

Framework conditions for the integration of digital demand and the digitalisation of the Romanian electricity network

Joint paper of the Energy Committee and the Digital Economy Committee

1. Purpose and method

This paper records the shared conclusions of the intersectoral roundtable convened by the Energy Committee and the Digital Economy Committee of AmCham România on 8 July 2026, supplemented by the preliminary findings Eurelectric presented in September 2026 ahead of its Power for AI report. It is a joint document, not two sectoral positions side by side: where the two constituencies placed different emphases, this is stated rather than smoothed over. It confines itself to framework conditions.

2. Policy context: compute and electricity as one system

On 3 June 2026 the European Commission adopted, in a single package, the Strategic Roadmap for Digitalisation and Artificial Intelligence in the Energy Sector (RAID-E, COM/2026/501) and the proposed Cloud and AI Development Act (CADA). RAID-E, a non-binding communication, announces follow-up measures on smart metering, energy data exchange, data centre rating and tripartite cooperation with data centre operators. CADA, once adopted as a regulation, will introduce Data Centre Acceleration Zones with a twelve-month permitting target, "strategic project" designation carrying preferential access to funding, and a four-level cloud sovereignty framework conditioning public sector procurement. Both committees read the package the same way: the Union now treats compute and electricity as one strategic system, and Romania's interests in either file cannot be defended in isolation from the other. Eurelectric's preliminary analysis adds that AI demand increasingly follows abundant power, grid capacity and land, shifting growth away from the established hubs towards regions able to offer them.

3. Shared diagnosis

The assets are real. Romania's data centre market is small — some 77 to 100 MW of installed IT capacity across fifty to fifty-five sites — but the underlying endowment is genuine: available network capacity in certain distribution areas, a large pipeline of approved renewable projects, competitive land, Black Sea cable landings, an experienced developer ecosystem, and about EUR 500 million earmarked under the National Recovery and Resilience Plan for sovereign cloud. Networks, too, outperform their reputation: PPC reports smart metering above 70% in its areas, Delgaz Grid targets 85% by 2030 alongside SCADA and automation programmes, and Bucharest reports SAIDI of about 79 minutes, close to Western European benchmarks.

The constraints are equally real. The obstacle investors cite most consistently is neither taxation nor land but speed of execution — permitting and, above all, grid connection — and, as Eurelectric notes, for fast-depreciating AI hardware unavailable power costs more than expensive power. Network performance, and hence the reliability a project can be promised, varies markedly between distribution areas. Network investment meets a regulatory obstacle: ANRE has so far been rather reluctant to recognise network investments in the regulated asset base, and OPEX-heavy digital solutions fare worse still. Absorption

capacity — administrative and engineering, not merely financial — is increasingly the binding limit, with distribution operators executing record investment programmes.

Energy availability is a separate constraint. AI loads run nearly flat around the clock, while Romania's recent additions are mostly solar, storage is modest, and the system relies on imports at the evening peak; with the refurbishment outage of Cernavodă Unit 1 ahead and new firm capacity arriving only progressively, firm supply will tighten before it eases.

4. The central conclusion: the realistic target is the mid-scale segment

The most consequential outcome of the consultation was a convergence, from both sides of the table, on the segment of digital investment for which Romania can credibly compete.

Hyperscale investment is not that segment, at least not in this policy cycle. To make it one, Romania would have to offer the firm, highly available connection of load blocks of hundreds of MW within enforceable timelines; long-term firm, clean energy at competitive prices, as in the nuclear PPA signed by Fortum and Google in Finland in September 2026; power-rich or brownfield sites; and a bankable regulatory framework. It cannot yet offer this combination, and a hyperscale strategy would tend to produce announcements rather than investments while loading the connection queue with requests the network cannot serve. The question changes where producers move up the value chain: European generators increasingly build data centres on their own sites and sell compute or powered sites rather than electricity alone, as in PPC's memorandum with AWS for a facility in Western Macedonia's former lignite area. Romanian producers with firm generation and brownfield sites, not least in Oltenia, could do likewise if the framework accommodates co-location and direct lines without shifting network costs onto other users.

Mid-scale projects — colocation, edge, enterprise, AI inference, and sovereign or regulated-sector capacity, at scales of tens rather than hundreds of MegaWatts — match the country's profile far better, as Eurelectric's modelling confirms: AI infrastructure is splitting between a few GW-scale training campuses in power-rich regions and a far larger network of distributed inference facilities. Such projects can be sited where headroom exists, absorbed through distribution-level reinforcement, connected flexibly, and aligned with the demand that CADA's sovereignty levels and the NRRP sovereign cloud envelope are likely to generate.

This is a judgement about allocating scarce capacity, not a policy of refusal: a hyperscale project with credible commitments should be welcomed. Both committees also accepted that mid-scale projects contribute less to the case for reinforcement, carry less bargaining weight, are more sensitive to tariffs and connection charges and, where oriented to sovereign demand, depend on that demand materialising. The mid-scale orientation is the better bet available to Romania — not a guaranteed one.

5. AI for power: where the two sectors' interests genuinely coincide

The reverse direction of the agenda attracted more agreement than either committee had anticipated. Digitalisation is the fastest available means of creating usable network capacity: the Commission estimates that grid-enhancing technologies can raise the capacity of existing networks by up to 40% at a fraction of the cost of new lines, and IRENA documents AI-based congestion management and dynamic line rating

delivering higher utilisation within months rather than years. Eurelectric's modelling adds that flexible data centre operation would moderate the resulting rise in wholesale prices and lower peak demand. These are precisely the capabilities the technology sector supplies and the capacity it needs — the clearest instance of interests aligned rather than merely compatible.

The barriers here are institutional rather than technical: operator confidence, best built through incremental pilots; the absence, noted above, of regulatory recognition for digitally enhanced capacity; data quality and interoperability, which must precede AI at scale; the added cyber attack surface; and competition for scarce digital engineering talent.

6. Points on which the two committees placed different emphases

Three divergences must be recorded. First, on the pace of connection reform: the digital constituency treats delay as the decisive competitive variable, while the energy constituency insists that reform must not shift costs onto existing network users — a concern the US experience bears out, where a growing number of local authorities have considered moratoria on data centres. The conditionality emerging in Ireland, Spain, Austria and the Netherlands — faster access in exchange for flexibility, own or clean generation or grid support — may reconcile the two. Second, on measurement: linking the Union's smart grid indicators to network remuneration is contentious among distributors and more naturally ACUE's terrain than AmCham's. Third, on sovereignty: the digital constituency's concern that assurance levels may act as de facto market-access conditions for non-EU providers is less shared by the energy constituency. None prevented agreement on what follows.

7. Joint recommendations

- 1. Connection transparency and queue discipline.** Publish realistic connection timelines and area-level capacity data, and adopt readiness-based queue management that favours credible projects.
- 2. Flexible connections, and speed for system value.** Implement the Commission's December 2025 guidance with bankable curtailment rules, offer faster access to projects committing to flexibility, own generation or grid support, and reflect data centre demand in network development plans.
- 3. Recognition of network investment.** Move the ANRE framework towards recognising anticipatory investment grounded in credible demand scenarios, and address the CAPEX/OPEX asymmetry so that digitally enhanced capacity is recoverable, treating any bonus-malus link with caution.
- 4. Firm energy and co-location.** Treat firm supply at the evening peak as a planning parameter alongside grid capacity, and clarify the rules for co-locating load at generation sites and for direct lines.
- 5. Romania's position on the EU files.** On CADA, engage in Council on the feasibility of the twelve-month permitting target and on sovereignty levels acting as market-access conditions, and examine former coal sites as candidate acceleration zones; on the rating scheme, set out a national position on eligibility criteria, including low-carbon sources and granular certification, given Romania's energy mix.

6. **Coherence on cybersecurity and AI.** Support coordinated implementation of NIS2, the Cyber Resilience Act, the AI Act and the Data Act, with narrow, practical guidance on high-risk AI use cases in energy, as intended under AI Act recital 55.
7. **Skills.** Treat the shortage of digital engineering talent as a shared constraint, not a competitive one.