

EVs: charging infrastructure needs a jolt to meet 2030 target

Achieving the target of all-electric vehicles by 2030 will need a substantial push from the government and the private sector in terms of setting up the charging infrastructure, enabling cheaper availability of raw materials and incentivising mid-way measures such as hybrid vehicles.

What is the aim?

Prime Minister Narendra Modi to Transport Minister Nitin Gadkari and erstwhile Energy Minister Piyush Goyal have all spoken about the target to achieve an all-electric fleet of vehicles by 2030, in line with the ongoing global push away from the internal combustion engine.

What steps have been taken?

Different departments and ministries have stepped up their engagement with the electric vehicle industry. Energy Efficiency Services Limited, a government firm, has put in motion plans to procure 10,000 e-vehicles and has already given out tenders to the likes of Tata Motors and M&M. EESL aims to lease these vehicles out to government departments so as to replace their existing fleets of petrol and diesel vehicles.

The Government also notified the scheme for Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME), as a part of its National Electric Mobility Mission Plan 2020. The scheme has four focus areas: technology development, pilot project, charging infrastructure and demand creation. The scheme has been extended till March 31, 2018.

Is the infrastructure ready?

There are several initiatives, by both the government and the private sector, to enhance the required charging infrastructure. The Centre has begun pilot projects in this regard, having already installed 25 charging stations in Bengaluru, and planning to expand this to other metros.

Last year, Fortum India inaugurated a 22 KW AC charger on a pilot basis in Delhi, and the company said it was looking to install up to 160 charging stations over a year in Delhi, Mumbai and Bengaluru. The parent company Fortum Oyj also signed an agreement with government-owned NBCC (India) to bring cloud-based back-end infrastructure for electric vehicles to India.

Reliance Energy also has said it planned to install 15 charging stations across its distribution licence area in Mumbai over the next three years. "The company is also working on a third-party business model to provide charging station facilities for electric two-wheelers and four-wheelers in public places, parking plazas near highways, and offices and malls," the company said. Tata Power has also installed two charging stations in Mumbai.

What are the roadblocks?

There are several. The first is that very few global carmakers have brought their electric variants into India. The fact that the government has also made a distinction between EVs and hybrid vehicles under the GST regime is seen as a problem. While EVs are to be taxed at 12%, hybrid vehicles are taxed at 28% plus a 15% cess.

The view among carmakers is that people are still sceptical about the shift to all-electric vehicles since they fear the charge duration of the batteries. As such, they are more likely to try hybrid vehicles, but that sector is not being encouraged by the current tax structure. The other issue has

to do with the charging stations themselves.

While sector specialists said that EVs can be charged at home using AC power, this would take about 5-8 hours for a full charge. DC chargers, on the other hand, can do the same in a fraction of the time. Most of the chargers being installed across the country, however, are AC chargers.

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