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World Earth Day: Polluted India needs to go extra mile with EVs

By Diksha Tripathy, ET Online Last Updated: Apr 23, 2023, 10:58 AM IST

Synopsis
The capital city of India ranks 4th on list of world's most polluted cities, according to IQAir, and many other cities are not too far behind where humans and plants too are engulfed in evil smoke. The hazardous level of pollution across metros and even in lower tier cities in India that is sizzling with heat waves necessitates finding alternatives to pollution-causing elements and switching to a more eco-friendly lifestyle.

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To top charts may not be an ideal situation in many cases. One such case is when it comes to pollution choking citizens of the world's most populous country, even as New Delhi scampers for green measures to cut down on emissions and move towards an ambitious target of transitioning to climate neutrality by 2070 that has immense economic benefits.

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and even in lower tier cities in India, that are sizzling with heat waves, necessitates finding alternatives to pollution-causing elements and switching to a more eco-friendly lifestyle.

One such alternative is electric vehicles. Fuelled by lithium, **EVs** can also help India reduce import of fossil fuel and narrow trade deficit.

The government has set a 30% EV adoption target for the country by 2030 and the segment in India has seen major growth in the last few years.

“The adoption of EVs has multifaceted impacts, both economically and environmentally. With rising demand and proactive government incentives, India's EV industry has experienced exponential growth over the past two years. Furthermore, the Indian government's rigorous pollution standards, scrap policy, and environmental awareness have contributed to the transformation of the EV market,” said Anil Gupta, MD, Okaya Power Group.

To be sure, India is still challenged with higher prices of EVs given the dependency for lithium imports and lack of adequate charging infrastructure. In fact, a recent drive to replace old, polluting, diesel buses at state-run public transporters with electric buses found no bids from top automakers including Tata Motors, Ashok Leyland and PMI Electro Mobility.

While the government has rolled out incentive schemes for faster adoption of EVs, some automakers were found to be involved in malpractices.

Automakers launch EVs with much fanfare and all stakeholders from corporates to government do not shy away from celebrating Earth Day on stage or on social media. However, the country continues to be choked by black smoke and India is in desperate need for faster EV adoption.

What is needed to ramp up EV adoption in India?

The Alliance for an Energy-Efficient Economy (AEEE) and the International Copper Association of India (ICA) recently in a whitepaper flagged what needs to be done for the EVs, ranging from extension of incentive schemes to developing the markets.

The extension of FAME II (Faster Adoption and Manufacturing of Electric Vehicles in India- phase II) scheme is critical

to accelerate the adoption of electric two-wheelers in the country by making them economically viable to consumers, AEEE said.

“The faster adoption and manufacturing of the Hybrid and Electric Vehicles (FAME) scheme provided incentives for EV purchase and supported the development of charging infrastructure across the country. This government program enhanced motivations for EV customers while encouraging the usage of electric vehicles,” said Setul Shah, Founder at RunR Mobility.

India can achieve its national targets of reducing carbon emissions and enhancing sustainable transport via increased adoption of 2-wheeler EVs, said Dr. Vikas Nimesh, Senior Research Associate, AEEE.

AEEE’s report also showed 79% of respondents believed that new E3Ws were more robust than retrofitted ones. This has distinctly indicated a need for reliable and durable E3Ws in the market.

"The shift from IC engines to EVs is driven by a combination of factors, including environmental concerns, energy efficiency, economic benefits, technological advancements, and government incentives. IC engines emit harmful pollutants, while
EVs have no tailpipe emissions and are more energy-efficient," said Rajat, CEO & Founder, Lohum.

Close to 30% of drivers surveyed preferred not to retrofit their vehicles, as they lacked trust in the performance and range of EVs. Meanwhile, 13% highlighted the issue of non-functional charging points when asked about charging stations near their area of operation.

Challenges & opportunities

Currently, there are only a limited number of charging stations in the country, which makes it difficult for EV owners to travel long distances.

To address this, several companies are investing in the installation of more charging stations across the country. Recently, during Auto Expo 2023, Tata Power had announced plans to install 25,000 charging stations across India with the objective of ramping up the EV infrastructure in India. Mukesh Ambani's Reliance Industries also disclosed plans to install charging stations in malls and offices in the next few years.

As against about 3,000 public charging stations and 5,500 charging connectors, India reportedly needs as many as 20.5 lakh charging stations by 2030.

Another challenge is the high cost of EVs, which is a deterrent for many potential buyers.

The limited range of EVs has also been a concern for those who need to travel long distances owing to lack of EV infrastructure. However, several companies are now launching EVs with longer ranges. For instance, MG Motor launched the MG ZS EV, which has a range of over 400 km (~461 km) on a single charge.

There is also a lack of awareness and understanding about EVs among the general public. To address this, several companies are launching awareness campaigns and providing education about EVs. A recent example could be of Hyundai which recently launched a campaign called 'Do You Know?' to educate customers about the benefits of EVs and dispel common myths.

Recent findings by AEEE and ICA reveal that no or minimum security briefing is given to a customer at the time of purchase or later. Nearly 26% of its respondents claimed that there were no safety features in their EVs. Additionally, 55% of drivers were unaware of the safety features present in their vehicles, indicating the need for increased awareness and education on safety measures.

The manufacturers and industry experts need to come up with a solution to these problems impeding growth of EVs in India.

A survey by LocalCircles in August had shown that a third of over 11,000 respondents said that safety and performance concerns were the key reason for them to not consider buying an electric two-wheeler in the coming six months. A similar survey earlier in March last year had shown only 17% of respondents had reported safety and performance concerns.

This sharp increase in safety concerns amongst consumers followed multiple incidents of electric two-wheelers catching fire during the summer. Questions on these incidents were also asked in the parliament.

The adoption of electric vehicles in India is not just a choice, it's a necessity. However, the road to EV adoption in India is not without its challenges, said Tushaar Bajaj, Co-Founder and Director, Virtus Motors.

The government, along with industry stakeholders, must work together to overcome the challenges and create an enabling environment for EV adoption, he said.

“As India strives to become a global leader in EV adoption, it has the potential to not only revolutionize the country's

transportation sector but also set an example for the rest of the world to follow. The time for action is now, and the future of mobility in India is electric," Bajaj added.

The price difference between battery-powered and fossil fuel-run passenger vehicles is narrowing fast, which may push more Indians to choose the greener option when they buy cars and SUVs. The average price of an electric passenger vehicle was well over two times (137%) more as recently as in 2020 compared with a similar variant run on petrol. That gap has now reduced to 73%, according to data from automobile consultancy firm Jato Dynamics.

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