
An introduction

I have written this short article for the Breakfast Point community to introduce the topic of, and hopefully start a real conversation about electric vehicles (EV's). I will declare upfront that I am an EV owner (a Tesla Model 3) and advocate the technology, as well as other green initiatives.

EV's and why we at Breakfast point should care

Electric vehicles (EV's) are rapidly gaining traction around the world. While in some countries they are readily accepted, in Australia for a variety of reasons, EV's are often not well understood by the person in the street.

We are all invested in the Breakfast Point community and I feel it is important we have some understanding of EV's.

As EV's will inevitably grow in popularity, there will come a time in Australia when prospective property buyers, who happen to own an EV, will favour property (apartment buildings in particular) that are EV friendly. It's worth noting in other countries real estate listings are often tagged as EV friendly or not.

With so many factors in play, at this stage we simply don't know how quickly the EV market will grow in Australia. We can observe in other countries that consumer and industry demand is rapidly increasing. Car manufacturers are meeting that demand with dozens of new EV models. In some countries EV's are already outpacing sales of petrol, diesel and hybrid vehicles.

With this in mind, I think it is fair to say in a few short years, there is a very real potential for property prices of buildings not facilitating EV charging to be adversely affected.

Are EV's really going to be a thing?

When talking about EV's, we think of Tesla. While Tesla is often credited for proving to the world electric vehicles are a practical reality, in recent years most other car manufacturers have taken notice and announced a paradigm shift from internal combustion engines (ICE) to electric. EV's are not a transient gimmick, and certainly not limited to the likes of Tesla.

I encourage you to take a look at some interesting headlines (links are clickable from this PDF)...

- Australian EV sales tripled last year
<https://www.smh.com.au/politics/federal/sharp-jump-in-electric-vehicle-sales-underscores-untapped-potential-20200202-p53wx3.html>
- UK announces policy to ban the sale of all petrol, diesel and hybrid cars by 2035
<https://www.bbc.com/news/science-environment-51366123>
- 60% of new car sales in Norway are EV
<https://www.forbes.com/sites/davidnikel/2019/06/18/electric-cars-why-little-norway-leads-the-world-in-ev-usage/#65ba487513e3>
- Daimler Mercedes abandons R&D on internal combustion to focus on EV's
<https://www.teslarati.com/daimler-abandons-internal-combustion-engine-over-evs/>
- Tesla testing their new semi truck
<https://electrek.co/2019/08/15/tesla-semi-electric-truck-exceeds-range-expectation-test-driver/>
- Rivian electric utes
<https://thedriven.io/2020/02/12/rivian-aims-to-introduce-three-more-models-by-2024-build-250000-a-year/>
- Volkswagen CEO: We Need To Move Faster On Electric Vehicles Or We Will Follow Nokia's Fate
<https://cleantechnica.com/2020/01/16/volkswagen-ceo-we-need-to-move-faster-on-electric-vehicles-or-we-will-follow-nokias-fate/>
- Audi, Porsche, Volvo, Polestar, Mercedes-Benz, MG, Mini prepare to release new EV's in Australia for 2020
<https://thedriven.io/2019/12/20/eight-new-electric-vehicle-models-set-join-australia-market-in-2020/>
- Amazon orders 100,000 electric trucks
<https://www.forbes.com/sites/alanohnsman/2019/09/19/amazons-multibillion-dollar-bet-on-electric-delivery-vans-is-game-changer-for-startup-rivian/#39410ec6d013>
- China 2019 sales of internal combustion fall, while EV sales increase
<https://cleantechnica.com/2020/01/13/china-2019-electric-vehicle-market-share-grows-to-4-7-despite-tighter-incentives/>
- GM switching to EV
<https://www.cnbc.com/2019/12/12/gm-expects-cadillac-to-be-majority-if-not-all-evs-by-2030.html>

But can EV's work in Australia? - a quick rundown on charging

Firstly, for everyday use treat your EV as you would your mobile phone - plug in your EV when you get home from your daily commute and let it charge overnight. The next morning you wake up to a fully charged EV. Nice.

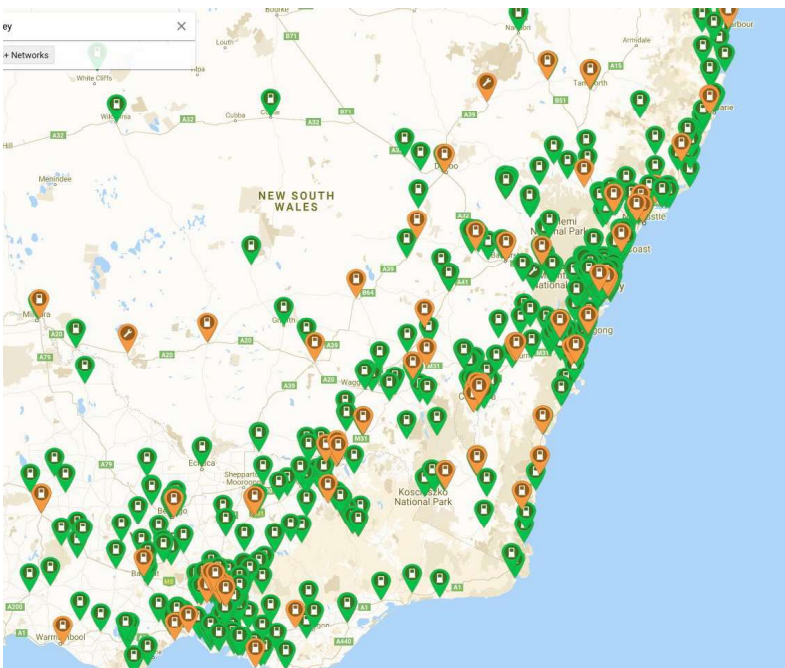
Different model EV's have differing battery capacities and efficiencies, so it makes sense range will vary between models (just like petrol). A couple quick examples...

Nissan Leaf ≈250km, Hyundai Kona ≈400km and Teslas 300-500km or more.

The idea is that your EV has enough range for your normal everyday use, your daily commute. For the average person who drives 50-75km in a day, you simply top-up overnight at home - just like charging your phone.

Now consider a road trip away from home, let's say from Sydney to Melbourne (as I have done in my Model 3). On road trips we typically stop every couple of hours for a toilet and drink/meal break. Popular highways already feature charging stations, typically placed strategically 200km (ie a couple hours driving) or so apart. Most of these highway based chargers are fast chargers and will top up an EV enough for your next stop in the time it takes to have a coffee or meal break.

To see what the charging infrastructure looks like today, here is a map of chargers between Melbourne and Sydney. You can check this out for yourself with www.plugshare.com (Plugshare is a popular online database of charging locations in Australia and elsewhere around the world).



- Green pins represent destination chargers (like you would have at home). Typically these are located at businesses, shopping centres etc to encourage the patronage of EV owners. Local to Breakfast Point, think Rhodes Waterside centre, Birkenhead Point, Flemington Markets, Olympic Park etc.
- Orange pins represent fast chargers and are often strategically located on country highways, but often in shopping centres too.

Rhodes Shopping Centre



Last word...

My purpose behind writing this is not to sell EV's. While I love my own EV and personally have no intention on purchasing a petrol car ever again, I do recognise they are, for now at least, not for everyone. We have yet to see price parity compared with fossil burning vehicles. But like any new technology, as adoption grows, prices will come down.

Being a strata member in Breakfast Point, I simply wish to highlight to my community friends and neighbours that EV's are coming. I understand there are challenges, but rather than find reasons to prohibit charging in our apartment buildings, now is a great time to collectively formulate a strategy to embrace what's coming - because it is coming, whether we like it or not.

As EV's inevitably grow in popularity, it makes sense that property values of apartment buildings without charging facilities, will sooner or later be adversely affected. That, in my opinion, is reason enough why we should be looking to facilitate EV charging in Breakfast Point, whether we individually intend to purchase an EV or not.
