The long road to greener mobility runs through the finance corridors

Unfavourable financing terms (lower loan-to-value ratio and short tenure) make it economically unviable for them to stimulate demand by reducing lease rent. While cheap electricity brings significant relief in running costs for the fleet owners, higher rent is a challenge.

Sreelata Jonnalagedda and Satyajit Roy

Light commercial electric vehicles (EVs) have emerged as game changers for last-mile delivery in India. E-commerce giants like Amazon and Flipkart, as well as logistics service providers such as Delhivery and Shadowfax, have rapidly expanded their EV fleets in response to both environmental imperatives and rising fuel costs. Yet, the government's vision for EVs to constitute 70per cent of commercial cars and 80per cent of two- and three-wheeler sales by 2030 looks too optimistic. Behind the visible growth lies a less visible but critical challenge – the financial ecosystem supporting EVs. Scaling this green revolution requires a robust financial ecosystem to ensure access to tailored and affordable financing.

Unlike internal combustion engine (ICE) vehicles, EV technology is still in a nascent stage. A key concern for traditional lenders like banks is the uncertainty surrounding EV batteries, particularly their long-term performance, reliability across usage conditions, and, most crucially, the residual value. Unlike ICE vehicles with well-established depreciation curves, the resale value of EVs, especially those with newer battery chemistries (e.g., LTO batteries), remains difficult to predict. This makes it challenging for banks to underwrite these assets with confidence. To limit the exposure, they tend to transfer the perceived risk to consumers, ultimately leading to conservative lending terms and higher borrowing costs.

In the commercial space, most automakers resort to the leasing model (outright selling is also present but relatively less prominent) through their own subsidiaries or in partnership with third-party lessors. Unfavourable financing terms (lower loan-to-value ratio and short tenure) make it economically unviable for them to stimulate demand by reducing lease rent. While cheap electricity brings significant relief in running costs for the fleet owners, higher rent is a challenge. If they resort to the buying option, the high purchase price shoots up the total cost of ownership (TCO), which increases further if replacing the battery becomes inevitable within 3-4 years. Even though battery cost has come down significantly in the last 15 years, there is still a long way to go before the upfront purchase price of EV becomes somewhat comparable to its ICE peers.

A promising approach to working around the apprehension of the lenders is to formally involve guarantee providers in the EV financing ecosystem. Unlike traditional lenders, guarantors or insurers are better positioned to evaluate and underwrite technology-specific risks, particularly for emerging battery chemistries. Their participation could help create more risk-informed financial products, improve lender confidence, and unlock access to

capital for commercial EV buyers. Log9 Materials, a Bangalore-based start-up, has already explored a similar innovative arrangement. In early 2023, Log9 formed a tripartite partnership with Three Wheels United, an EV financing company and Eqaro Guarantees, a financial guarantees platform. In partnership with Log9, Eqaro provided guarantees for vehicle financing in terms of a surety bond (which guaranteed a residual value for the vehicles) and, backed by this bond, Three Wheels United financed the vehicles for Log9 Mobility. Despite the arrangement of favorable lending terms, Log9's super-expensive asset became a major roadblock for its growth. For promising technologies, government support is more critical, especially in a cost-sensitive market like India. The SIDBI-World Bank Electric Vehicles – Risk Sharing Program (EV-RSP) and SIDBI's partnership with Shell Foundation to provide a partial credit guarantee for commercial EV loans were some of the welcome moves in the right direction.

Automakers like MG Motors have introduced the Battery-as-a-Service (BaaS) model for personal EVs, but it comes with its own financing challenges. Split ownership between the user and the automaker complicates asset valuation, risk allocation, and collateralization. This, in turn, makes it difficult for the lenders to underwrite loans when responsibilities for battery performance and maintenance are shared.

The government's FAME policy has already provided the initial momentum in EV adoption for light commercial applications. The next phase of growth should come from policy interventions that de-risk EV lending, especially for the commercial sector. Government-backed credit guarantee schemes and targeted priority sector lending policies – similar to those used in MSME lending – could encourage banks and NBFCs to offer higher loan-to-value ratios and longer tenures for EV manufacturers (or their leasing subsidiaries). By reducing the perceived risk for lenders and lowering the cost of capital for automakers, these measures can enable more competitive lease structures for end-users, particularly in price-sensitive segments such as last-mile delivery and gig-based services (more dependent on two- and three-wheelers). International models like the U.S. Department of Energy's Loan Programs Office are examples of how government-backed financial instruments can support clean transport ecosystems.

As we aim to decarbonize the transport sector, the commercial EV segment will play a pivotal role. However, unlocking its full potential needs more than just manufacturing and policy mandates; it calls for a robust financial ecosystem that equally aligns the interests of lenders, guarantors, automakers, and fleet owners. Through innovative risk-sharing mechanisms and strong credit support structures (e.g., first-loss risk guarantee), we need to ensure more affordable leasing models to create the momentum for mass adoption.