India overtakes China in global e3W sales in 2023

GOING STRONG. 1 in 5 three-wheelers sold globally electric; about 60% were sold in India

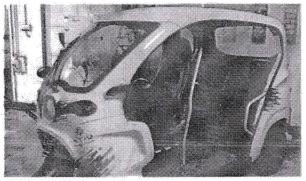
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India surpassed China to become the largest market for electric three-wheelers in 2023, thanks to government financial incentives and resulting reductions in the cost of ownership of electric three-wheelers (3Ws), according to a report by the International Energy Agency (IEA). "India has made good progress to date, and almost a quarter of the country's three-wheelers are electric," it said.

Total electric 3W sales in India sales stood at 5.8-lakh plus units in 2023, an increase of 65 per cent over 2022 volumes, while China experienced an 8 per cent decline in electric 3W sales, totalling 3.2 lakh units, making it the second-largest market.

Globally, the 3W market expanded 13 per cent in 2023, reaching 4.5 million sales, of



ELECTRIFYING SALES. Total electric 3W sales in India stood at 5.8-lakh plus units in 2023

which 21 per cent were electric, compared with 18 per cent in 2022. Nearly one million electric 3Ws were sold globally in 2023, recording a 30 per cent increase from 2022. The electric 3W market is dominated by China and India, which together account for over 95 per cent of all-electric and 80 per cent of conventional 3W sales.

In 2023, one in five threewheelers sold globally was electric, and nearly 60 per cent of those were sold in India, boosted by the FAME-II subsidy scheme.

40% CHEAPER

In India, despite the upfront price being 55 per cent higher than for its petrol equivalent, the average electric 3W model (auto-rickshaw) is more than 50 per cent cheaper to own after eight years of service, and

even without subsidies is over 40 per cent cheaper.

When compared with an internal combustion engine (ICE) 3W running on natural gas, the electric model achieves total cost of ownership (TCO) parity just two years after purchase and proves to be about 40 per cent cheaper over an eightyear lifespan. However, without subsidies, the TCO breakeven point is only reached after four years, it said.

The Chinese market still predominantly uses lead-acid batteries in sales, despite government efforts to transition towards Li-ion technology. Lead-acid battery-powered electric 3Ws remain dominant in India and rural China due to lower upfront purchase prices.

Three-wheelers with Li-ion batteries are expected to gain ground in the Indian market with the introduction of the 2024 EMPS subsidy scheme, which favours vehicles with advanced battery chemistry.