



Interurban EV Charging Network

2027 Deployment Strategy by RaviStar

190

Proposed new stations

479 Chargers

71.9 MW peak demand

1,412,640

Projected EV fleet by 2027

164

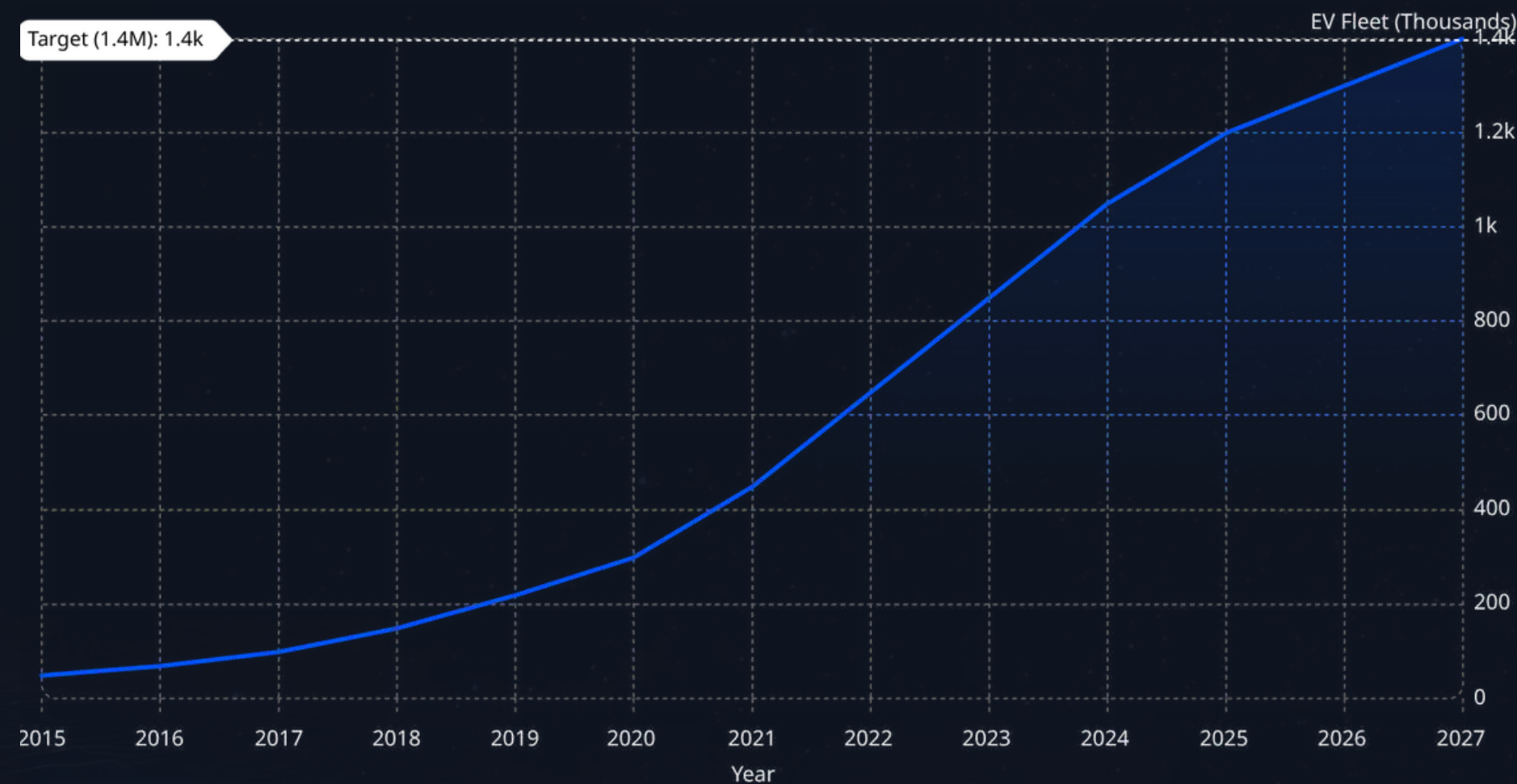
Grid friction points identified



Spain's EV growth is outpacing its charging network

Accelerating EV Adoption Outpaces Infrastructure:

1.4M EVs by 2027



The projected growth of electric vehicles by 2027 creates a significant disparity with the current and planned charging infrastructure, highlighting a critical market gap.



1.41M EVs by 2027

57.4% are BEVs

fully dependent on public fast charging for all interurban trips



6,896 interurban stations exist today

median power 22.2 kW

AC slow chargers, useless for highway use



AFIR Art. 4 deadline passed Dec 2025

150 kW pool every 60 km on TEN-T Core;
Spain is non-compliant on several corridors



86% of optimal sites are grid-constrained - this is the real deployment problem

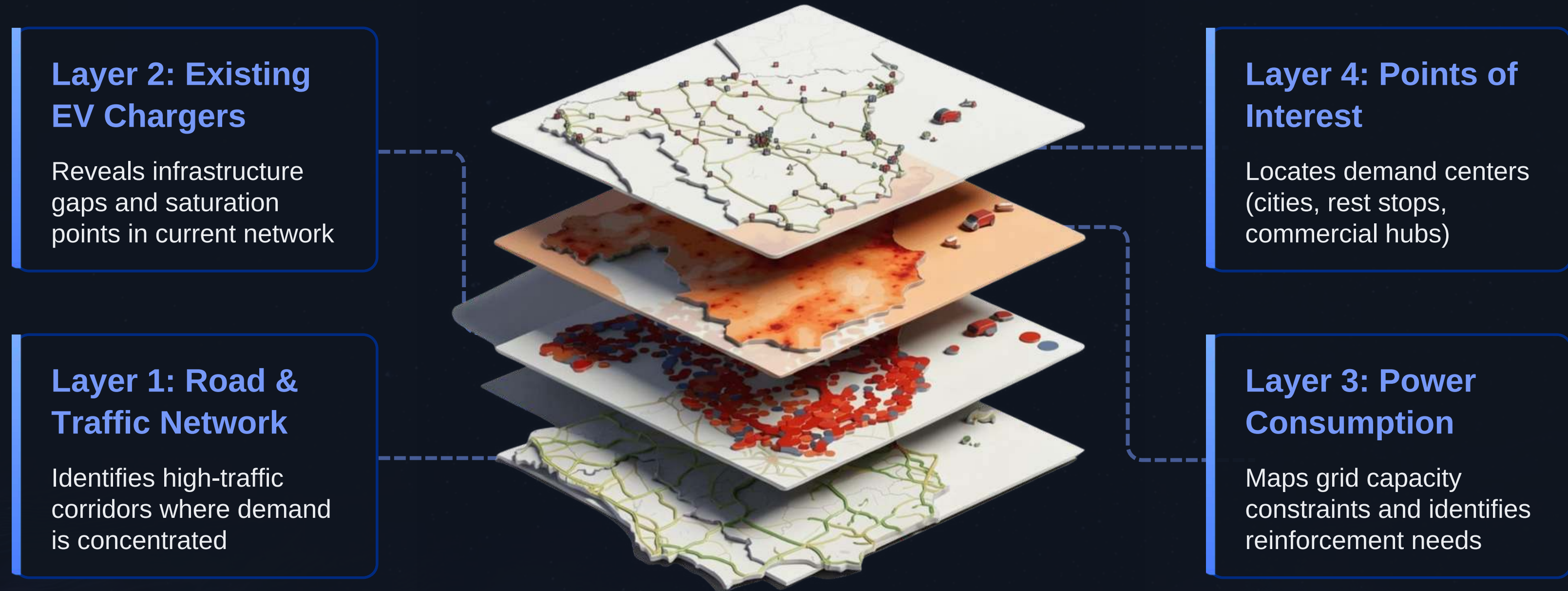
Grid Status	Stations	%	Chargers	Demand (kW)
Sufficient (≥5 MW)	26	13.7%	147	22,050
Moderate (1-5 MW)	2	1.1%	8	1,200
Congested (<1 MW)	162	85.3%	324	48,600
TOTAL	190	100%	479	71,850

What This Means

- 5,714 CNMC substation nodes analysed across i-DE, Endesa, UFD, Viesgo
- 92.9% carry zero firm available capacity as of April 2026
- Cause: 2023–2025 surge in data centre, renewables and industrial connection applications consumed all headroom



Supply Analysis: Multi-Layer Spatial Framework

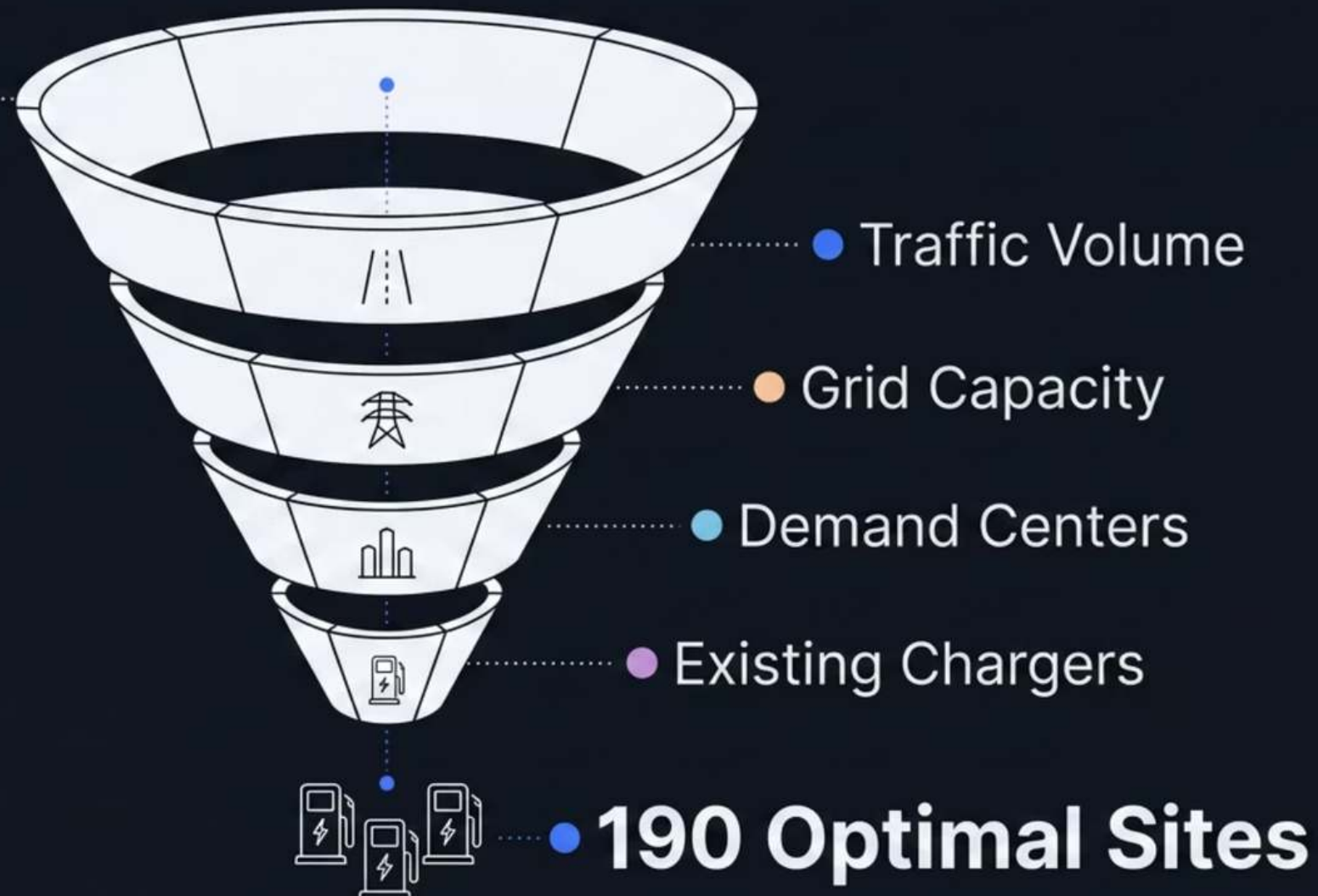


Overlaying these four spatial layers reveals optimal placement zones where road corridors, existing infrastructure gaps, grid capacity, and demand centers converge.



A five-signal scoring model applied to 53,475 road-proximate candidate sites

• 50,000+ Potential Locations



Scoring Signals

Traffic intensity, 30%

Daily travellers on nearby roads

Charger Gap, 25%

Distance to nearest existing station

Grid Capacity, 20%

Available MW at nearest CNMC substation

Site Type, 15%

Motorway services (1.0) → petrol station (0.90) → rest area (0.95)

Province demand, 10%

2027 fleet share by province (Madrid 45%, Barcelona 13%)



190 stations across 63 road segments, concentrated on six priority corridors

190 Proposed Stations

Selected via composite opportunity score combining traffic intensity, grid headroom, distance from existing chargers, proximity to service areas, and road classification

164 Friction Points

Existing demand, but has a gap in grid coverage

⚡ Iberdrola BI Map

Grid Status

- Sufficient (≥ 5 MW)
- Moderate (1–5 MW)
- Congested (< 1 MW)

Top 10 Priority

- i-DE ★ fast-track
- External distributor



Three stations. Three grid situations. Three deployment paths

IBE_011 · A-8 · Viesgo

"The first-mover blank slate"

- Cantabrian coast · zero HPC on entire corridor today
- Avilés–Gijón industrial belt · freight + commuter traffic
- Viesgo grid → smallest DSO · simplest negotiation



i-DE grid



External distributor



IBE_008 · AP-7N · Endesa

"The negotiated opportunity"

- Barcelona–France · TEN-T Core · AFIR mandatory
- Purpose-built motorway services · max POI score
- Endesa grid → co-deployment agreement required

IBE_004 · A-3 · i-DE

"The immediate win"

- Madrid–Valencia · highest-volume domestic corridor
- Top-scoring Congested station (0.529)
- i-DE grid → self-authorise, no third party
- 6–18 months · fully controlled by Iberdrola



Three-phase deployment: revenue in 9–12 months, full network by 2027+

PHASE 1

Now → H2 2026 · 26 stations

- 17 i-DE Sufficient-grid stations: submit CNMC applications immediately
- 7 Endesa Sufficient-grid: co-deployment agreements
- 2 Viesgo Sufficient-grid
- Lead stations: IBE_001 (M-502, 10 chargers), IBE_003 (A-7, 10 chargers), IBE_013 (A-31, 6 chargers)
- Revenue live in 9–12 months · No grid works required

PHASE 2

H1–H2 2027 · Friction points

- Commission estudio de acceso for 79 i-DE friction points
- A-7 corridor priority (2.1 MW blocked, i-DE territory)
- Bundle reinforcement with PNIEC MOVES III / RRF co-financing (€6.8B allocated)
- Moderate stations: IBE_072 (A-66) and IBE_120 (N-621)

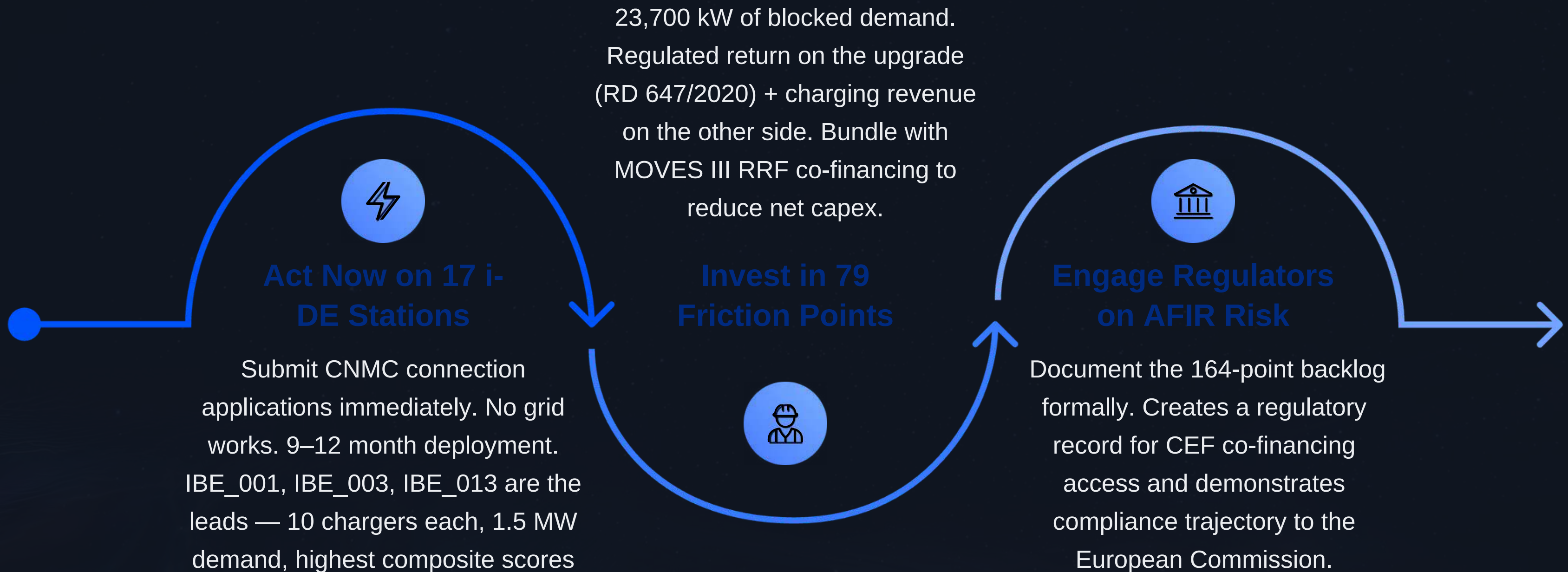
PHASE 3

2027+ · 162 Congested sites

- A-3 Madrid–Valencia: 4 stations, all i-DE, highest TEN-T urgency
- Cross-DSO working group (i-DE + Endesa) for AP-7N corridor
- Formal MITMA/CNMC notification of 164-point backlog as AFIR compliance barrier



Three actions, starting today.



THE TEAM



**Vikram
Bhatt**



**Marian
Garabana**



**Raluca-Teo
Gogosoiu**



**Robyn
Rothlin**



**Stephan
Pentchev
Stefanov**



**Dominique
Robson**

*In the loving memory of our
dear friend and colleague
Vikram who was the heart
of our work and lives*

