

Future Mobility Show 2019 Conference & Exhibition on Future Technologies Concept Note

The impact of Environmental Pollution on health of human being and animals globally is an extremely important concern today for society and Governments across the world. Many countries have been working on innovations and technologies to bring down the pollution levels in the environment, thus the planet will be a better place to live in for the current and future generations.

The sources of pollution that adds to the environment comes from various quarters including Industry, manufacturing, Oil and Gas, solid waste, electronics, vehicular pollution, etc.

Ranging from pedestrian and personal transport to public transit and freight movement, mobility is a crucial piece of the development puzzle and the key to unlocking the potential of India's economy and people. While the Industry across the world is working on various innovations and new methods in manufacturing, the automobile industry globally has begun working on this for the last decade to bring in alternate options to reduce the vehicular pollution and its impact.

The challenge lies in ensuring that these systems meet the needs of their users in a sustainable manner. It must be clean for environmental benefits, shared to maximize asset efficiency, and connected to meet user needs from end-to-end. Safe, energy-efficient and low-emission systems are necessary for India to meet its international commitments on climate change.

India with the second largest population and the fourth largest vehicle numbers in the world, has all the reasons to work on alternate options on an immediate basis.

The Government of India has taken a number of steps already towards this direction in the last two decades, viz making it mandatory for all passenger vehicles to convert from the conventional Diesel / Petrol to CNG fuel in Metro cities and gradually into other parts of the country in a phased manner. Though CNG is low on emission, it is not yet a zero emission fuel.

The Government of India has taken several other initiatives of late, with a target to bring zero emission in vehicles for India for future. This includes Electric Vehicles, fuel cell vehicles, Hybrid vehicles, etc



To achieve this target of zero emission vehicles, the following four elements needs to be looked at:

- 1. Import/Trade Security
- 2. Engineering Security
- 3. Manufacturing Security
- 4. Environment Security

We have to work on following areas to acquire these important elements for future technologies-

- Adequate infrastructure: Public charging infrastructure, dedicated charged corridors, charging points in residential complexes, space for vehicles to park and charge, etc. There should be separate zones and/or lanes in cities across India that should be dedicated for electric vehicle operations including pick-up spots or zones for taxis, auto-rickshaws, bikes, buses and separate traffic and/or toll lanes. Pilots can be conducted in select cities and select areas which permit only the entry for electric and less polluting vehicles, in order to reduce pollution in crowded places.
- Solar energy: as the electrified mobility will put additional load on the electricity grids, need to look at solar-powered charging points, etc. The Government to allow access to private players to set up solar farms at subsidized rates
- Alternate fuel: Need to generate power from renewable sources. Hydrogen and methanol along with alternate pathways to energy to be explored. Not only are the alternative fuels less costly to produce than those obtained by refining crude oil, but switching to them requires no change either in the design of automobile engines or the energy infrastructure of a country.
- Raw Material Security: Create guidelines & regulations for re-cycle and re-use for various applications in order to reduce dependence on imports of raw materials. Also, Government to explore or acquire mines for the critical elements/components for country needs
- Increase in Manufacturing Units: India should manufacture the majority of the parts for its electric vehicles to reduce the dependency on export trade and also secure the jobs in the country.



- Taxation: To reduce and consistent GST on Electric vehicles, Batteries, and Charging –Swapping station services, reduce taxation for less polluting (non-BEV) vehicles, uniformity of taxation across States. EVs should be allowed to get benefits to pay tax (GST liability on services) from Carbon Credit or from a ZEV trading / "feebate" mechanism.
- Fast Track Approval and Single Window Clearance: Fast track approval for construction and operation of Charging Stations, Swapping stations from Municipal departments, City Planning offices and other statutory bodies; registration of electric vehicles from transport authorities. There should be defined checklist of documents to be uploaded online with self-declaration along with timeline of 48 hrs to execute the transfer and registration of cars, for issuance of permits and fitness certificate etc

The three days exhibition and conference will showcase the following under the display:

- Manufacturers of Electric Cars & Two wheelers
 Electric & CNG Driven Three wheelers
 Electric Three wheelers
 Oil Companies
 Electric & Hybrid Cars
 Components used in production of these vehicles
 Environment Friendly Fitments
 Battery Manufacturers and Battery Management systems.
 Electric Vehicle Chargers
 Electric Vehicle Infrastructure
- Other Alternate Energy Driven
 Vehicles.
- Other Accessories for Vehicles

The organizers of Future Mobility Show will work closely with all relevant Ministries of Government of India and other associations/organizations involved in this sector.
