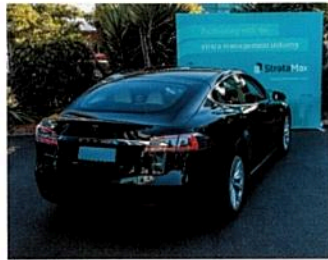


# Tesla representing the future in transport



It has now been 85 days since I last visited a petrol station. However, during this time I have driven my car from the Gold Coast as far south as Yamba and as far north as the Sunshine Coast, in total almost 5000km. I have avoided the small but ever-present monitoring of petrol prices, shopper docket discounts, queues at the pump and at the cash register. It's funny but some of the small things end up being most noticeable since buying an electric vehicle.

**Daniel Borin**  
Executive, Strata, Qld

My initial concerns of owning a Tesla no longer exist. For example, I was worried about the daily hassle of charging of my car. Now it has become second nature and in reality takes me, on average, about 25 seconds a day (not much more than it takes to plug in a phone.) Another concern was range anxiety, knowing that I wouldn't have the flexibility to just pull into a petrol station. In my last 85 days I have only once travelled close to the range of the battery and on that occasion a Tesla Super Charging Station was a mere one kilometre detour on my trip. At the station I enjoyed a cup of coffee while my car was charged within thirty minutes.

For weekday charging I rely on a wall charger at work that can pump around 60km of charge into the battery per hour. This means I'm always fully charged ready to travel over 425km at the drop of a hat. If there is a longer trip coming up I can also increase the battery limit (which normally sits at 85 per cent to full, and enjoy up to 485km.

On sunny weekends I charge at home using my solar panels which is good for both cost and the environment. At normal power rates the economics of electricity vs petrol are estimated to be about 25 per cent cost of petrol (based on an average price of \$1.20 per litre).



This article is written from my personal perspective on the Tesla Model S, and why I think it's a glimpse into the future for both the automobile and transport industry in general. Given that, from a practical sense, the future is shaped by what the market demands, I have given a review in terms of the buying criteria people use for cars.

### **Performance**

There is an unassuming simplicity to the Model S's performance when you get behind the wheel due to two main factors; a single gear and being extremely silent. Once you press the pedal you experience instant, incredibly smooth torque and almost no sound at all - the only stimulus to let you know you are moving is the g-force and the sight of other cars disappearing in your rear vision mirror.

The current entry level Model S boasts zero to one hundred in 4.4 seconds while the top of the range model can almost halve that to 2.2 seconds. Quite simply, the Model S is an amazing performance vehicle.

### **Style**

Undoubtedly style is a personal preference but generally people appreciate sleek design and robust curves. The body of the Model S certainly delivers on these and as far as luxury is concerned it holds its own against most other top end sedans.

### **Reliability**

The car rates well on reliability as it has far fewer parts than regular cars; no gear system, no engine, no exhaust system, no fuel and oil pumps, no crank shafts or belts and pulleys.

### **Driving pleasure**

The driving pleasure of the vehicle is enhanced through both convenience and ease of driving. What's really nice is that the Model S knows where you want go when you get in the car through its calendar integration. Your day's appointments appear when you enter the car and you can simply click the entry to navigate directly to your destination via Google Maps on the centre console's 17-inch monitor.

For everyday driving the car is extremely silent, easy to handle and just a pleasure to drive. The overall experience is very smooth, and it will drive indefinitely while you have the autopilot engaged and your hands aren't off the wheel for too long-a-period.

### **Safety**

In 2013 the Tesla attained the highest safety rating ever for a car tested by the National Highway Traffic Safety Administration in the US.

### **Quality and comfort**

The Tesla includes a premium option that provides leather seats and Nappa-leather dashboard. When combined with the wood trim it certainly gives the car a luxurious, quality feel. With the impressive 17-inch centre display, dashboard screen and subtle led ambient lighting the design is quite minimalistic.

### **Features**

There are many features, from automatically adjusting the suspension height based on the GPS location (ie. steep driveway at home) right through to the ability to "summon" your vehicle out of its parking spot remotely, just to name a couple.

### **So what does this mean for the future?**

The Model S has been an engineering marvel paving the way for a new generation of more affordable cars. You can pre-order the Tesla Model 3 for USD \$35k with delivery estimates for the middle of 2018. Local pricing is yet to be announced but based on similar Model S delivery prices should be under AUD \$55k. This will compete with cars such as the Subaru WRX, Audi A3, Commodore SS and VW Passat.

### **Are Strata communities ready for the new wave in Electronic Vehicles (EVs)?**

While Tesla may be ahead of the game in terms of electric vehicles, every other major car manufacturer has either released an EV or has one on the way. As more supply comes into the market the price will drop and we will see far more on the road. So is strata ready for an influx of EVs?

Sydney-based company Wattblock have received funding from the City of Sydney and the NSW Government's Innovate Program to explore this issue. Finding answers to: Who pays for the electricity used to charge an EV in an apartment building carpark? How do you bill it? How much will it cost apartment dwellers to charge their EVs at home? Where should EV charging stations should be placed? What does it do to a building's emissions profile? And how many Tesla Model S cars can be charged at one apartment block before its lifts cut out?

It is interesting, the answer to the last question was tested in an apartment block in Pyrmont and they found that if there were three EVs charging the lifts would stop. These are the problems Wattblock are investigating solutions for.

Brent Clark from Wattblock made the following comment, "What we are finding in strata are a range of approaches to EV charging infrastructure. For some, allowing a Tesla charge-point at an individual car space is enough. Others are running higher amp lines down the middle of each level of carpark, with the owner paying for a 'last mile' connection to their spot. Some are considering new grid backbones and distribution boards on each level of a carpark.

"Then there are the by-laws. Questions of who pays, and how the amount they pay is calculated. It's definitely one area where, taking a longer term approach will pay off".

EVs are here to stay, how strata cope with the new demands will be the challenge.



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