

'To meet EV target, OEMs need to rev up entry segment'

SURAJEET DAS GUPTA

New Delhi, 5 December

Indian OEMs need to accelerate the launch of new electric vehicle (EV) models in the entry level, mass, and economy segments with affordable pricing if they want to achieve \$100 billion in revenue potential for the EV industry, says a report released by Bain & Company.

Achieving the target requires EVs to grow more than tenfold in volumes in the next six-seven years with penetration going up from the current 5 per cent to 40 per cent by 2030.

At present, EV sales have been limited to the premium end of the market such as scooters priced at over ₹1 to 1.25 lakh, cars for ₹9-15 lakh, and three wheeler passenger vehicles for over ₹3 lakh. This has limited the penetration and the mass adoption of EVs.

Bain's report, India Electric Vehicle Report 2023, says that electric cars cost roughly 50 per cent more, offer a 50-60 per lower range and 30 per cent less engine power than a comparable ICE model.

This could explain why their penetration stands at 1.5 per cent.

The report says that while a Tata Tiago electric vehicle costs ₹8.7 lakh, it has a range of 250 km and 60 bhp power. Compare this with a Tata Tiago ICE which costs ₹5.6 lakh but has a range of 600 km and 85 bhp power.

What's the way out? The report says an

accelerated entry of entry level electric cars at competitive prices is the need of the hour, combined with a decline in battery prices as the market develops scale and develops 'fit for purpose' EV first platforms for the mass market.

The need for affordable models applies to the two wheeler market too, says Bain, both electric scooters and mobikes. EV scooter penetration can jump from the current 10-15 per cent to over 50 per cent if this happens, the report says.

It argues that while EV scooters have achieved a penetration of 40 per cent already in the premium segment, the mass and economy segment that constitutes 75 per cent of the market remains largely untapped.

OEMs need to build products that will displace dominant ICE models such as the Honda Activa, available for around ₹90,000.

This will be a challenge for OEMs, though, who are struggling to balance vehicle costs with range of performance.

In electric motorcycles, there is only one per cent penetration, though they account for 60 per cent of the overall two wheeler market. Again, the problem is that most of the models are 50 per cent more expensive, have 25 per cent lower top speeds and 80 per cent shorter range than ICE models.

The only criterion in which EV mobikes are at par is in the total cost of ownership.

The report says that while premium EV

mobikes have gained some traction, it will be difficult for them to match the performance of premium ICE mobikes at comparable prices.

However, the entry level segment which constitutes nearly half of the overall mobike sales, is more amenable to EV penetration, driven by lower range and performance thresholds.

If OEMs can match the price and performance of existing ICE entry level vehicles such as Hero Splendor, EV penetration might grow further.

In the electric three wheeler passenger space (excluding e-rickshaws) where penetration is 5-10 per cent, Bain estimates that the current models cost 25 per cent more than a CNG alternative and have a 30 per cent lower range.

A Mahindra Treo EV costs ₹3 lakh and has a 140 km range compared to a CNG powered Piaggio Ape City which costs ₹2.3 lakh and has a range of 200 km.

Bain says it is imperative for OEMs to introduce electric models at lower price points - at around ₹2.5 lakh - even if this entails a lower range as compared to CNG models.

The lower price will enable the adoption of EV vehicles for last mile connectivity within a 5-15 km radius that covers metro stations, markets, malls and offices which account for 40-50 per cent of all 3W passenger trips.



THE BIG CHALLENGE

- Most EVs are at the premium end of the market when the focus should be on the entry and mass level segment
- EVs are 25-30% more expensive than ICE and CNG models

WAYS TO CHARGE UP

In electric cars: OEMs should introduce models at the entry level for the economy market

In the 3-wheeler EV market: The requirement is for products at ₹2.5 lakh to increase volumes

In electric scooters: OEMs should aim at displacing the large market held by Honda Activa