

Prioritising Category C Deployment for EV Public Charging Stations.

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This note has been prepared to strengthen deployment of Category C EVPCS under the PM E-DRIVE scheme, enabling quicker rollout of charging stations with higher utilisation.. It draws on field observations, state-level experience, and stakeholder consultations.



Executive Summary

PM E-DRIVE, the central government's flagship scheme for subsidising public EV charging infrastructure, classifies charging locations into three categories. Among them, Category C is the most commercially significant, as it covers the sites where vehicles actually operate like highway rest stops, logistics parks, market complexes, and other commercial hubs. By contrast, Categories A and B are largely constrained by government land ownership, making Category C the key arena for utilisation-led deployment.

Category A

What it means

Government offices and public campuses.

Implications / Gaps

These sites are accessible, yet they often serve a limited and predictable user base.



Category B

What it means

Government-managed public spaces like municipal parking lots, bus depots, metro and railway stations.

Implications / Gaps

Better public access, but still bounded by government processes and site control.



Category C

What it means

Commercial, high-traffic sites like rest stops, logistics parks, freight hubs, markets, and parking facilities.

Implications / Gaps

This is where charging gets used and has the strongest case for utilisation-led deployment.



The framework for Category C already exists. The challenge is execution. Category C deployment remains well below potential because five interconnected implementation gaps are creating friction at each stage of the delivery chain, from site identification through to subsidy disbursement.

These five gaps form a dependency chain, not a menu of standalone issues:

- 1. Technical planning below the substation level** — Without feeder- and DT-level data from DISCOMs, site proposals are built on assumptions rather than verified grid capacity. RDSS digitisation is proceeding but remains incomplete across high-priority corridors.
- 2. Tender enablement and project packaging** — Viable bids require clusters of sites, not isolated locations. State Nodal Agencies currently lack the tools and support to package demand-led site portfolios that attract credible CPO bids.
- 3. Absence of a standardised bidding document** — Lack of understanding on standard commercial terms, qualification criteria, and uptime obligations, tender quality varies significantly across states, and bids often fail to include performance commitments.
- 4. DISCOM participation and revenue-sharing structures** — The tripartite model (land owner + DISCOM + CPO) demonstrated by BYPL in Delhi significantly improves CPO viability, but requires SERC authorisation for non-tariff income, a regulatory pre-condition that many states have not yet met.
- 5. Subsidy disbursement linked to uptime** — India has over 29,000 public chargers installed; approximately 18% were non-functional as of March 2026¹. Until disbursement is linked to demonstrated uptime of minimum 95%, the scheme utilisation signals expansion over service quality.

¹ Government of India, Press Information Bureau. (2026, March 27). [Status and expansion of EV charging infrastructure](#).



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Category C EVPCS can deliver stronger returns on central subsidy investments through higher utilisation

Under the PM E-DRIVE operational guidelines on subsidy for charging infrastructure, Category A covers charging stations set up in government premises and Category B covers charging stations set up on government-owned, controlled, or managed public locations. These two categories are bounded by government land ownership, and the charging infrastructure they enable will remain concentrated on government campuses, offices, and public facilities.

The vast majority of commercial vehicle movement in India like commercial fleets, intercity logistics, last-mile delivery, everyday public use happens at streets, market complexes, highway corridors, freight aggregation hubs, and commercial parking facilities. Most of these locations fall outside Categories A and B by definition.

Fleet vehicles require charging at high-dwell, operationally predictable locations: highway rest stops, logistics parks, market yards, and private commercial hubs. These are Category C locations by definition.



The unique factor of Category C is that the subsidy is most oriented toward market development. The 80 percent support only on upstream infrastructure is intentional: it reduces the highest-risk cost barrier for a CPO (grid connection and augmentation) while preserving the commercial incentive for private operators to invest. Reliable demand of commercial and freight vehicles at these sites also supports predictable revenue flow for DISCOMs.

The policy framework for Category C already exists. Its success will depend on coordinated execution across institutions and agencies to translate policy into on-ground outcomes. It is also an opportunity to establish the commercial and institutional patterns that the broader public charging ecosystem will build on.

The leverage of Category C will materialise only if site selection, project packaging, DISCOM participation, and operator models are designed to attract credible bids and support long-term operational viability. The findings below suggest that repositioning State Nodal Agencies (SNAs) to play a stronger state-level planning and decision-making role is critical. Alongside this, coordinated action across five areas, namely data visibility, project packaging, bid design, revenue-sharing models, and subsidy-linked uptime requirements, will be critical to unlocking the full value of Category C.



Elevate SNAs to lead state-level EVPCS planning and decision-making.

The Operational Guidelines for Deployment of EV PCS under PM E-DRIVE require states to aggregate demand for EV public charging stations across cities and highways through the **State Nodal Agency (SNA)**, in coordination with Urban Local Bodies, Municipal Corporations, State Highway Authorities, State PSUs, Utilities/DISCOMs, and other public departments. For highways, the guidelines also provide that routes may be identified in consultation with MoRTH and other stakeholders, with priority informed by vehicular volume, connections to major cities, and industrial hubs. In states with multiple DISCOMs, utility coordination may evolve unevenly, especially where the SNA is embedded within or closely aligned to a single DISCOM.

Despite this design, Category C site selection in practice is often shaped by land already secured or readily accessible to private players. As a result, the effective starting point for decision-making shifts toward land availability rather than a systematic prioritisation based on projected demand and utilisation. This has important implications, as higher-utilisation sites not only support EV adoption but also strengthen the underlying commercial case for both DISCOMs and charge point operators.

This challenge is compounded at the subsidy disbursement stage. The operational guidelines require proof of full payment of DISCOM demand notes, along with PMP compliance documentation, before first-tranche claims can be processed through the nodal agency. In effect, developers must complete multiple steps of land readiness, infrastructure preparation, and sequential documentation, before payments can be triggered. While intended to ensure compliance and accountability, this sequencing can introduce delays that slow execution even after project sanction.

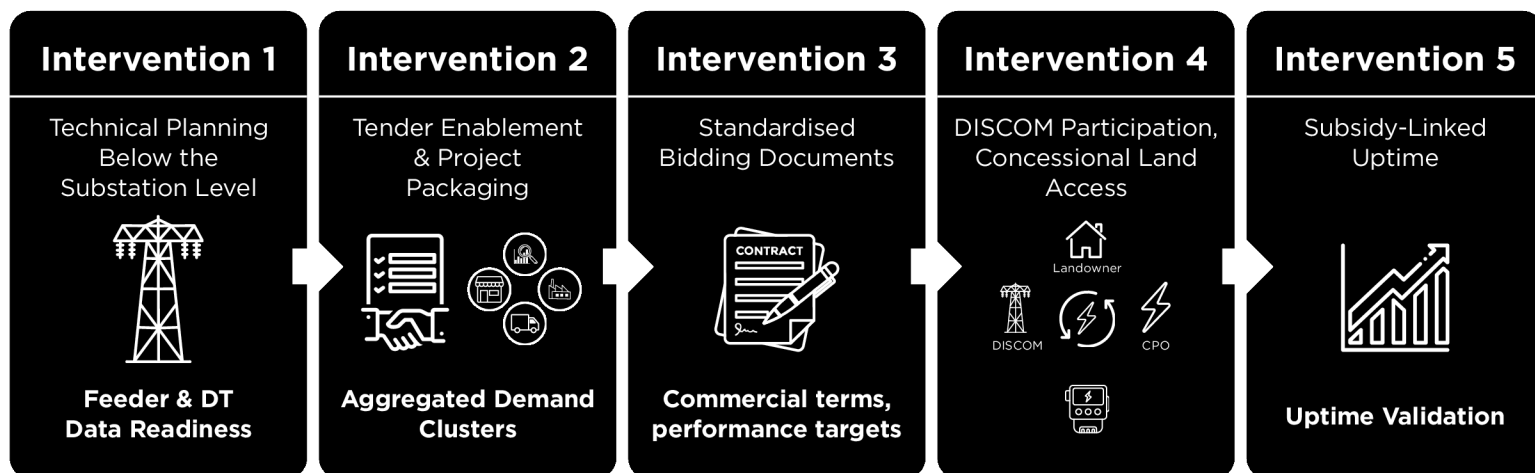
What needs to change: Addressing these gaps requires anchoring decision-making more firmly in the economic case for deployment. For Category C, this implies that the SNA moves beyond a facilitative role to actively assess current and projected demand, and to translate these insights into an electrification plan that is both commercially and operationally viable. In this context, prioritising sites around economic hubs, logistics flows, and high-traffic corridors becomes critical, as these locations offer more predictable utilisation and a stronger investment case for both public and private stakeholders.

Building on this, the SNA can function as a strategy and planning arm of aggregating demand-led sites and guiding proposal development, rather than operating primarily as a conduit for land-ready proposals. This would require access to utilisation proxies, grid-readiness inputs, and a workable inter-DISCOM coordination mechanism ahead of proposal finalisation. In parallel, a more standardised pathway for land clearance, utility coordination, and claim documentation could enable states to move more efficiently from sanction to tendering and disbursement.



Key Interventions to strengthen delivery of Category C EVPCS

PM E-DRIVE Category C IMPLEMENTATION DEPENDENCY CHAIN



The five identified interventions form an interconnected dependency chain. **Technical Data** enables **tender packaging**, as site proposals require reliable feeder and Distribution-transformer (DT) level data to become investment-ready bid clusters. Similarly, **standardised bidding** documents rely on **viable ownership and revenue-sharing structures** to sustain market development and deliver charging at scale. Finally, **uptime-linked disbursement** provides essential system accountability, ensuring the subsidy rewards consistent operational service quality rather than just installation.

Intervention 1 — Technical Planning Below the Substation Level

The operational guidelines require each proposal to specify the site, charger configuration, electrical load, estimated project cost, subsidy requirement, and implementation mode. For Category C, those inputs are only as strong as the underlying site assessment. Feeder loading, distribution-transformer (DT) headroom, spare capacity, and likely augmentation costs determine whether a location is technically feasible and commercially viable. Where this information is incomplete, proposals are necessarily built on assumptions, which can lead to either underestimation or overestimation of support requirements and, in turn, weaken the bid.

The core problem is that the data needed to make these assessments is not yet consistently available in digital, structured form across most DISCOMs. In practice, assessing grid readiness for a Category C site today means deploying field teams to physically map feeder loads, visit DT locations, and gather infrastructure data from ground-level utility staff. This manual groundwork is a significant contributor to the lead time between site identification and a submission-ready proposal.

According to the Ministry of Power's update to Parliament in early 2026 (Lok Sabha Unstarred Question No. 65, January 2026), the Revamped Distribution Sector Scheme (RDSS) remains the central instrument for closing this gap. However, only about 25% of sanctioned distribution transformer (DT) smart metering work and 79% of feeder-level work has been completed, with the scheme's deadline set for March 2028. At this pace, DT and feeder level data will remain incomplete or inaccessible for significant portions of the distribution network for the foreseeable future, including many of the urban and peri-urban corridors where Category C EVPCS demand is highest.

Proposed intervention: Two priority actions would materially improve technical planning for Category C.

First, the Ministry of Power and MHI should jointly drive RDSS prioritisation, in coordination with state departments that bring complementary inputs. Planning departments can help identify economic zones and industrial clusters; transport departments can support demand estimation through vehicle registration and fleet movement data; and DISCOMs can identify grid constraints and charging integration requirements. Together, these inputs would allow RDSS digitisation to be sequenced toward the DT and feeder geographies most relevant for EV infrastructure, especially in high-impact corridors.

Second, DISCOMs should be encouraged to see site prioritisation through a revenue lens. Higher-utilisation Category C sites increase DISCOM revenue through energy sales and connection charges, making RDSS-linked data readiness a commercially useful. Framing the process this way creates a stronger incentive for DISCOMs to accelerate digitisation in the corridors where EV charging demand is most likely to materialise.

Intervention 2 — Tender Enablement and Project Packaging

The guidelines position nodal agencies at the centre of site identification, demand aggregation across ULBs, corridors and highways, and the submission of proposals under the EV PCS component. They further specify that, where Charge Point Operators (CPOs) are to be appointed, selection must proceed through a transparent bidding process determined by the relevant ministry, state government, or nodal agency.

For Category C, the constraint is not ambiguity in the policy mandate but the practical difficulty of converting individual candidate sites into viable tender portfolios. A single site is typically insufficient to attract competitive CPO interest; economic viability depends on bundling multiple sites across ULBs, corridors, logistics hubs, public facilities, land-owning bodies, highway agencies, and DISCOMs into coherent, balanced clusters. In the absence of such aggregation, bid response remains muted even when subsidy support is in place.

Proposed intervention:

A light-touch tender-enablement package focused on cluster formation, pre-bid market sounding with CPOs (including on highway amenity location feasibility), land-readiness checks, and standard risk allocation. This could help nodal agencies move from a list of candidate sites to a coherent bid package. States issuing Category C tenders for the first time may find this particularly useful in compressing the time between site identification and award. Whether this takes the form of central guidance, a knowledge resource, or targeted state-level support is a question best answered in consultation with the nodal agencies themselves.

Intervention 3 — Standardised Bidding Document for Category C

The primary constraint in scaling Category C public charging infrastructure under PM E-DRIVE lies not in site identification or cluster formation, but in the absence of a standardised, investable procurement framework across states.

Although PM E-DRIVE incorporates structured annexures, undertakings, and tranche-linked documentation, state-led tenders remain heterogeneous in bidder requirements, technical specifications, and contractual conditions, leading to elevated transaction costs and reduced investor confidence.

As a result, bidders face limited visibility on critical parameters such as site data, grid-readiness assumptions, service obligations, subsidy disbursement timelines, and demand projections, constraining effective participation and competitive discovery.

Proposed intervention:

A Model Standardised Bidding Document (SBD) for Category C stations should be developed to enable consistent, transparent, and performance-oriented procurement across states. Such an SBD would reduce drafting effort for state nodal agencies while harmonising commercial and technical terms, and providing bidders with clear, comparable information on site characteristics, grid integration, service obligations, subsidy milestones, and expected demand.

It should incorporate demand proxies such as vehicle registration density, fleet movement patterns, and dwell-time estimates into bid evaluation frameworks. This will enable competition based on utilisation commitments and uptime guarantees rather than tariff undercutting. The SBD should be structured for adoption covering minimum site-information requirements, standard technical specifications, bidder qualification criteria, concession and revenue-sharing options, service-level obligations, reporting formats, and clear linkage between subsidy disbursement and verified performance metrics.

Intervention 4 — DISCOM Participation, Concessional Land Access and Revenue-Sharing Models

The current framework recognises DISCOMs as key implementation partners and provides for coordination on upstream infrastructure, but the treatment of non-tariff income and revenue-sharing arrangements remains insufficiently clarified for scalable EV charging deployment.

This creates uncertainty for tripartite models involving land-owning agencies, DISCOMs, and CPOs, even though such structures can materially improve bankability and reduce idle-period risk.

To unlock this model for Category C, stronger guidance is needed on permissible revenue streams, accounting treatment, role allocation, and approval pathways so that DISCOMs can participate confidently in commercially viable charging projects.

Proposed intervention:

A model framework should therefore be issued for Land Owning Agency-DISCOM-CPO structures under Category C, setting out implementable options for concessional or usage-linked land access, upstream infrastructure responsibilities, and revenue-sharing mechanisms.

The framework should preserve flexibility for state-specific conditions while clearly defining commercial roles, risk-sharing principles, reporting obligations, and subsidy-claim conditions.

Issued as guidance rather than mandate, such a framework would reduce regulatory ambiguity, strengthen DISCOM participation in new revenue models, and accelerate replication of bankable charging infrastructure across states.

Intervention 5 — Subsidy-Linked Uptime

India's public charging network has already reached meaningful scale, with 29,277 public EV charging stations installed as of 01.08.2025. But scaling charger density alone will not drive adoption if users cannot rely on chargers being available and functional when needed.

Reliability has therefore become the binding constraint: uptime depends not only on CPO maintenance and operations, but also on DISCOM-side power availability and upstream grid readiness, making it a system-level performance issue rather than a purely operator-level one.

In that context, a 2026 industry source reports that roughly 18% of nationally installed chargers were non-functional in March 2026, underscoring the gap between installed capacity and usable infrastructure.

Proposed intervention: Two actions are needed together, and both should apply across all categories, not only Category C.

First, a defined portion of disbursement is linked to demonstrated uptime over a specified operating period, alongside minimum annual energy-dispensed thresholds. A minimum uptime threshold of 95 percent should be examined as a disbursement condition within the existing PM E-DRIVE framework. This matters especially because users typically turn to a public charger when the battery is already low and a non-functional charger at that point is not a minor inconvenience but a direct failure of service reliability.

Second, The scheme should also clearly define the uptime verification mechanism by assigning responsibility for validation, setting audit frequency, and linking verified performance to subsidy release across all charger categories. This would strengthen accountability, improve user trust, and ensure that public investment translates into a dependable charging network at scale.

Conclusion

Taken together, these interventions suggest that the next phase of PM E-DRIVE should move beyond a narrow focus on charger deployment and toward a more mature implementation model that treats public charging as a service ecosystem rather than a pure infrastructure rollout. The policy challenge is no longer only to add stations, but to ensure that they are bankable, usable, and consistently available across states, with procurement structures, DISCOM participation, and subsidy design aligned to real operating conditions. In that shift, State Nodal Agencies need to be elevated from a largely facilitative role to one of active market design and coordination: aggregating demand, shaping tenders, aligning local land and grid realities, and translating central scheme architecture into workable state-level delivery models.

At the same time, the framework must recognise that public charging performance depends on more than one actor. CPOs are responsible for station operations, but uptime and user experience also depend on DISCOM-side power availability, upstream infrastructure readiness, and the clarity of contractual and regulatory roles across the system. That is why standardised bidding documents, clearer tripartite models, and subsidy mechanisms linked to verified uptime and service delivery are so important. This will reduce uncertainty for states, improve confidence for investors, and ensure that public support rewards functioning infrastructure. Ultimately, PM E-DRIVE's success will depend not just on how many chargers are sanctioned, but on how well the scheme enables states to create durable, accountable, and replicable charging ecosystems.



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