

Electric Vehicles (EVs) will become the future of transport in India.

Every day there is new development taking new steps in electric mobility space. In fact, it seems to be one of the biggest collaborations among the industries undertaken by automobile manufacturers, battery producers, R & D Labs, and governments to push electric mobility and change the future of transportation.

The Indian government is slowly but steadily encouraging electric vehicles and According to a KPMG survey of auto executives, by 2030, 39% of new vehicle sales in India will be electric vehicles.

Electric Vehicles (EVs)

An EV operates on an electric motor instead of an internal combustion engine and works on a battery instead of any kind of fuel. EVs have low running costs as they have fewer moving parts and are also environmentally friendly to use.

In India, the fuel cost for an EV is approximately 80 paise per kilometer, and if you contrast this with the cost of petrol which is today more than Rs 100 per liter in Indian cities, or Rs 7-8 per kilometer to work a petrol-based vehicle.

EV Adoption

<li ""="">You have previously seen cities like Delhi and Kolkata lead the way for mainstream e-mobility. <li ""="">These cities promoted the use of e-rickshaws to lower operation and economical costs for traveling in cities. <li ""="">There are reportedly over one lakh e-

rickshaws on the streets of Delhi and Kolkata. This development is also encouraging to invest in EV sales for personal use as well.

‘Switch Delhi’ Campaign Last year’s ‘Switch Delhi’ Campaign was launched and has seen a great response which is encouraging customers for the EV industry. The campaign was introduced to promote the adoption of EVs to people in their daily life. Owing to its success, some leading two-wheeler companies have stated that they will be launching new EV models in the country.

The Transport Minister of Delhi declared that since the campaign was launched, there has been an increased registration of electric two-wheelers. The Switch Delhi campaign also aims at focusing on creating an outreach for electric auto while encouraging people to opt for this mode of public transport.

According to an independent study by CEEW Centre for Energy Finance (CEEW-CEF), the EV market in India will be a US\$206 billion opportunity by 2030 if the Indian market keeps progressing to meet its ambitious 2030 target. This would require a cumulative investment of around US\$180 billion in vehicle production and charging infrastructure.

Another report by India Energy Storage Alliance (IESA) has projected that the Indian EV market will grow at a CAGR of 36% by 2026. The EV battery market is also projected to grow at a compound annual growth rate (CAGR) of 30% during the same period.

‘e-AMRIT’ portal: Platform for information on electric vehicles

India rolled out the website e-AMRIT – <https://www.e-amrit.niti.gov.in/> – at the COP26 Summit in Glasgow, which will work as a one-stop destination for all information on electric vehicles. It mainly focuses on targeting the adoption of EVs and their purchase such as charging facility locations and EV financing options as well as information about investment opportunities, government policies, new updates, and available subsidies for drivers and manufacturers.

Policies

It has been made clear by the

government that charging EVs is considered a service, which means that operating EV charging stations will not require a license. It has also issued a policy for charging infrastructure to enable faster adoption of EVs. The revised center Guidelines & Standards for Charging Infrastructure for Electric Vehicles was promulgated on January 14, 2022.

These guidelines include provisions for individual owners of EVs for public charging stations (PCS) infrastructure and it covers land use and access, power tariffs, government roles, timelines for offering connectivity for installation of public charging stations PCS, among other concerns.

2. Ministry of Road Transport and Highways: It has announced that both commercials, as well as private battery-operated vehicles, will be issued green license plates for EVs. It has also notified that all battery-operated, ethanol-powered, and methanol-powered transport vehicles will be completely free from the commercial permit requirement.

3. Department of Science and Technology: Has come up with a grand challenge for developing the Indian Standards for Electric Vehicle Charging Infrastructure.

4. Niti Aayog: The National Mission on Transformative Mobility and Battery Storage has been approved by the cabinet, and the inter-ministerial guide committee of the Mission will be chaired by the CEO of Niti Aayog. The Mission focuses to create a Phased Manufacturing Program (PMP) for 5 years till 2024, to support setting up large-scale, export-competitive integrated batteries and cell-manufacturing giga plants in India, as well as localizing production across the complete electric vehicle value chain.

Ev will become the future of transport in India. The scope of India's EV market growth and the availability of capital for manufacturers, and charge point stations as well as improvements to infrastructure and diversified options for consumers by Industries. India's EV ambition will also require an estimated annual battery capacity of 158 GWh by FY 2030, which provides huge investment opportunities for investors worldwide.