real-world ranges and are within a price range that is very affordable.

For a day like this to be a success, there needed to be support from industry, which came in spades, with the following vehicles available on the day.

Hyundai provided essentially a pre-release Ioniq (fully electric), so very exciting to see.



The actual vehicle was the Irish specification and although registered in Australia it was not available for test driving, but was taking passengers. This was fine, as you could still appreciate the performance and fit out. It is planned that the Australian spec vehicle will go into production around July this year and then be available August/September.

Renault brought along two vehicles, a Zoe and a Kangoo Z.E. The Zoe is the most popular EV in Europe and after driving it, you can see why.



The Kangoo Z.E. is a great commercial vehicle with a very practical payload of up to 650 kgs, so would fit nicely into a commercial fleet. Both vehicles are now available here in Adelaide after a staged rollout initially in the eastern states.



The BMW i3 was popular all day, and like all BMWs, well finished.



The i3 has been available in Australia for a while, and it now comes with the upgraded battery, increasing its range. So a great car - just got better.

The Mitsubishi Outlander plug-in hybrid electric vehicle (PHEV) is a car that fits the bill for many people.

Being a plug-in hybrid, it has a very good usable electric range, which for many people would cover their usual daily commute. It's a great vehicle on so many fronts, including commercial applications.



The Tesla Model X, that was supplied by local hire company myCar green, was a crowd pleaser with its falcon wing doors, great performance and staggering range.



A great package, although many were asking about Model 3, which should make its way to our shores once the production levels ramp up, as it proving to be very, very popular.

So great support from industry providing the vehicles on the day and supporting the actual drives. It proved so popular, the vehicles hardly stopped, as they made loops around the city.

Given the expected numbers, several AEVA members were also happy to take people for rides in their EVs. For many people just riding in an EV is a new experience, plus it allowed people the opportunity to talk to owners about their real-life experiences and how practical they are. There was a great spread of vehicles on offer, including David Cann's Nissan Leaf, Blake Spearman's Mitsubishi i-MiEV, Harry Lawrence's and Barry Norsworthy's BMW i3, also electric vehicle enthusiast, Tomasz Wilinski's Tesla Model S. It provided a great opportunity for so many people, and again very popular.

Electro mobility encompasses many forms of transport, including e-bikes, electric motorbikes and scooters, which are increasing becoming part of the transport mix.

Mic Chapman, a long-time AEVA and corporate member, and proprietor of MiCycles – Adelaide Electric Bikes, brought along a great selection to test ride, including Velectrix, Greaser eCruiser and XDS e-bikes. They proved a great cross section of styles of e-bikes are available.



Mic also had on display a Zero S motorcycle and a Fonzarelli scooter. Again, great e-mobility options.



He was supported by the Bicycle Institute of South Australia, and there was a steady flow of people keen to test out how the bikes performed. E-bikes provide a great option for commuting and recreational riding.

We were very pleased to see a new enterprise on the SA landscape, Electron Motors, display their electric scooter. Electron Motors is also an AEVA corporate member.



In fact, the scooter has only just passed through the accreditation process to be registered in Australia, and the scooter on show had been brought down from Brisbane especially for the event. It was a real hit and given its advertised price, very appealing and a great option for commuting or urban delivery work.

Electron in particular are looking to offer a suite of options, including moving into other types of electric vehicles, so broadening the overall models on offer in Australia. So exciting days ahead.

There was also a great collection of trade stands including GELCOservices, Design Ecology, SA Power Networks and Jet Charge.

GELCOservices, an AEVA corporate member and very respected member of the electric vehicles community with its Managing Director, Mr Bob Gell working on many innovative projects here in Australia and globally.



In particular, they provide domestic and commercial EV charging solutions and manufacture a wide range of cables etc. to suit different charging options.

Design Ecology, also an AEVA corporate member, specialises in designing and installing solar and battery storage systems.



This ranges from domestic through to commercial, with the focus on sizing and designing the system to match the individual need.

SA Power Networks provided a stand to give a greater insight into the future of the grid, plus showcase two of their fleet vehicles, a Mitsubishi Outlander PHEV and a Holden Volt.



It is great to see an organisation include these vehicles in their fleet, and a sign of things for others to follow.

Jetcharge specialises in charging infrastructure and provides software for the non-Tesla charging units at the charging hub provided by the City of Adelaide in Franklin Street. These charging stations encompassed part of the site for the day.

Since being installed, it has proven to be very popular. The City of Adelaide has made a commitment to supporting EVs and has also installed charging stations in the Central Market carpark as well as

multiple units around the city. Having this infrastructure in place is an important step to take, as it shows people, who decide to purchase an EV, that they will be supported.

Across the day there was also a series of presentations, touching on a diverse range of subjects and covering many questions people have. They included:

Alina Dini - The key to unlocking the EV market in Australia. Alina has a wealth of experience and knowledge around EV adoption globally. She was able to apply that knowledge to the Australian context.

Mr Bryn Williams - SA Power Networks. "Electric vehicles and the future of the electricity grid". Bryn spoke of the role electric vehicles will play in smoothing out spikes in the system, in particular with the increase in renewable energy flowing into the grid.

Mr Geoff Lobban - Design Ecology – "Solar panels and storage". Geoff touched on the need to move as quickly as possible to renewables and away from fossil fuels. He also spoke about the need to have a well-designed system to maximise your benefits. Also, the perfect match of a solar system and EVs.

Mr Eric Rodda - "Electric Vehicles - An Overview". A simple overview of the electric vehicle, starting off with how it fitted in historically with other early vehicles, mainly steam and petrol powered. After looking at the recent history, the discussion then turned to comparing the electric car to the Internal Combustion Engine (ICE) car.

This talk is now available on the "Documents" page of the AEVA (SA) website.

Sally Knight - "Charging Electric Vehicles, An Overview". Sally looked at unravelling the sometimes confusing array of charging options. She demonstrated how simple it is to charge at home and made sense of the different public charging facilities available, as well as the various plugs and adapter cables that you will need to carry for longer distance travel.

Sophie Gibbs - "An electric vehicle as your primary vehicle". Sophie is an 'accidental' advocate for electric cars. After she and her husband took a leap of faith to purchase an EV, knowing very little about them, she will never go back to an internal combustion engine. Their Nissan Leaf has travelled over 80,000 kms and it is her primary vehicle for all daily driving needs.

David Cann - "Darwin to Adelaide in a Tesla". David is another strong advocate for electric vehicles. Stepping out of his Leaf and into another person's Tesla Model S, was more than he expected. What was most astonishing for him was the overwhelming positive response he received from people seeing an electric vehicle in the outback. With a little bit of planning an EV is more than capable of getting 'off the beaten track'.

Part of the static display on the day included a number of AEVA members' vehicles, including manufactured models as well as conversions. It reinforced the different options available.

So the main aim of the day was to get as many people as possible to experience electric mobility. The logistics behind this happening smoothly is always a challenge, so AEVA members and others who volunteered their time and expertise across the day, in particular the traffic marshals, who also needed to deal with the heat, put in a fantastic effort. Without this support, days like this would simply not happen.

... and what about the public that attended the day? Although it was quite hot, everyone waited patiently for their drive or ride, and across the day over 400 people were able to experience an electric vehicle - whether car, scooter or e-bike.

So overall - a great day, highlighting what is now on offer. Electric vehicles have moved on from being a niche market and appealing only to the early adopters. They are fairly and squarely in the mainstream, which was highlighted by the interest and attendance shown across the day.

Prices have come down, the next generation of EVs are coming through with more mature technology and upgraded features, there are more models to choose from, driving range has gone up and charging infrastructure is being rolled out. All the stars are starting to align and it is hoped that an experience that was on offer at the Green Drive Day, would go part way to convincing people that electric vehicles are a real and practical option, and we can all charge together to make SA the EV capital of Australia.

Ultimately though, the aim is for electric vehicles to become ubiquitous nationally.

Paul Koch  
Chairperson  
AEVA SA.  
May 2018