## The evolution of the car

One of the world's largest car makers has been speculating on the future of the car.

They see the future as all electric. They do not tackle the issues of range, charger availability, charge time, lack of renewable electricity to recharge, CO 2 generated in creating the metals, minerals needed and making the batteries or the issues with scrapping.

They do see an evolution to more automated vehicles. They wish to excite future customers with more digital displays and capabilities. They anticipate moving away from the old ownership model to more varied patterns. They expect there to be car pools and systems to summons a vehicle when you need one. They anticipate much more use of each vehicle as a result.

There is also a parallel vision of owners of EVs seeing them as mobile batteries, using them to supplement the grid and then finding some time when they can recharge them.

The two interesting features of the commentary were the absence of any research into what we the potential customers might want, and the lack of any analysis of what might be possible in terms of access to renewable power and chargers. There was no carbon accounting, just an overall assumption an electric vehicle entails less CO 2 than a petrol one. That would depend on where the electrical power came from, how many miles the vehicles were to do, and how much CO 2 it took to produce the battery of the EV.

These companies are becoming very detached from customers and practicalities. They have also lost a lot of volume with petrol and diesel sales down by much more than electric sales are up. What is your vision of the future car you want?