

19 Aug 2021

Top Electric Vehicles Players Electrifying the Indian Roads

Ok Google, EV charging stations near me? About 20,10,00,000 results in 0.69 seconds by Google. This is exactly how the landscape for Indian transportation is going to pan out in the next couple of years. While there is a vision for 100% electric vehicles by 2030, most industry experts indicate that around 40-45% EV conversion by 2030 is a realistic expectation. A major push towards EVs will be led by the public transportation requirements in India – Fleet cars, E-Buses, 3 wheelers, 2 wheelers, and not to forget E-bikes.

Let's have a look at the broad categories of the EV landscape and top players electrifying the Indian road:

- 1. 3-Wheeler – 2- Wheeler segment in India picked up pretty well in 2015 when discussions around e-rickshaws as alternate transport methods were ongoing. One of the major players to enter this segment was Terra Motors.** Terra Motors has already made a footing in the Indian EV market with various electric 3-wheelers, both for passenger and cargo transportation. It is powered by a Terra battery unit which gives a range of 100 km on a full charge. The average weight of the e-rickshaw is 380 kg and can accommodate 5 people, including the driver. Adding to its suitability for India's narrow roads, its steering wheel gives a driver easy maneuver and a small turning radius. In comparison to other 3-Wheeler players in India, Terra Motors seems to have gained positive momentum in India. The report by Avendus Capital states that the EV market is expected to rapidly shift to a lithium-ion battery and by 2024-25, as much as 40 percent of the e-rickshaw market is expected to be li-ion based. Like other players Terra is also investing heavily in Li-Ion research and rapid adoption. Players like Piaggio, Bajaj and Kinetic have also entered this segment in the recent times.

2. **4-Wheeler** - The penetration of EVs in the four-wheelers segment has remained extremely low at ~0.1%. Several gaps in the four-wheeler EV market such as a limited number of products, high prices, insufficient battery promise, low performance, and an underdeveloped charging ecosystem are yet to be filled. Currently, there are 6 electric cars on sale in India. Of these, the Tata Tigor EV is the cheapest EV while the Mercedes-Benz EQC is the most expensive electric car in India. Upcoming electric cars in India include Jaguar I-Pace, Mahindra eKUV100, and Porsche Taycan among others. The current players who have penetrated the 4-wheeler EV segment are Tata Motors (Nexon EV), MG (ZS EV), Hyundai Kona Electric, Mahindra e-Verito.
3. **E-Buses/Fleet Buses:** By March 2020, about 1,031 e-buses were sold across different States and transport undertakings. The country's electric bus market has gained momentum owing to aggressive government push through FAME India [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India] scheme and increased interest from global investors. The highest number of e-buses deployed in any State under FAME 1 as of April 16, 2020, is 80 in West Bengal, which is closely followed by Maharashtra (70). Out of the total 400 buses deployed under FAME 1 in the country, the majority of 215 buses have been supplied by Tata Motors. Several global players are also eyeing the e-bus market in India like (Olectra-BYD, Scania, Foton PMI, JBM Solaris, VECV) in this market.
4. **2-Wheeler:** India's electric two-wheeler penetration is expected to reach 25-35% and e-three-wheeler penetration is expected to reach 65-75% by 2030. There are 148 electric bikes currently on sale from various manufacturers starting from 25,000. The most popular products under this bracket are the Revolt RV400 (Rs. 1.03 Lakh), Bajaj Chetak (Rs. 1 Lakh), and Hero Electric Optima LA (Rs. 44,990) (all prices Ex-showroom). The popular new EV products making their debut in 2021 include the Hero Maestro electric, Hero eMaestro, Vespa Elettrica, CFMoto electric bike, and Tork T6X. While the 1000cc Kiwami superbike by Terra Motors can easily capture a distance of 20,000 kilometers with a single charge and can attain a top speed of 140km/hr.
5. **E-Bikes - Electric BiCycles** The electric bikes market in India is estimated to reach a value of INR 17.43 Bn by FY 2024, from INR 2.92 Bn in FY 2019, expanding at a compound annual growth rate (CAGR) of ~42.95% during the FY 2020-FY 2024 period. Electric bikes have already set a prominent footprint in the states of Uttar Pradesh, West Bengal, Gujarat, Tamil Nadu, and Maharashtra. With further development in charging infrastructures, the adoption of electric bikes is likely to increase in other parts of the country as well.

6. KPMG in India expects 25-35 percent 2W penetration and 65-75 percent in 3Ws by 2030. The passenger vehicle (PV) electrification is expected to follow, with 10-15 percent penetration in the personal segment and 20-30 percent in the commercial one by 2030. Two-wheeler (2W) and three-wheeler (3W) segments are likely to lead the adoption curve, followed by e-buses and passenger taxis.

The government's push to ensure EV adoption through subsidies and tax benefits has further propelled the market growth. Even though the Indian automotive industry saw a sharp decline in FY2019, the electric vehicle market is expected to continue to grow in the coming years. With the BS6 norms becoming applicable from April 2020, electric vehicles will become more price-competitive with conventionally fueled vehicles, thus accelerating the electric vehicle sales in the country. What's your pick out of this?