

# INDIAN ELECTRIC THREE WHEELER INDUSTRY

Three-wheelers leading India's  
electrification journey

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# Highlights

*Electric three-wheelers are at the forefront of India's EV journey, supported by favourable operating economics, and the Government's focus on cleaner modes of transport, especially in the commercial segment.*

*The segment is expected to witness increased traction going forward with 14-16% of new three-wheeler sales (excluding rickshaws) expected to be in the electric segment by FY2025.*



**The three-wheeler (3W) segment has been one of the early adopters of electric vehicles (EVs) in India,** reaching penetration of 53% in 10M FY2023, compared to 4% in the two-wheeler and 1% in the passenger vehicle segment. While sales had contracted sharply in the aftermath of the pandemic, they revived at a healthy pace in the current fiscal, crossing pre-pandemic levels by a comfortable margin.



**The growth within e3W segment has been led by the unorganised e-rickshaw,** which currently accounts for ~90% of the e3Ws sold in the country. Given the lower upfront costs and operational savings, coupled with minimal compliance needs, this segment has flourished over the past 5-7 years. However, e-autos, with a higher load-bearing capacity and top speed vis-à-vis e-rickshaws, are also gaining prominence now.



**Multiple factors remain supportive for e-auto adoption,** including the favourable policy environment with Central and state government subsidies to reduce the capital costs, reduction or waiver of registration fees, road taxes and permit requirements. These result in a significantly lower (40-45%) total cost of ownership (TCO) as compared to conventional diesel/CNG 3Ws, offering a compelling proposition for shifting to e-autos.



**Nevertheless, a key challenge is financing availability.** Given the nature of the user segment and the uncertainties of the product (being a new and technology-driven product), the financing options available so far have been relatively limited. ICRA's channel check suggests that large banks and larger financial institutions are shying away from financing this segment, and those that are providing loans, are at high interest rates.



**However, ICRA expects the penetration of e-autos to increase from the current levels** of 8% to 14-16% by FY2025, and to 35-40% by FY2030 as these challenges ease out in the medium term and the product becomes more established in the market.



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