

Electric and Fuel cell vehicles

Level 1

This level assumes of electric vehicles is assumed to be limited if there is a lack of focused policy initiatives, reaching 12% for 2wheelers, 3 wheelers and taxis, and 2% for buses and cars, reaching complete electrification in at least metro cities.

Level 2

Level 2 envisages that focused policy decisions by the government could incentivize and promote electric vehicles, thereby increasing the penetration of electric cars and 2 wheelers to 40%, 3-wheelers, taxis and buses to 99%, electric buses to 99% of the road based transport in 2050, buses on fuel cell engines to 1% and cars on fuel cell engines to 4%.

Electric two wheelers have made a debut in Andhra Pradesh, and with supportive policies are expected to form significant share in the fuel mix in all categories of vehicles. Electrification in railways is currently 34%, and is expected to increase rapidly. Electric vehicles can be a transformative change in the transport sector. The RMI-NITI Aayog report on electric vehicles provides different transformative scenarios for penetration of electric vehicles. Further, with development of smart cities, electric vehicles penetration could increase significantly.

Level 3

Level 3 assumes further electric vehicle push, increasing penetration of electric cars to 47%, 2-wheelers to 56% in 2050, complete electrification of buses, 3 wheelers, taxis by 2040, with 2% of buses and 9% of cars on fuel cell engines in 2050.

Level 4

Level 4 assumes that transformative policy programs are envisaged which could achieve 100% electrification of buses, taxis and 3 wheelers in 2030, 82% of cars and 93% two wheelers by 2050, the remaining mainly on fuel cells and CNG.

