Electric Mobility – agenda for discussion

Gaurav Dubey

Programme Manager - Sustainable Mobility Programme
Centre for Science and Environment

AAETI. 12.02.2019
Why electric mobility?

Use of clean fuel, and particularly electricity, for mobility can have significant impact on emissions from transport.

*Emissions in g/ year. Source: The Urban Commute.*

FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) Scheme launched in 2015 to incentivise take up of e-mobility.

Till July 2018, about 2,17,000 hybrid/electric vehicles (xEVs) have been given direct support by way of demand incentives.

In 2018, focus of FAME Scheme moved to public transport. 8 cities selected to buy 455 e-Buses.

State level policies have followed – Delhi’s draft EV policy.

How does policy intent transform into reality? How important is it for States to have their own policies?

ZEV – Zero Emission Vehicles Mandate?
Demand has been slow in personal vehicle segment despite incentives.

Para-transit segment has picked up faster than anything else.

Buses remain costly but important. Is it sustainable?

How to align policy with market forces? What should be the future shape of incentives?

Subsidies, but for how long? And what happens then?
Take up is dependent on charging infrastructure availability. Necessary to address “range anxiety”.

Slow charging, fast charging, opportunity charging and battery swapping – all have impact on the e-vehicle design, cost and the overall ecosystem. **Do we need to move towards a particular charging paradigm?**

As demand ramps up, requirement of raw materials will grow. **How will this impact supply?**

**Standardisation vs Innovation?**
Electric mobility in India – where are we headed?
Operations and deployment

• Little evidence on organized operations – are we prepared?
• E-Buses a very different proposition to standard buses. Need to take into account minute details like slope of roads (number of flyovers) for operations planning as they will impact range. Are we going with an ecosystem approach?
• Para-transit is growing rapidly. Organization will become necessary at some point to ensure optimal benefits. What are the experiences?
• Operating models will evolve – how to assure regulation remains aligned?
Thank you

gaurav@cseindia.org