Why Leasing Dominates India’s Commercial EV Market

Leasing dominates India's commercial EV sector as fleet operators seek to mitigate high upfront costs, battery uncertainties, and infrastructure gaps, contrasting with ICE vehicle trends where outright purchases remain the preferred ownership model.

In the Indian company car market, outright purchases dominate ICE vehicle acquisitions, making up 91.5% in 2020, while leasing accounts for 8.5%. In contrast, the EV sector shows a strong preference for leasing, with about 50% of commercial EV fleet operators choosing this model, especially for electric three-wheelers, four-wheelers, and buses (Redseer Strategy Consultants).

While buying vehicles is usually more economical over 3-5 years, leasing offers better cash flow management, lower administrative costs, and greater fleet flexibility, these factors alone do not explain its popularity among EV fleet operators, the following table provides a representative comparison.

Understanding the disproportionate preference for leasing among EV operators requires a closer look at the value chain, which includes end-users like quick commerce providers (e.g., Zepto, Swiggy) and original equipment manufacturers (OEMs)/EV manufacturers (e.g., Mahindra). Fleet operators act as intermediaries, procuring vehicles from OEMs and providing services such as last-mile delivery and ride-hailing.

Fleet operators incur costs related to vehicle acquisition, maintenance, upgrades, and resale, while revenue depends on utilization, operating expenses, and earning potential. Though these factors apply to both ICE vehicles and EVs, the higher risk associated with EV ownership makes leasing more appealing. Unlike ICE vehicles, which have predictable depreciation and maintenance, EVs face uncertainties in battery life and charging infrastructure development (WSJ).

EVs have higher upfront costs mainly due to expensive battery components like lithium and cobalt, which are prone to price fluctuations—lithium carbonate peaked at over $80,000 per tonne in 2022 before falling to about $13,000 in 2024. Additionally, the relatively immature EV service ecosystem in India results in higher maintenance expenses.

A Bangalore fleet operator reported delays and increased repair costs compared to diesel vans due to a lack of trained EV mechanics. Moreover, the residual value of EVs, primarily linked to battery life, remains uncertain due to varying degradation patterns, unlike ICE vehicles.

While EVs offer lower per-kilometre operating costs, their daily running expenses can sometimes exceed those of ICE vehicles due to downtime and utilization challenges. In India, inadequate charging infrastructure, slow charging speeds, and battery degradation reduce vehicle utilization, making EV operations less predictable (ET Auto).

For example, Pune's PMPML reported 9,582 e-bus breakdowns in 2024, a 45% increase from 2023, largely due to battery and air conditioning failures amid traffic congestion (Times of India). Moreover,

limited fast-charging stations for commercial vehicles cause long charging times, disrupting fleet efficiency and schedules (ET Auto).

The key difference between ICE and EV economics lies in ownership risk. EVs entail higher risks related to technological obsolescence, battery reliability, residual value, and downtime. Ideally, fleet operators would expect lower EV prices to balance these risks, but in India, such price reductions are insufficient to justify EV purchasing, especially given the high cap-ex requirements.

Government subsidies, like FAME II, have lowered upfront costs, disbursing ₹5,228 crore for over 11.53 lakh EVs as of December 2023 (Hindustan Times), but long-term battery replacement costs and resale uncertainties persist. Additionally, market competition and efficiency demands add to revenue risks, challenging fleet operators as they adapt to a new technology landscape.

In India, most fleet operators are SMEs with limited financial resources, unlike large OEMs or quick-commerce companies, making it challenging for them to bear EV ownership risks, such as high upfront costs and uncertain battery expenses. For instance, a small school bus operator investing in electric buses faces unpredictable costs compared to diesel buses.

The financial sector lacks robust underwriting practices to assess EV-related risks, hindering SMEs from securing favorable financing (Economic Times). The collapse of BluSmart, which left lenders scrambling to recover 1,500–2,000 financed EVs, highlights the financial vulnerabilities in the EV sector (Times of India).

While initiatives like SIDBI's direct lending to MSMEs and NBFCs like Revfin are helping bridge the financing gap for EV adoption (RMI, Revfin), financial institutions are still developing robust models to accurately assess the long-term value and risks of EV assets

OEMs such as Mahindra are well-equipped to absorb EV-related risks within the commercial value chain. To encourage EV uptake, Mahindra has effectively passed government subsidies to fleet operators and launched competitive leasing options for electric three-wheelers, easing upfront costs and battery lifespan concerns (RMI, Mahindra Electric).

Collaborations with NBFCs and insurers have led to leasing models that cover battery health and replacement risks, protecting lessees. Consequently, as long as EV risks remain concentrated and unevenly distributed, leasing will continue to dominate India’s commercial EV sector.

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