

Electric cars, are they a realistic alternative?

The much talked about electric vehicle (EV) strategy has started opening the doors to further debate around costs and potential infrastructure problems. Many also feel that the slow take-off rate in other areas of the world is another major concern, especially when choosing to go green seems to be such an obvious move.



Will the electric car of the future be like this...
(Image: Jensweb, via Wikimedia Commons)

Taking costs into consideration first, industry commentators are expecting electric vehicles to hit the local market at a cost approximately 20% higher than their petrol counterparts, which to most is not an affordable option. However, this angle and justification of why EV sales will not take off is a wrong one. It's not about weighing up the extra cost of capital to the consumer and trying to off-set this value with the fuel savings, according to Wayne Duvenage, chief executive of Avis Rent a Car.

"There is far more to the story" says Duvenage who believes that there is a large percentage of people who will opt to "buy down" and choose a less luxurious electric vehicle for the pure savings in petrol costs, along with other factors such as reduced service costs and the environment that come into the decision.

Issues to consider

"Should one's budgeted price range for a vehicle be R300 000 for example, and an electric model with a less luxurious spec is introduced into the same price category, the electric model may well be considered in place of the more luxurious petroleum powered option, due to the huge savings in energy costs, which we're putting in at around 75% and 80%," adds Duvenage. A calculation worked out on the electric vehicles' usage pattern of around 15kWh per 100km at R20, versus the current average petrol vehicles' usage pattern of R100 worth of fuel per 100km.

Another area of concern was around the infrastructure that supports battery charging for electric vehicles. However, the reality in South Africa is that 70% of car travel is used for commuting to work and back, plus other short trips which are usually below a distance of the current battery range (of approximately 150km), so a plug point at home and maybe the office is more than sufficient. At this point the installation of power points in petrol garages is not a priority or a real necessity, until fast booster charge technology comes into play, which it will.

So why is the shift to electric motoring moving at such a slow pace when the people and businesses the world over are making big, bold steps to go green?

"One reason is the limited range of vehicles and people worry that they may need to travel further than the battery range on the odd occasion. That's why car rental and car pool companies exist and the sooner people become comfortable with their needs being met by rental rather than ownership, the quicker this paradigm will break. Europe is fast moving in this direction and will take to EV travel faster than here in SA."

Designers must think outside the box

Another hurdle could be that manufacturers are trying to build these electric powered cars to look like, and carry the same number of passengers, as the conventional car. This could be linked to the market's desire for the EV car to look like a normal car.



... Or more like this? (Image: Mattes, via Wikimedia Commons)

"In my opinion, the most practical and efficient EV design and solutions will come from outside the typical manufacturer space, as there is a need to break out of the mould and blinkers here. The ideal EV vehicle for work commuter purposes is

far smaller and lighter, with two doors and seats and a very different configuration and design," says Duvenage.

The level of doubt in the industry is reducing rapidly, electric vehicles are becoming the order of the "near future" day and society will deliberate less over environmental decisions as these fast become the expected norms.

"The conventional motor manufacturer is far behind where they could and should have been in this space by now, and one senses that this is fast becoming a case of hurry up and change fast or become the subject of those not too distant dinner table discussions of "remember that motor manufacturer," concludes Duvenage.

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