



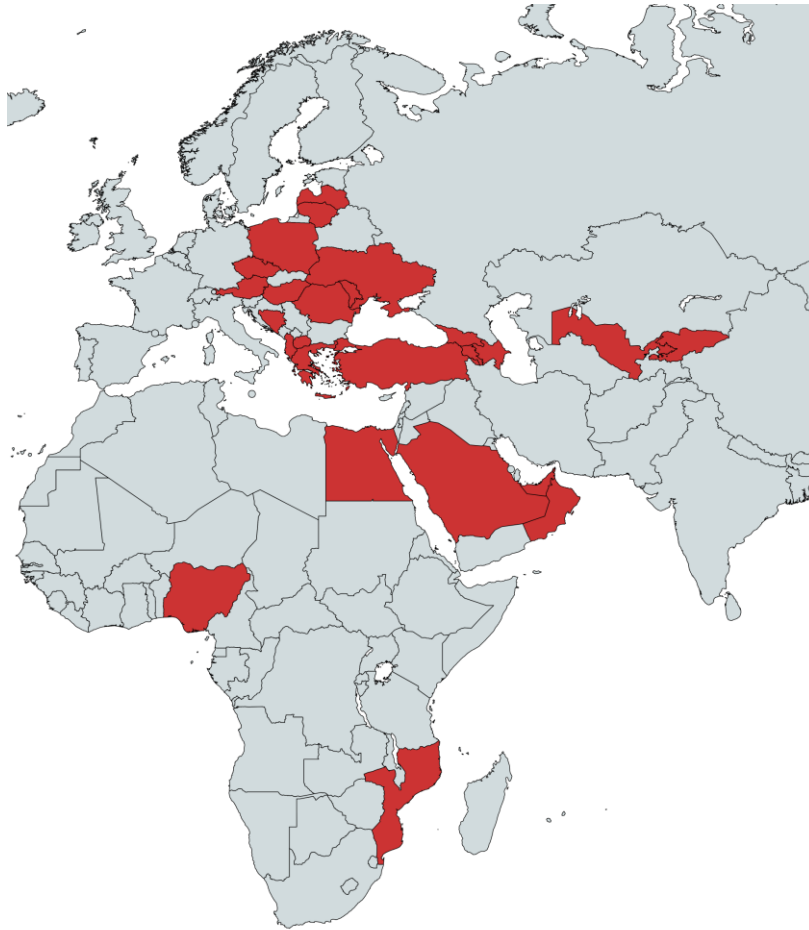
E-MOBILITY: STATUS UPDATE

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- ERRA's Energy Transition Committee (ET COM) initiated the 2025 E-Mobility Survey to strengthen regional knowledge on transport electrification.
- The 2025 edition continues and expands the 2022 study, engaging 25 member regulators from the ERRA network.
- The survey examines national progress in regulatory development, infrastructure rollout, and market readiness for e-mobility.
- Data collection was conducted among national regulators in 2025 through a standardized questionnaire.

Survey Participant Countries



Albania
Armenia
Austria
Azerbaijan (AERA)
Bosnia and Herzegovina
(FERK)
Czechia
Egypt
Georgia
Greece
Hungary
Kyrgyz Republic
Latvia
Lithuania

Moldova
Mozambique
Nigeria
North Macedonia
Oman
Poland
Romania
Saudi Arabia
Turkiye
UAE (RSB Dubai)
Ukraine
Uzbekistan

Objectives



Assess the current regulatory and policy environment for e-mobility.

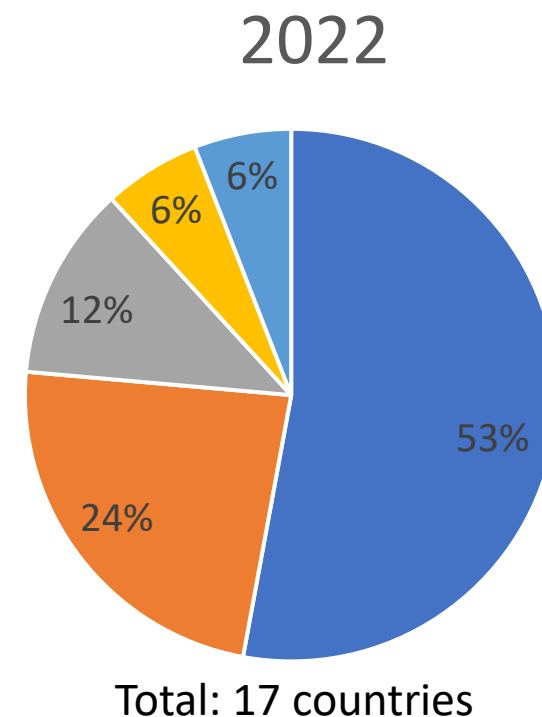
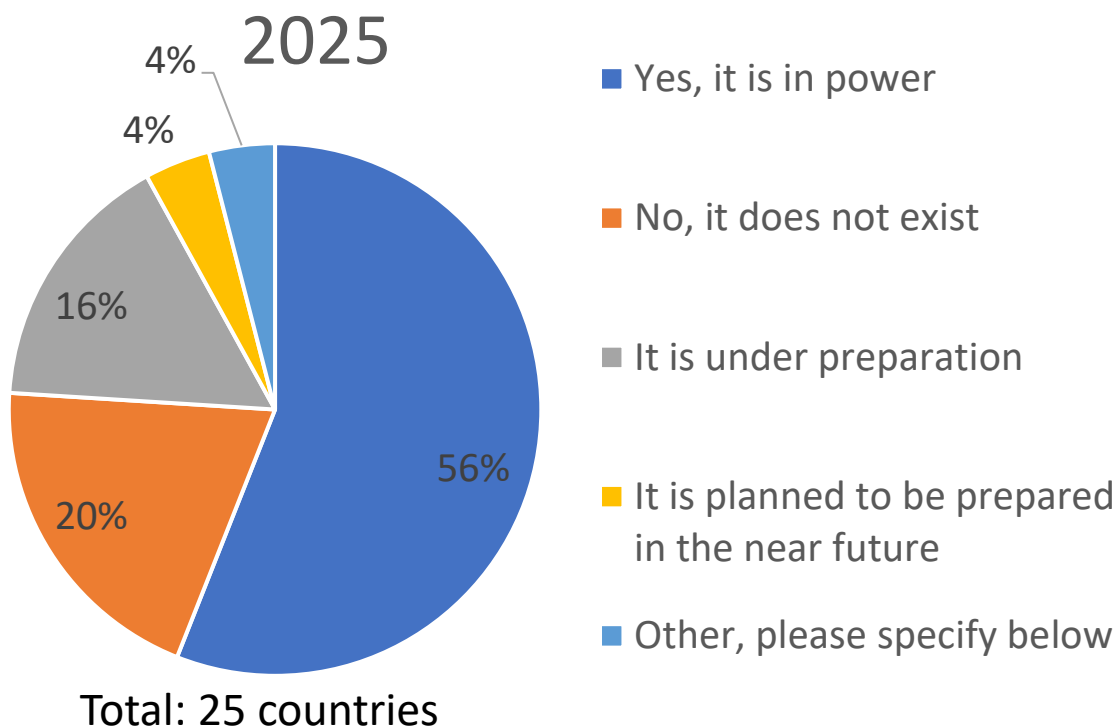
Map the deployment and planning of EV charging infrastructure.

Identify institutional responsibilities and coordination mechanisms among market actors.

Evaluate financial incentives, tariff models, and grid-integration strategies.

Highlight lessons learned and good practices for regulatory advancement.

Legal Framework regulating the e-mobility – Q1.1

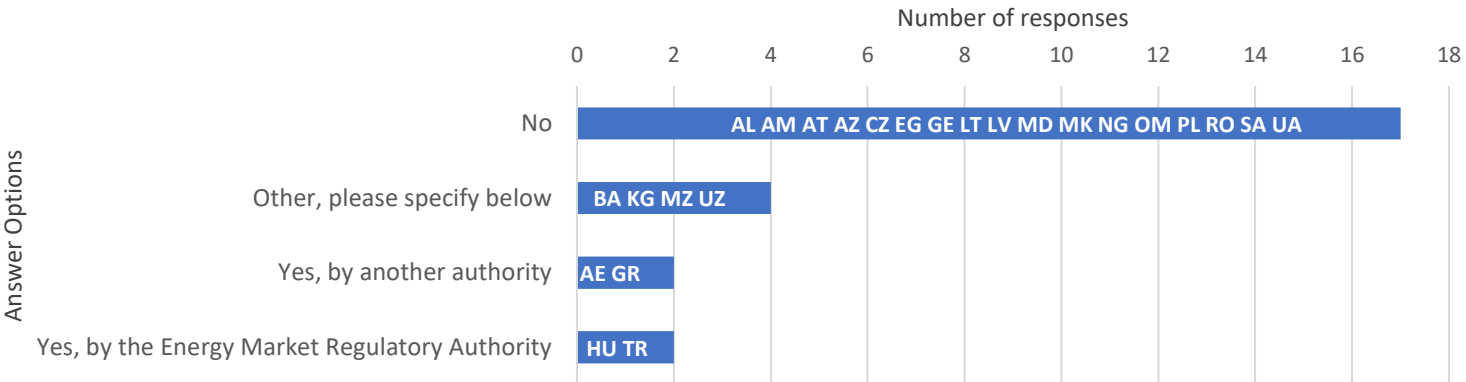


Between 2022 and 2025, the share of countries with e-mobility legal frameworks rose from **53% to 56%**, while those without any framework fell from **24% to 20%** — indicating steady but modest regulatory expansion.

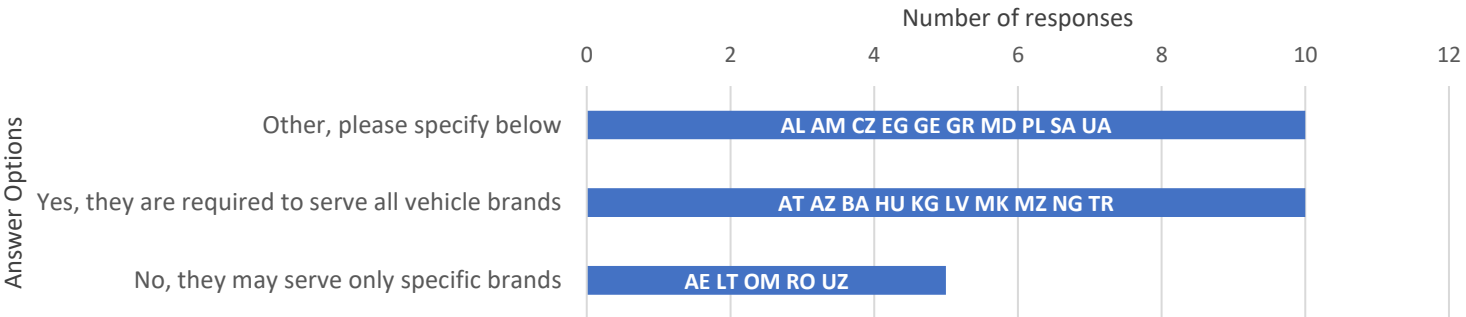
Market Regulation of EV Charging Operators (Q1.2–Q1.4)



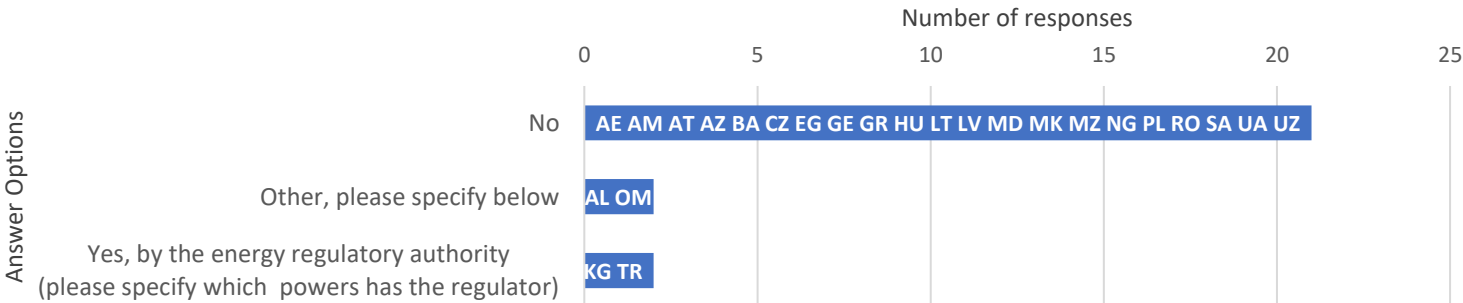
Q.1.2: are the electric vehicle charging operators licensed?



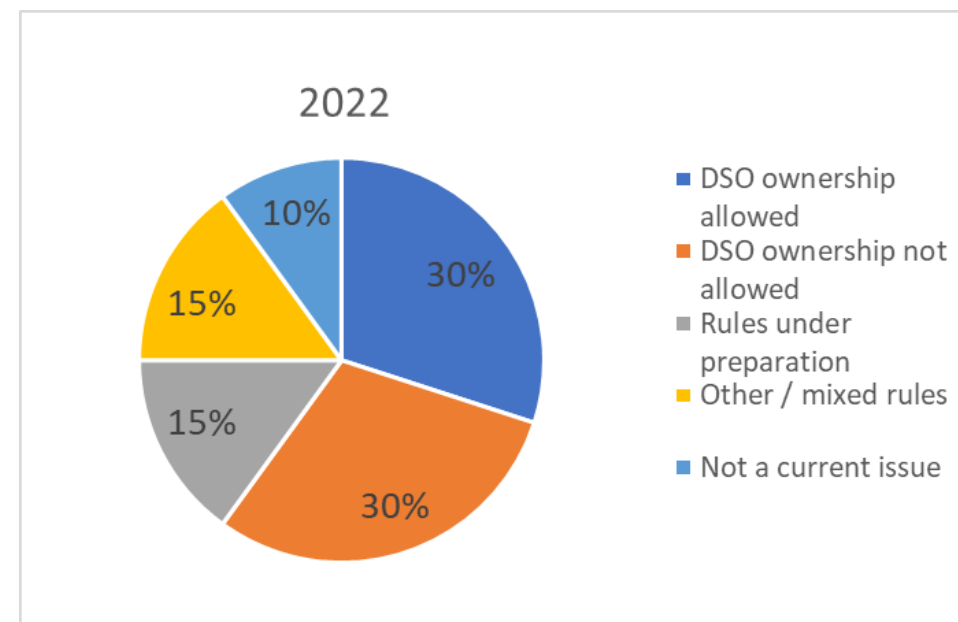
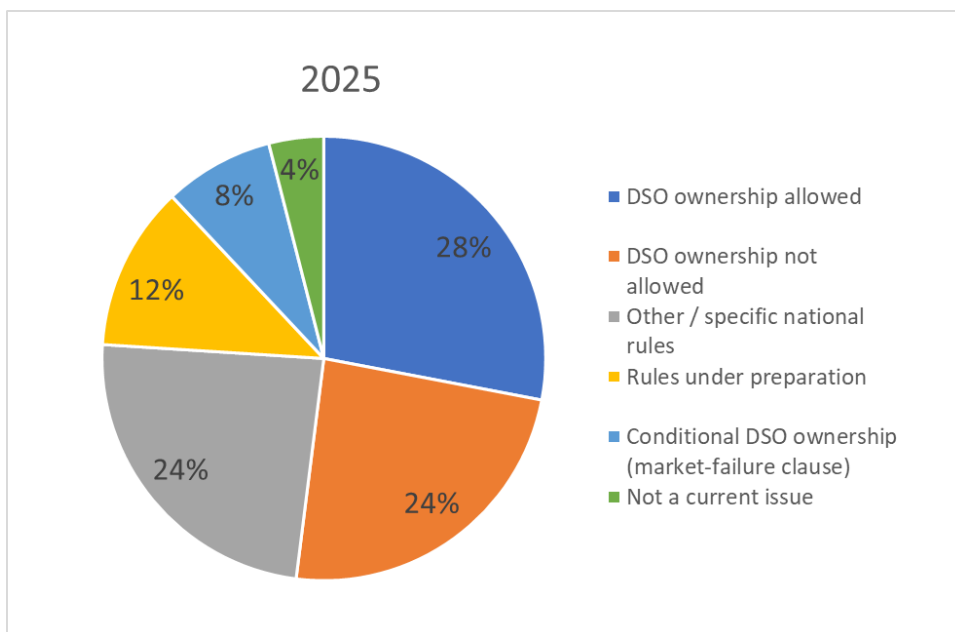
Q. 1.3. Are electric vehicle charging operators required to serve all vehicle brands?



Q. 1.4. Are the charging prices regulated?

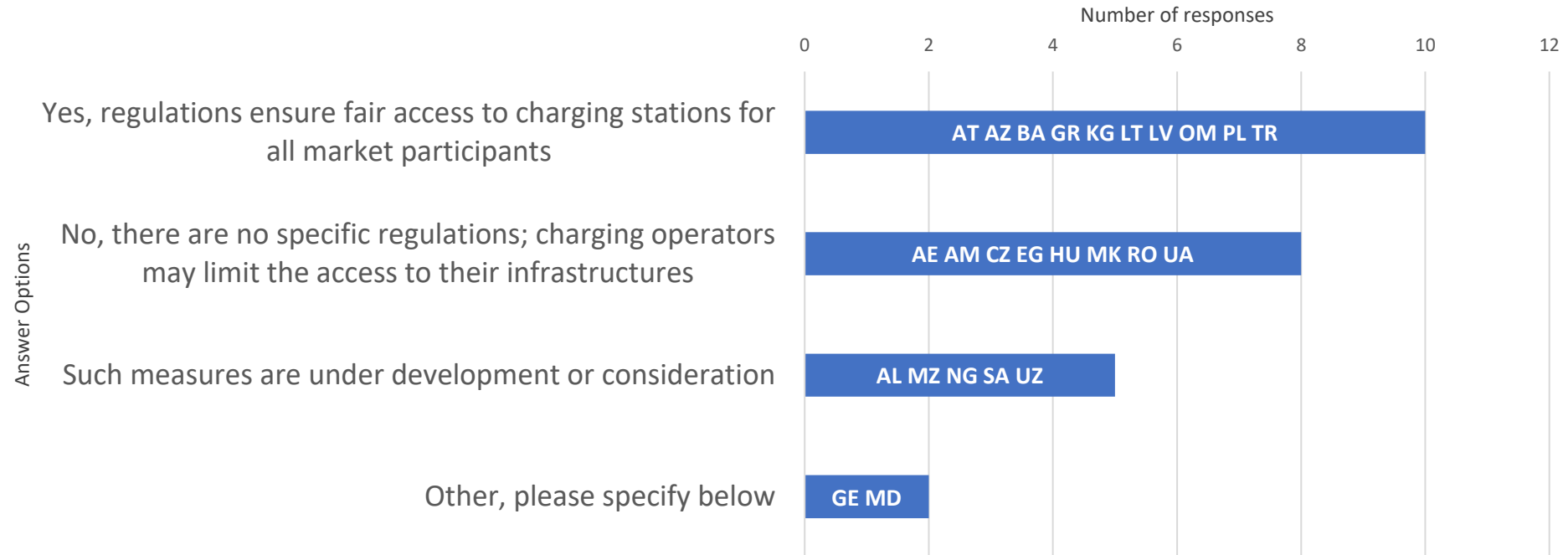


DSO Ownership of Charging Infrastructure - Q1.5



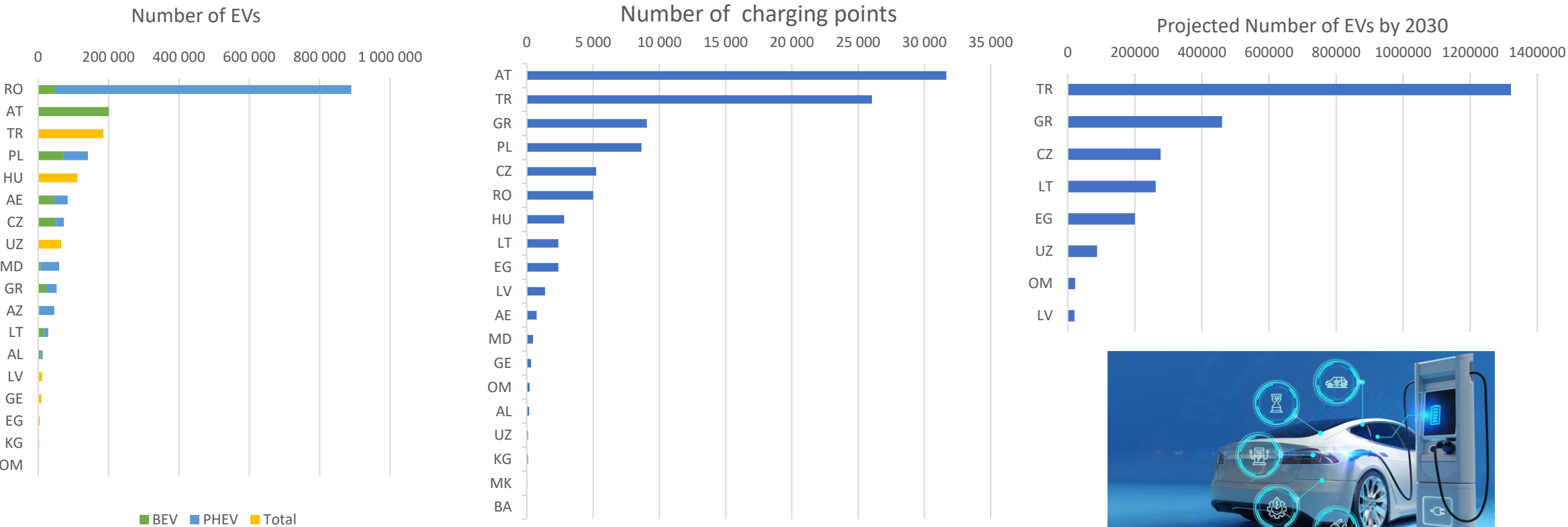
Regulatory approaches to DSO ownership remain highly diverse in 2025: while 28 % of ERRA members allow DSOs to own charging infrastructure, an equal share prohibit it outright, and many apply conditional or transitional models reflecting evolving market maturity.

Fair and Non-Discriminatory Access to Charging Infrastructure – Q1.6



Only **40 %** of ERRA members have binding fair-access rules for EV charging; another **20 %** are developing them, while one-third still rely on voluntary or undefined practices — showing uneven progress toward open and competitive charging markets.

EV Stock and Charging Infrastructure – Q2.1,2.2,2.4



The e-mobility landscape across ERRA countries remains highly uneven: EV numbers and charger availability vary by several orders of magnitude, with only a few mature markets achieving a balanced EV-to-charger ratio.

Governance Roles in EV Charging Infrastructure Q2.3-2.3.3



Most countries rely on competitive markets for charging roll-out, while DSOs focus on grid connection, suppliers stay neutral, and local authorities play a supportive role.

Local Authorities & Municipalities

36% involvement (9 of 25 countries)

- Provide permits, zoning, and co-financing.
- Coordinate urban-area charging.
- Fragmented role; no national strategy.

Distribution System Operators (DSOs)

100% limited to grid connection (25 of 25)

- Connect chargers as metering points.
- 3 allow roll-out; 1 market-failure clause.
- Consistent with EU unbundling.

Energy Suppliers

12% defined role (3 of 25 countries)

- Only in MZ, OM, UZ.
- 88%: no supplier role – market-led.
- Suppliers focus on power provision.

Market Players / Private Operators

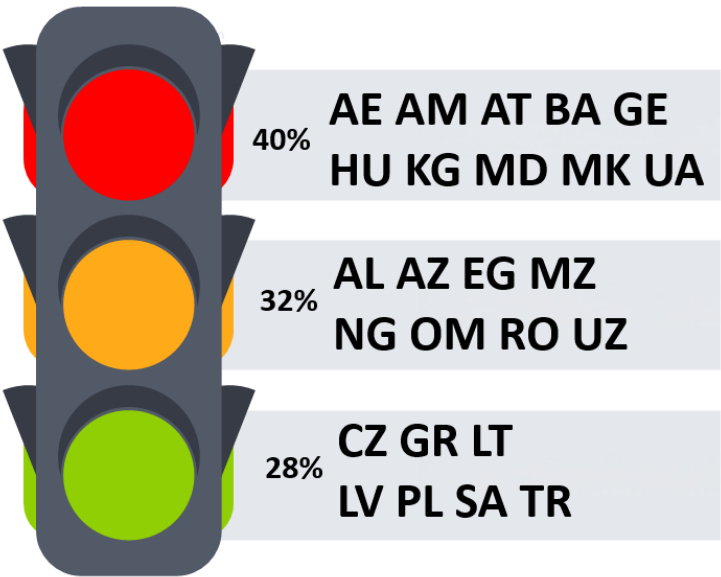
49% fully market-based roll-out (17 of 25)

- Private investors lead expansion.
- 14% cite service companies; 9% municipalities.
- Market-driven model dominates.

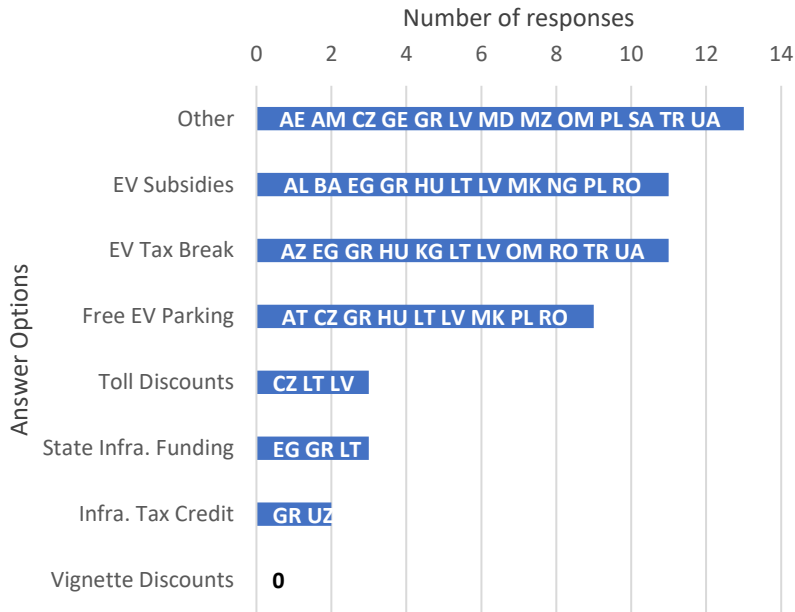
National Plans & Support Measures Q2.5-2.7



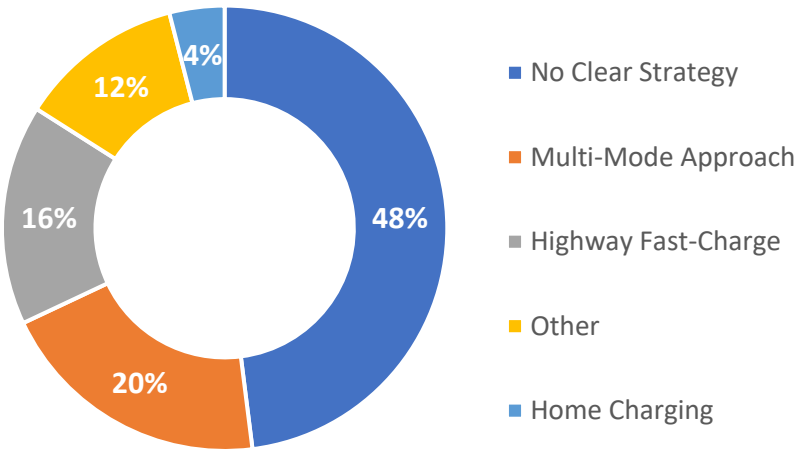
Q.2.5 National CI Rollout Plan?



Q.2.6 Incentives for EVs & Charging?

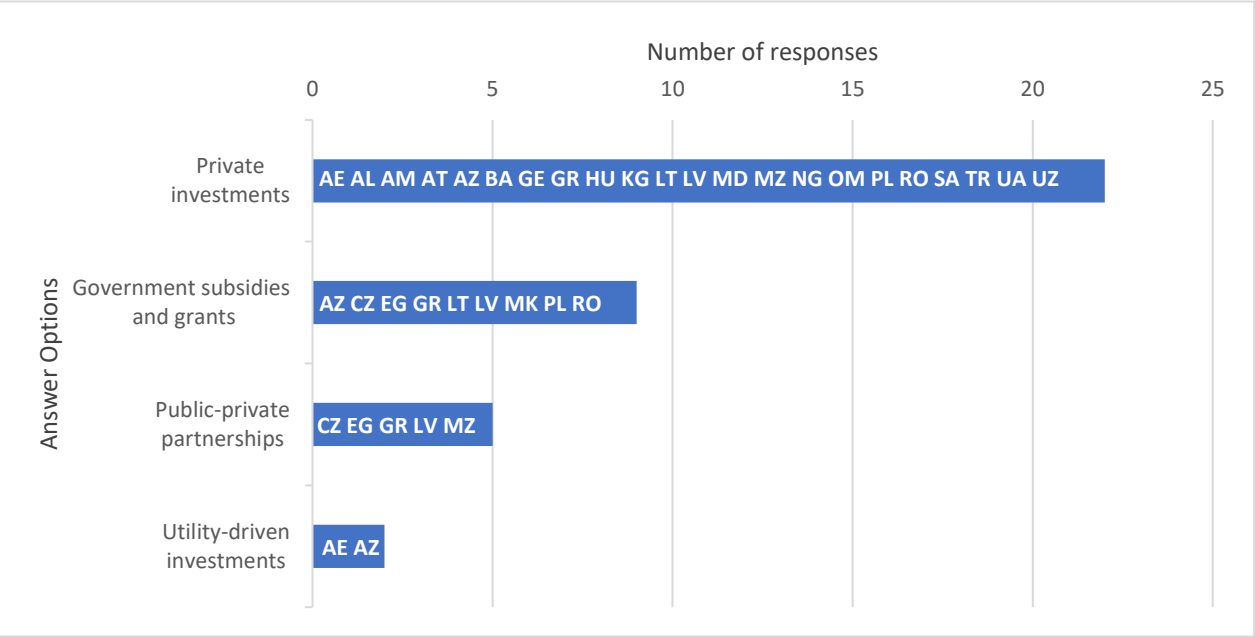


Q.2.7 Prioritized Charging Types?

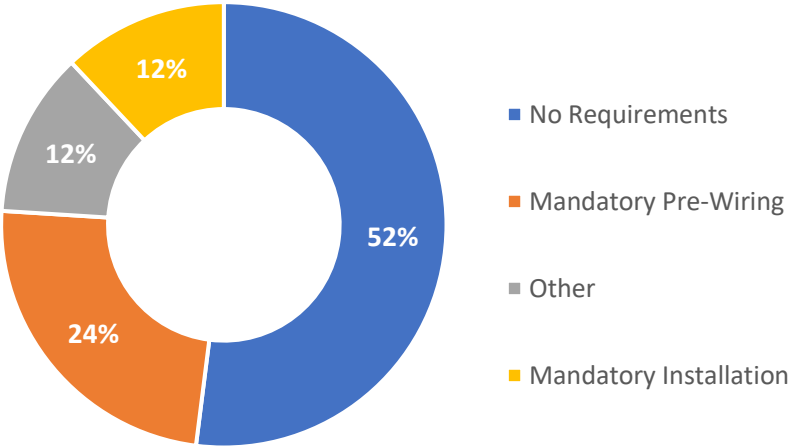


While most ERRA countries are still developing national rollout plans, many already provide fiscal incentives for EV adoption, yet strategic prioritization of charging infrastructure remains fragmented.

Q2.8 – Who Finances Charging Infrastructure?



Q2.9 – New Building EV Charging Requirements?

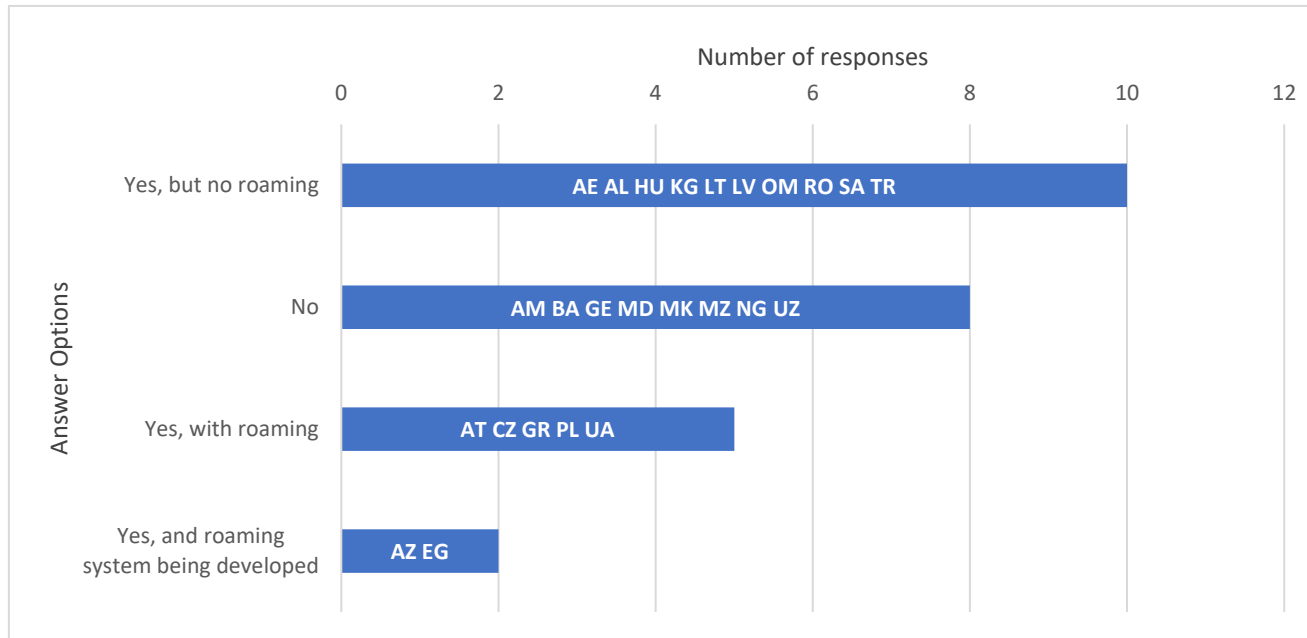


Most ERRA countries still depend on public financing to build charging networks, while mandatory construction codes for EV readiness remain at an early stage. Aligning financial incentives with regulatory obligations will be key to accelerating infrastructure rollout and investment certainty.

Market Players and Roaming Systems Across ERRA Countries



Q2.10 –Are there multiple EV charging station market players in your country? If yes, are they operating by themselves or under a roaming system?

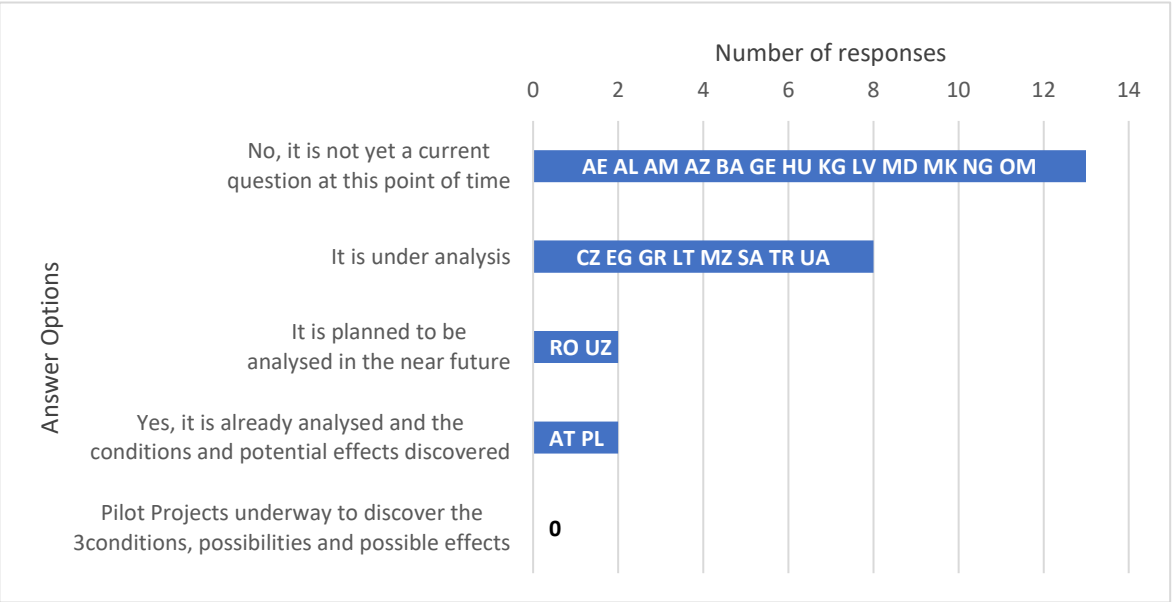


Competition is emerging in EV charging markets, but roaming and interoperability remain underdeveloped — regulators can bridge this gap by promoting open access and standardization.

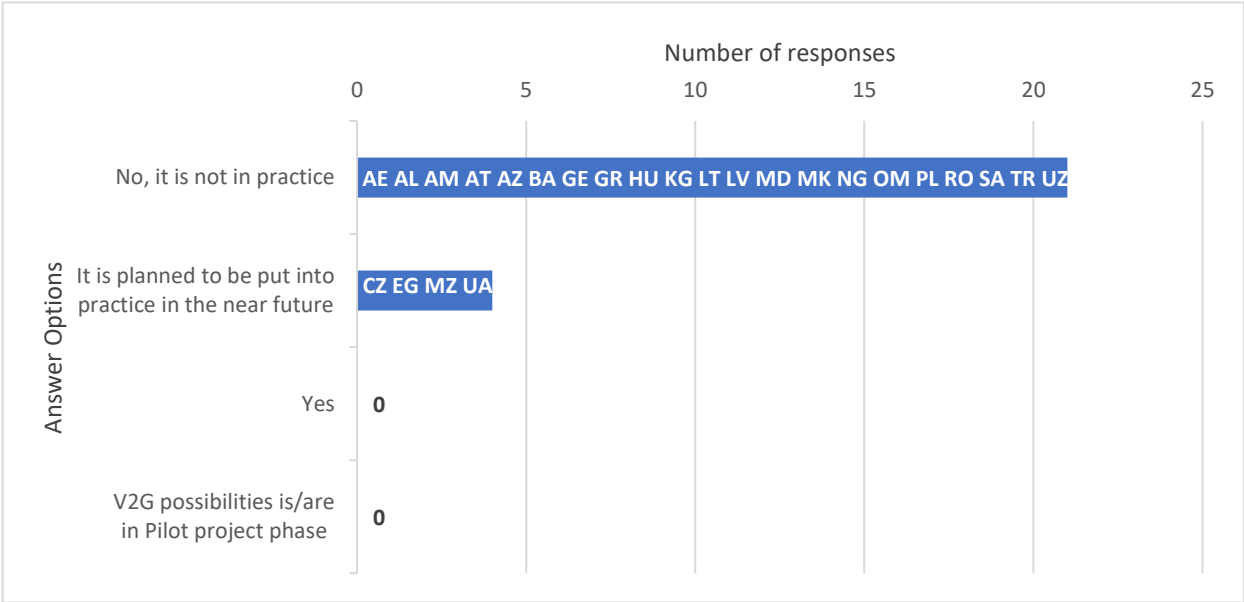
Grid Readiness for EV Integration



Q3.1- Is V1G/V2G potential analyzed nationally?



Q3.2- Is V2G Currently Operational?

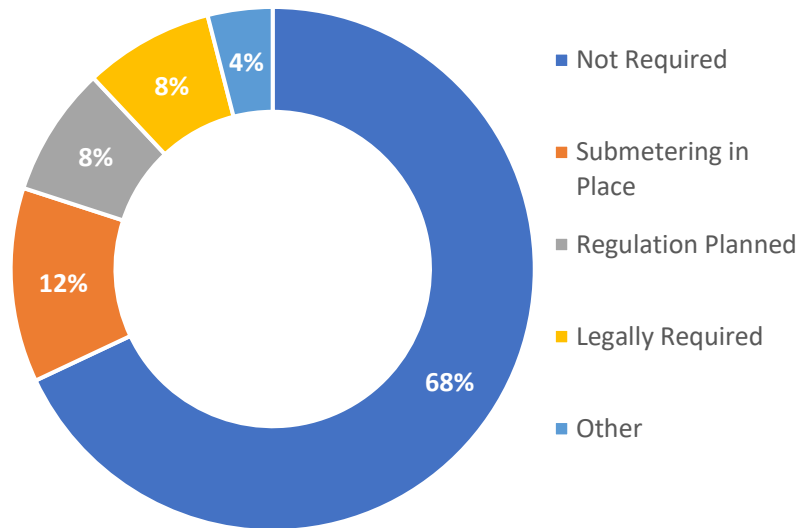


Most ERRA grids can handle current EV demand, but few countries have proactive reinforcement or V2G analysis in place.

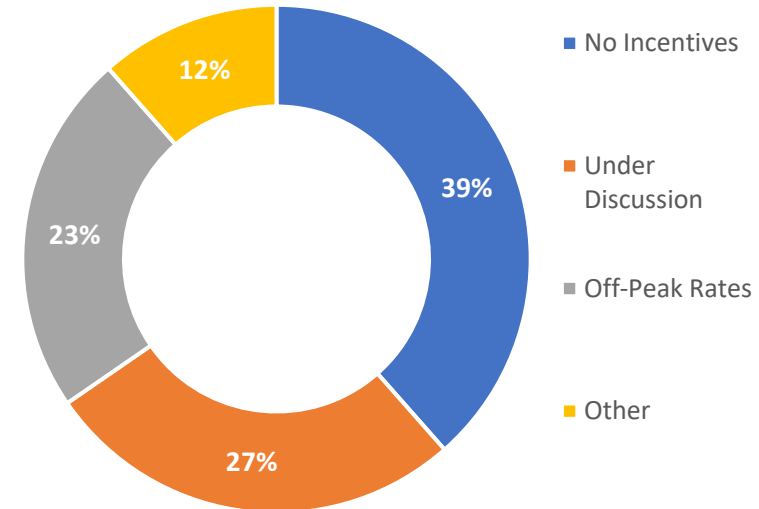
Innovation Measures: Smart Charging and V2G



Q3.3. Are there separate meters for the EV home charging?



Q3.4 Incentives for Off-Peak EV Charging?

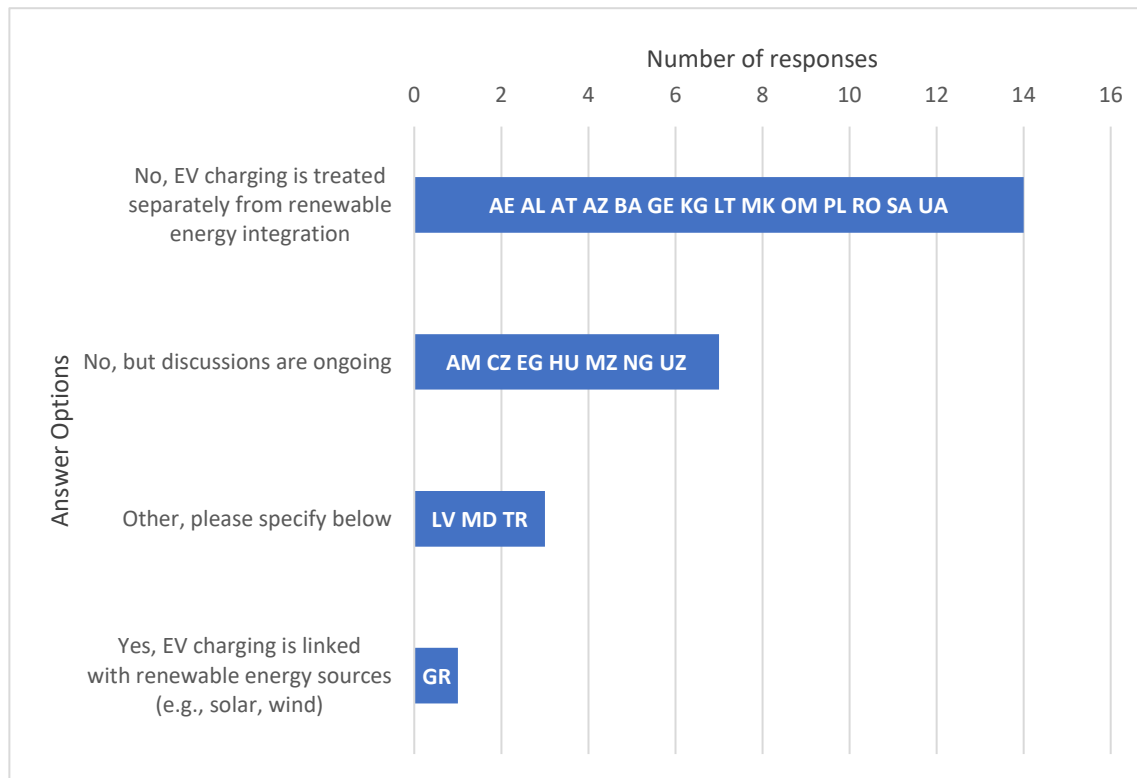


Smart-charging systems are expanding, but economic incentives to promote off-peak use remain underdeveloped.

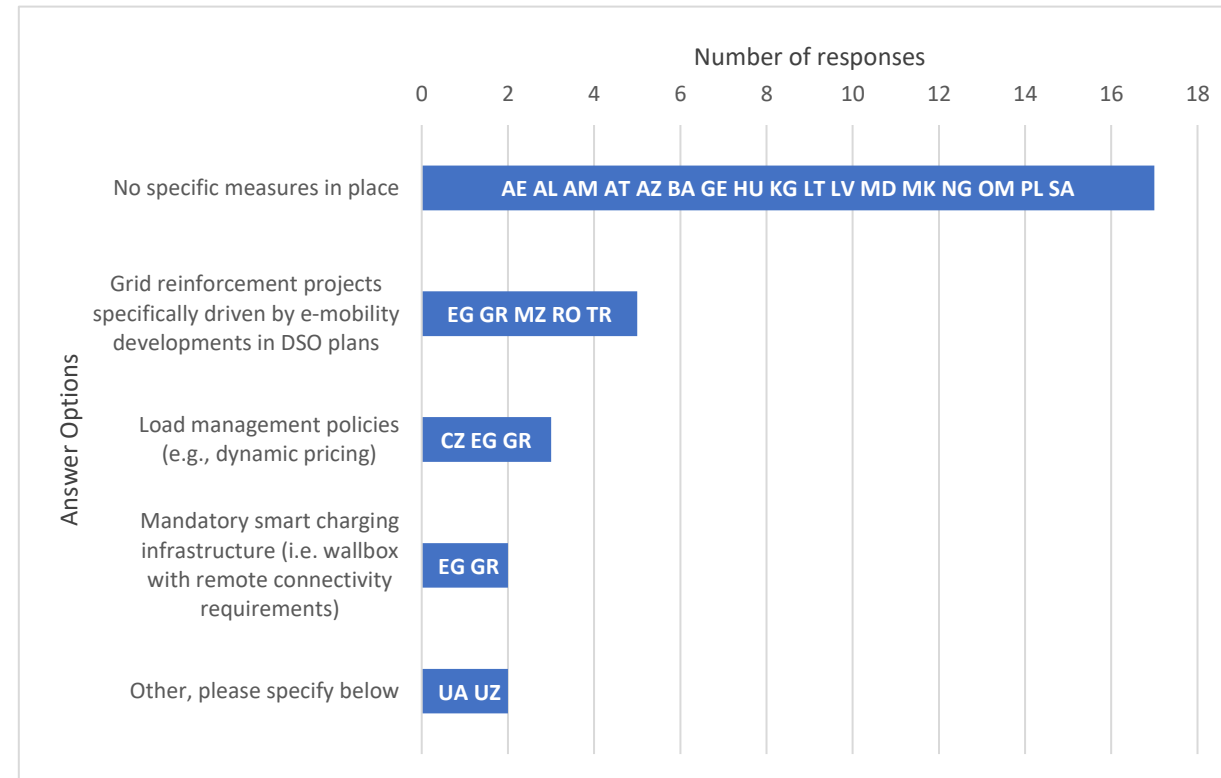
Regulatory Oversight & Methodologies



Q3.5 – Regulatory Measures for RE–EV Integration?



Q3.6 – Measures to Prevent Grid Congestion from EVs?

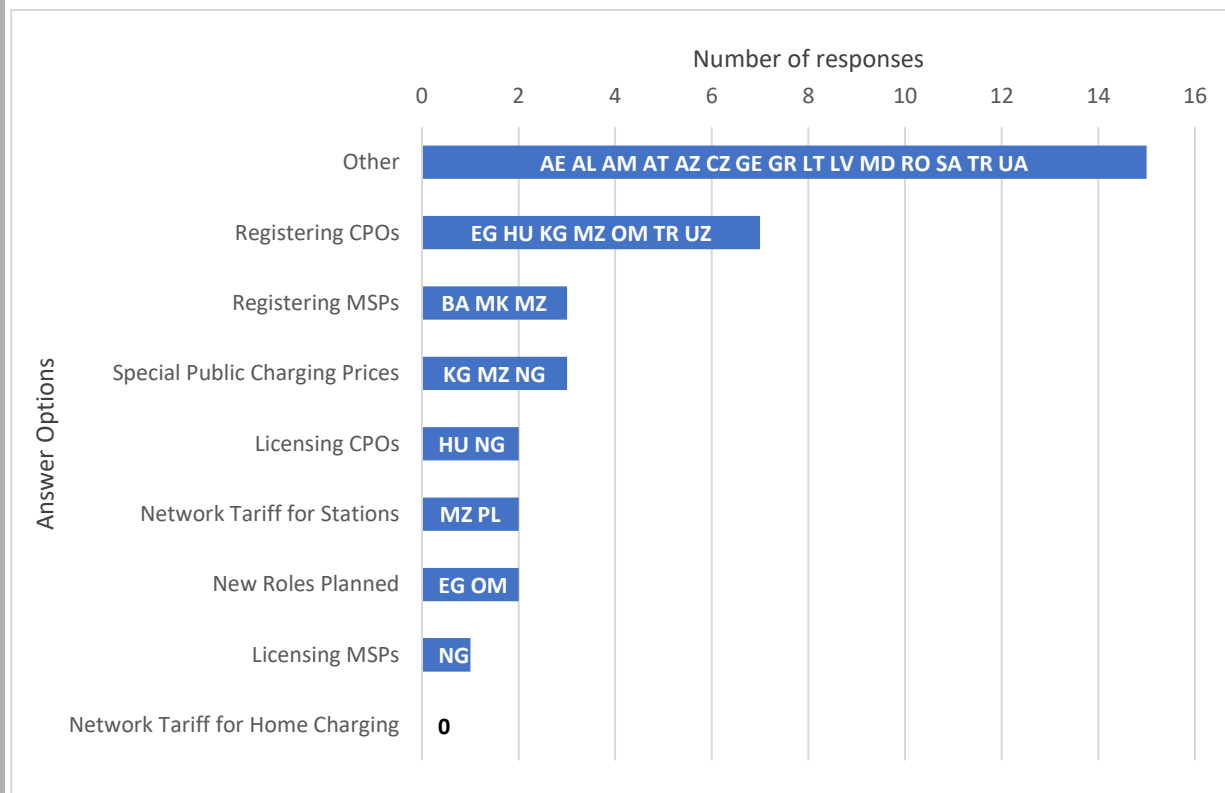


Regulatory awareness is advancing, yet formal mechanisms for renewable integration and congestion management are still developing across ERRA markets.

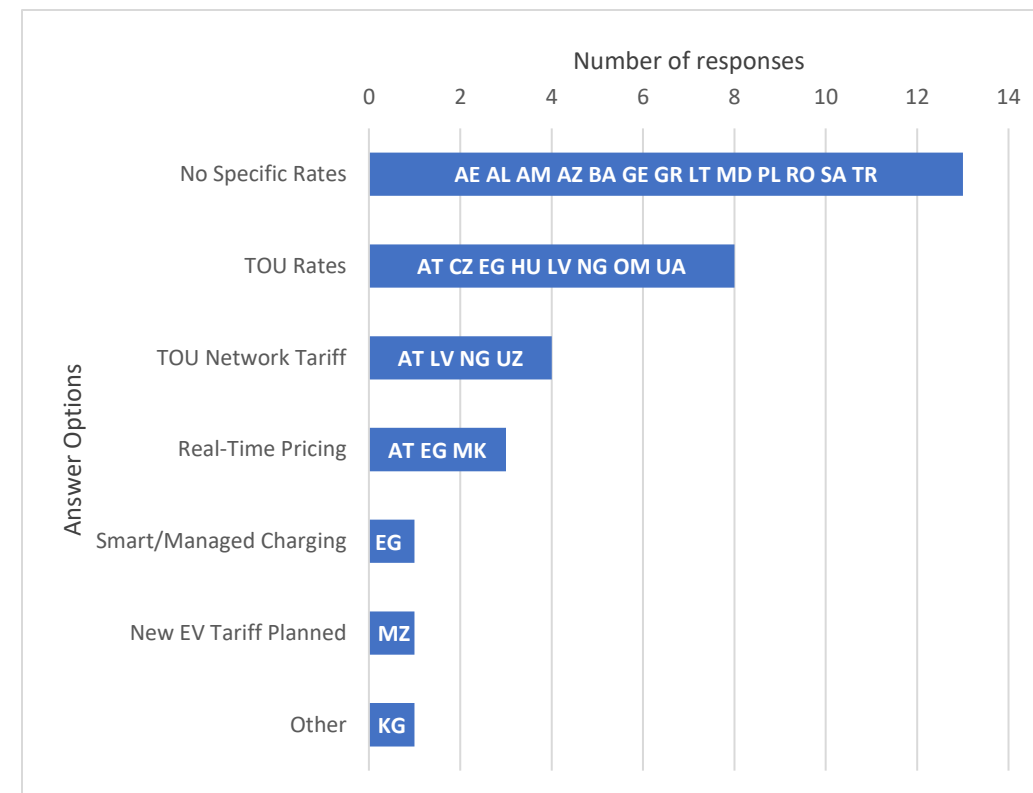
Tariff Regulation & Price Formation



Q4.1 – Current Regulatory Roles in E-Mobility?



Q4.2 – EV Tariff Design and Smart Charging Measures?



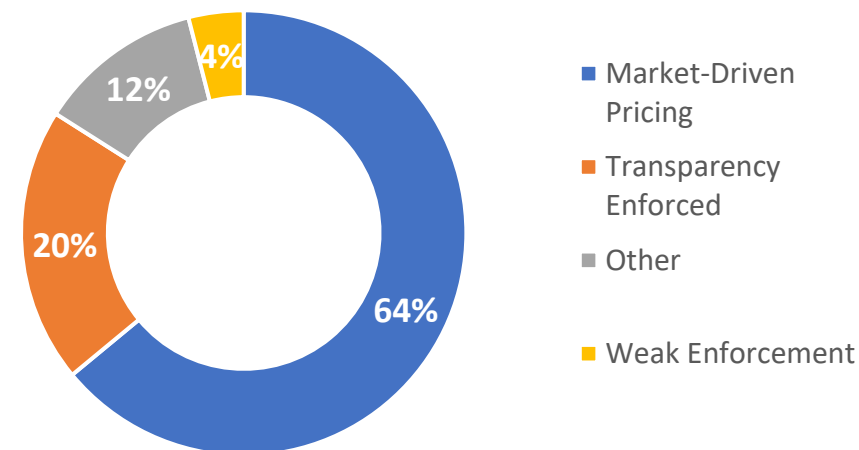
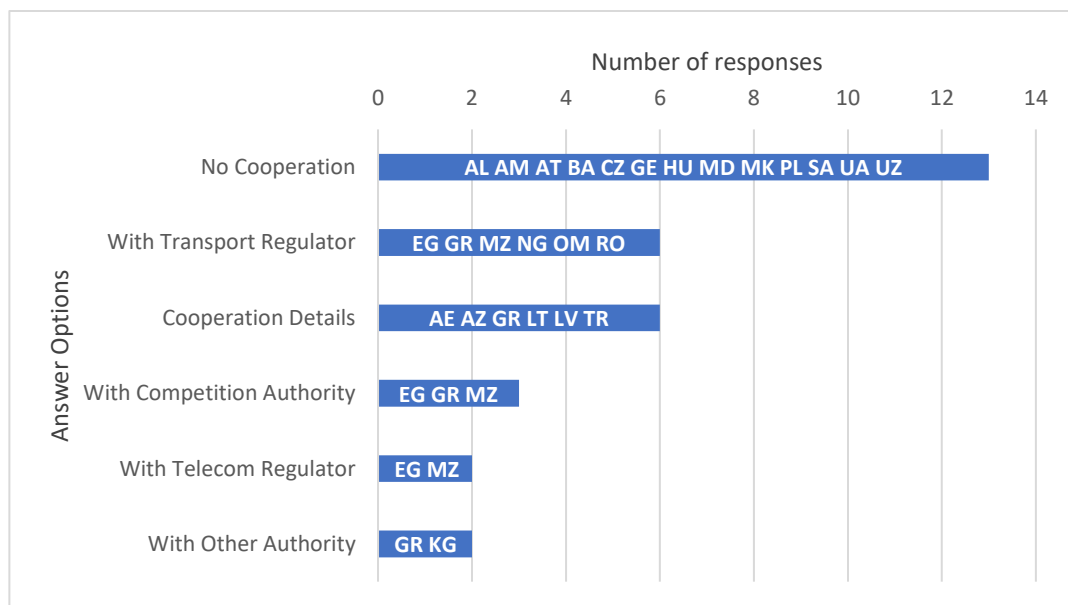
The shift from market entry to active pricing and flexibility management is underway across ERRA countries.

Institutional Cooperation & Market Transparency



Q4.3 – Cooperation with Other Regulators on E-Mobility?

Q4.4 – Monitoring & Enforcement of Pricing Transparency?

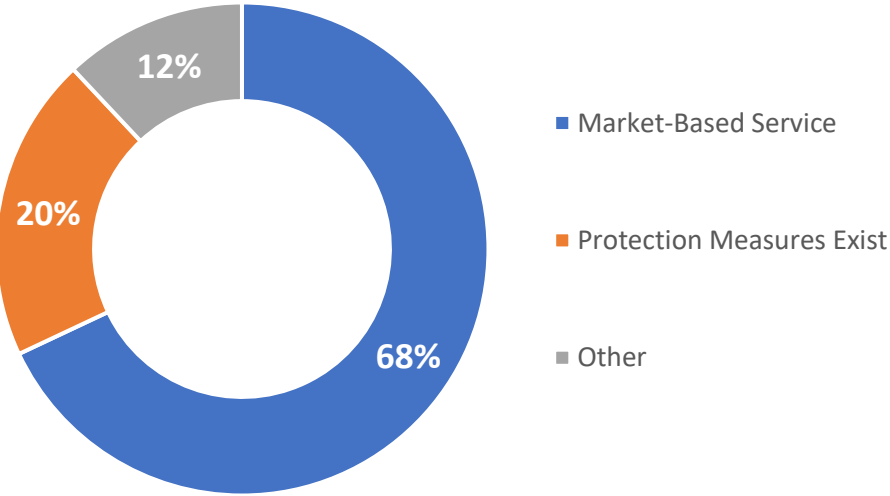


Regulators increasingly coordinate on e-mobility policy, but formal powers to monitor and enforce transparent EV charging prices remain limited.

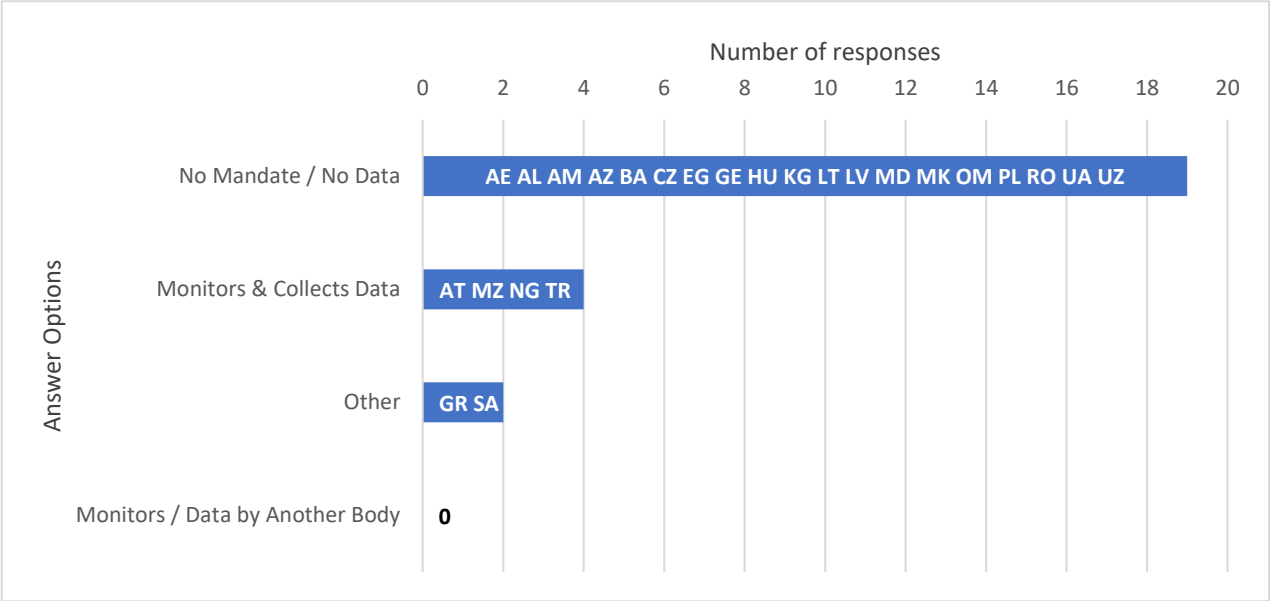
Customer Protection & Data Monitoring



Q4.5 – Customer Protection Mechanism?

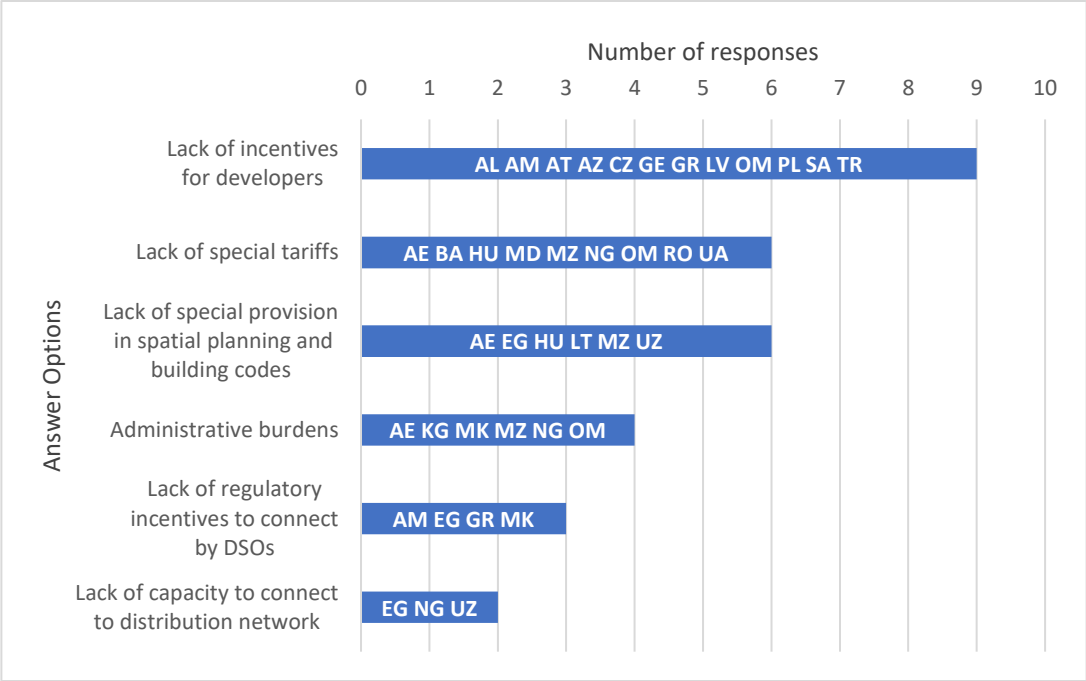


Q4.6 – Pricing Data Monitoring by Regulator?



General consumer laws remain the main safeguard; dedicated EV-charging rules are being progressively developed.

Key Barriers to EV Infrastructure Development (Q5)



Additional Barriers Identified by Respondents	
Regulatory / Legal	• Missing or unstable frameworks • Lack of oversight • Policy uncertainty.
Financial / Technical	• High costs • Limited grid capacity.
Market / Utilization	• Low utilization • Limited fast chargers • Business-led expansion.

➤ **Smart Charging & Grid Integration**

V1G/V2G/V2X systems; Grid impact of mass EV adoption; System services from EVS.

➤ **Tariff Design & Market Models**

EV charging tariffs (regulated/unregulated, TOU, dynamic); Business models; Market operation; Public-private partnerships.

➤ **Regulation & Policy Frameworks**

Standards; Interoperability; Regulatory measures' impact on market and consumers; Experiences from other countries.

➤ **Financing & Investment**

Incentives; Subsidy schemes; Investment and leasing models; Infrastructure funding.

➤ **Sustainability & Urban Planning**

Link with renewables; Environmental impact; Urban/rural planning; Accessibility and affordability.

Next Steps



Activity	Deadline	Comments
Preparation of a draft questionnaire and sending to voluntary teams for comments		Done
Receiving comments on the draft questionnaire from the voluntary team	July 11	Done
Final questionnaire available on internet and opening of survey	July 14	Done
Collecting responses to the questionnaire from the committee member states	August 18	Done
Processing and studying the collected responses	September	Done
1st draft report shared with the committee	October 3	Done
Discussing the 1st draft report with the committee (sharing comments, opinions)	October 15	Ankara
Comments on the 1st draft	October 31	
Sharing final version with committee members	December 31	
Final discussion and approval of the final report	January 29	online meeting
Finalization and publication (Secretariat) of the final report	February 17, 2026	
Presenting the final report at the GA 2026 meeting	April 28, 2026	Bratislava



**THANK YOU
FOR YOUR ATTENTION!**

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