



# *Electric Vehicles*

Available Models

Is an EV suitable for you?

Range and Performance

Charging methods

Public Charging



# *Available Models*

- Hybrid or All-Electric?
- See <http://www.nextgreencar.com/electric-cars/available-models.php> for a list of manufacturers and models
- Manufacturers of all-electric cars include :  
BMW, Citroen, Ford, Mitsubishi, Nissan, Peugeot, Renault, Smart, Tesla, VW.



# *Is an EV suitable for you?*

- Off-road parking (for charging)
- Location for a charging point to be installed
- Short journeys (less than 100 miles per day)
- High initial cost but not as high as advertised
- Will accept uncertainty about battery life / degradation



## *Range and Performance*

- Typical Range: 80-120 miles (manufacturers' claim)
- Experience says:  
120 miles manufacturer's claim =  
90 - 100 miles prediction on journey start =  
80 miles reality.
- Depends on use of ancillary devices, terrain, driving sensitivity etc.
- Performance: can be like any petrol/diesel vehicle.



# Charging Methods

Different methods. Depends on vehicle make and model.

e.g.

Time 0 - 100%

- Standard Charging 13 Amp (at home) 8-12 hours
- Fast Charging 16 or 32 Amp (special installation at home and at public charging stations)

16 Amp	6-8 hours
32 Amp	3-4 hours
- Rapid/Quick Charge: 50 Amp DC (at public charging stations) 20 mins (to 80%)

See <http://ukevse.org.uk/charge-points-chargers/> for more details.

*Different vehicles require different charging methods using differing cables*



# *Public Charging*

- Ecotricity are installing Fast and Rapid charge points at all motorway service stations + all IKEA.
- Moto and Welcome Break are complete as are all M4 s/stations and Kidlington on A34 at Oxford
- Target is to complete all M/way s/stations by end of year.
- No charge at present for charging at these points.
- Chargemaster are installing other rapid charge points, eg Waitrose at Abingdon. Cost – up to £7.50 per charge.