



IT'S NOT ALL DOWNHILL

Subsidies alone will not give enough push to electric vehicles in India. Policymakers and manufacturers need to work in tandem with consumers to understand their needs and identify demands

ASWATHY K P

ILLUSTRATION: RITIKA BOH

56 DOWN TO EARTH 1-15 MARCH 2021 DOWNTOEARTH.ORG.IN

EITERATING the Centre's commitment to facilitating adoption of electric vehicles (EVs), Union Minister of Micro, Small and Medium Enterprises Nitin Gadkari informed the Parliament on February 11, 2021 that EV regulations had already been issued to state governments. He said the Union government will also provide subsidies to 62,000 passenger EVs and 100,000 e-twowheelers so that India transitions towards green mobility.

Subsidies and other monetary incentives like tax rebates have been at the heart of the Centre's EV plans since inception. This is understandable, given that the average price of EVs in India is ₹12-13 lakh, nearly double that of cars (₹5-7 lakh) that run on fossil fuel. Similarly, the starting price of e-two-wheelers is ₹70,000-1.25 lakh, much more than their conventional fuel counterparts with similar features.

In 2015, when the government adopted the Faster Adoption and Manufacturing of Hybrid and EV (FAME), the Centre spent around ₹343 crore in the first phase to provide subsidies to about 278,000 EVs. On April 1, 2019, FAME II was launched with an outlay of ₹10,000 crore for three years. About 86 per cent of the fund will be spent on creating demand for EVs in the country. To make electric vehicles further affordable, months after the launch of FAME II. the Centre announced a reduction of GST on EVs and charging stations from 12 per cent to 5 per cent and 18 per cent to 5 per cent, respectively. In September 2020, $_{
m the}$ Union Ministry of Road Transport and Highways issued a notification that allows the sale and registration of EVs without batteries. The move is expected to reduce the upfront purchase cost of EVs and give

customers the option of procuring batteries directly from manufacturers. At least three states—Delhi, Gujarat, and Telangana—also have introduced EV policies through which they offer monetary incentives, over and above FAME II.

WHY THE POOR SHOW

Despite the proactive push by governments, EV adoption has not gained much traction in India. It has been almost two years since FAME II was launched, and so far a little more than 50,000 EVs have been sold, as per the programme's dashboard on February 12, 2021. Currently, the share of EVs is less than 1 per cent of the total vehicles sold, according to a 2019 report by Exhibitions India Group, a trade

Besides, most households in the country own a single car. EVs might be impractical for them as they are not ideal for longdistances and charging stations do not exist outside major cities. Then there are others who expect a technology boom in the EV industry in terms of new vehicle models, battery technologies, and charging options. This may also be a deterrent for mass adoption.

Consumers are versatile and their purchasing choices are highly dependent on socio-demographic (gender, age, employment, income) and travel characteristics (commuting distance and time). Policy makers, as a result, should carry out city-level sample surveys to understand consumer needs and

AFFORDABILITY IS NOT THE ONLY REASON PEOPLE ARE AVOIDING ELECTRIC VEHICLES. THERE ARE INFRASTRUCTURAL (LIMITED CHARGING STATIONS), TECHNICAL (BATTERY DEGRADATION) AND SOCIAL (LACK OF AWARENESS) REASONS AS WELL

promotion organisation. India aims to increase the share of EVs to 30 per cent of all vehicles sold by 2030.

The low demand shows that affordability may not be the only reason people are avoiding EVs. There are technical (range anxiety and battery degradation), infrastructural (limited charging stations) and social (lack of awareness) reasons as well. For instance, at present the country limitedpublic charging stations, with most of them found in residential and office spaces. Consumers, therefore, need to make sure that their residence or office has a dedicated parking space and uninterrupted power supply. Different charging pump models (private and public) and charger types also make the consumers' choices difficult.

influences. For example, almost 75 per cent of the EVs sold so far under fame II are two-wheelers, as per the programme's dashboard. Such a survey will help policy makers understand the consumer needs better. It would also help them identify demand centres to install charging infrastructure.

Finally, policy makers and manufacturers need to work in tandem to encourage consumers to move to cleaner vehicle technologies. For example, while the Centre could provide greater push to two-wheelers, companies should launch newer models with features that the consumers want.

(Aswathy K P works on material and strategic studies at the Center for Study of Science, Technology and Policy, a Bengaluru-based think tank)

DOWNTOEARTH.ORG.IN 1-15 MARCH 2021 DOWN TO EARTH 57