

OPERATOR GUIDE · INDIA

Why Fast Charging Alone Isn't Enough

Building a reliable EV charging network in India, with a practical Telangana lens.

[Read the source article](#)



THE RELIABILITY TEST

A fast charger is not a reliable network

Fast charging is a tool; **reliability is the product.**



Find the bay

Drivers judge the network by whether they can find the bay, connect the right gun, start a session, pay, and finish.



Complete the session

A 60 kW unit that completes sessions beats a 240 kW unit that is offline three days a week.

Use AC for dwell and DC for turnover

Build the mix from dwell time and traffic evidence, not from a charger catalogue.

AC · DWELL

When vehicles stay longer

Homes, offices, apartments, hotels, and malls.

7.4–22 kW destination sites can reduce grid shock and improve session economics.

DC · TURNOVER

When vehicles cannot wait

Highway legs, taxis between trips, and fleets.

Use DC fast charging where traffic evidence supports rapid turnover.

SITE DESIGN BEFORE HARDWARE

Design the site before you buy the cabinet

Highway fuel retail, mall parking, IT-park decks, and fleet depots are different products.

Start with who parks, for how long, how they find the bay, and what happens if the first gun fails.

01 Match the product

Site type, dwell time, and traffic.

02 Protect the session

Plan for a failed first gun.

03 Separate demand

Use dual guns where possible, CCS2 as the public four-wheeler default, and separate two- and three-wheeler points where demand is real.

GRID READINESS

Grid readiness decides whether speed is real

Validate sanctioned load, transformer headroom, earthing, surge protection, and electrical distance before ordering hardware. A 150 kW charger on a weak feeder produces derating and trips, not speed. In Telangana, larger loads can require dedicated transformers and electrical-inspector clearances.



Load



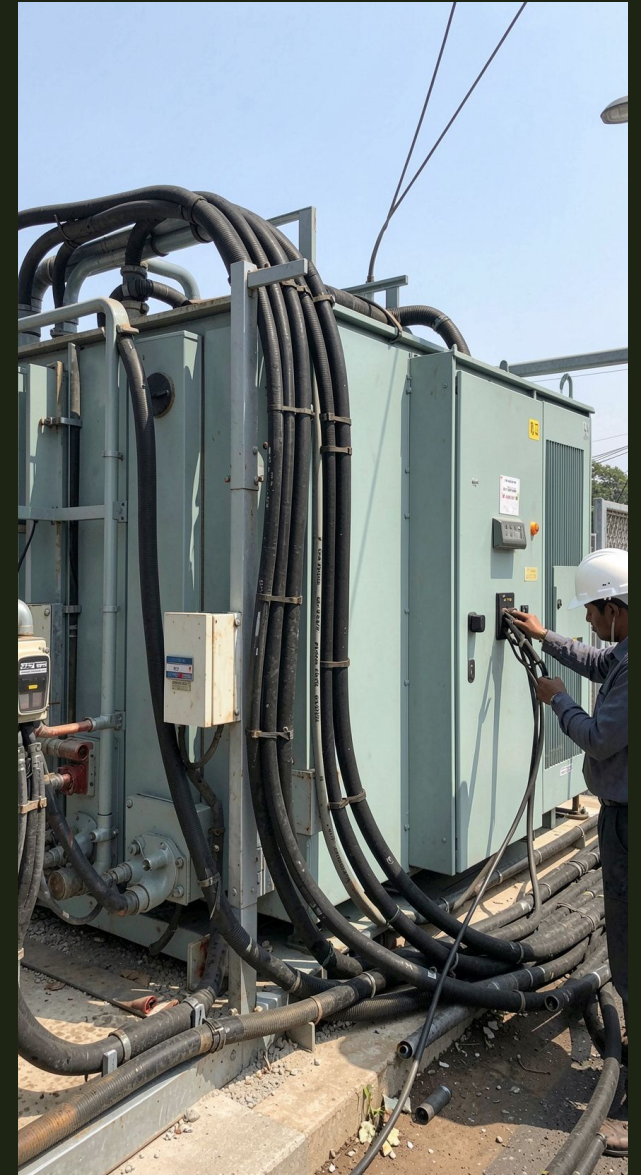
Protection



Distance



Clearance



Validate the feeder before the cabinet.

Made with GAMMA

THE CONTROL ROOM

Make software the control room

Connect OCPP-compliant chargers to a live charge point management system from day one.

Remote reboot

Firmware updates

Pricing

Occupancy

Access

Fault codes

Remote reboot, firmware updates, pricing, occupancy, access, and fault codes turn many truck rolls into remote fixes.

Track session success and uptime, not installed kilowatts.



THE ASSET HAS A ROUTINE

Operations are part of the asset



Weekly cable checks, monthly connector care, monsoon earthing tests, spare guns, and a named uptime owner.



Discovery and access matter too: major-app listings, clear signage, working payment, and a simple start flow.



Networks without this layer become the offline pins drivers screenshot.

Maintenance is part of uptime.

The India setup path is practical, not frictionless

01

Site control

Lock ownership, lease, host agreement, or franchise.

02

Load and tariff

Measure grid distance and allowable load; apply for the DISCOM connection under the EV charging tariff category.

03

Clear and commission

Complete electrical and inspector clearances where required; commission OCPP-connected hardware.

04

Publish and operate

Publish the site, train host staff, and start the maintenance calendar on day one.

Public charging is de-licensed under the [Ministry of Power guidelines](#), but land, power, and operations still have to work.



Telangana: run state clearance and load work in parallel

TGREDCO

Use **TGREDCO's single-window process** for EV charging station clearance.

DISCOM load

Apply to TGSPDCL or TGNPDCL for load under the EV charging tariff category; larger sites may need transformer and inspector work.

Prepare papers

Keep land documents, site photos, charger certification, and identity or company papers ready.

Check live notices

Review current fees, documents, and subsidy notices on the live portals before filing.

Tariff categories are determined by the **Telangana Electricity Regulatory Commission**.

TOTAL COST OF THE ASSET

Budget the whole stack, not just the charger

Site type	Indicative planning band	Main cost drivers
Small AC cluster	₹2–12 lakh	Charger count and electrical work
Mid AC + DC site	₹15–25 lakh	Civil, electrical, software
High-power DC hub	₹25 lakh to >₹1 crore	Transformers and long cable runs

Also budget

Service upgrades, civil works, earthing, software, security deposit, and first-year maintenance.