Follow-up to the European Parliament non-legislative resolution on Electricity grids: the backbone of the EU energy system

1. **Rapporteur:** Anna STÜRGKH (Renew / AT)

2. **Reference numbers:** 2025/2006(INI) / A10-0091/2025 / P10_TA(2025)136

3. **Date of adoption of the resolution:** 19 June 2025

4. **Competent Parliamentary Committee:** Committee on Industry, Research and Energy (ITRE)

5. **Brief analysis/ assessment of the resolution and requests made in it:**

The report emphasises the crucial role of electricity grids in the EU's transition to a competitive, net-zero economy by 2050. It calls for the full exploration, optimisation, modernisation and expansion of electricity grids, including transmission and distribution, to accommodate renewable energy sources and increased electrification.

Among its main requests, the resolution calls on the Commission to:

- **Upcoming Grid Package and streamlining of permitting procedures (Paragraphs 7, 12, 13, 15, 18, 24, 26, 48, 69, 72, 73)**
    - Ensure integrated, coordinated and cross-sectorial planning and alignment of electricity network development plans with national energy and climate plans (NECPs) for all voltage levels and set out an EU strategy to reduce the dispatch-down of renewable electricity;
    - Propose a targeted revision of the TEN-E Regulation to introduce a robust planning process with a strengthened role for the Agency for the Cooperation of Energy Regulators (ACER), ensure scenarios are drawn up in line with the decarbonisation agenda and simplify the application process for small and medium-sized distribution system operators and easier access for smart electricity grid projects;
    - Enhance cooperation with neighbouring countries through Projects of Mutual Interest (PMI) and work closely with the UK to agree on a mutually beneficial trading arrangement;
    - Develop guidelines to harmonise and increase transparency of national development planning for distribution grids and require transmission (TSO) and distribution (DSO) operators to provide energy regulators with necessary data;
    - Closely monitor the implementation of the Renewable Energy

Directive (RED) and assess if revised permitting provisions are sufficient to deliver on EU objectives, introduce mandatory digital application, submission and processing requirements, and set out guidelines for Member States to include a principle of tacit approval in their national planning systems;
  - Review and improve existing cost-sharing mechanisms to ensure they reflect the shared benefits of infrastructure and address the diversity of electricity flows;
  - Strengthen regional cooperation on grid planning and energy cooperation across all sea basins with neighbouring countries, particularly in offshore wind energy development;
  - Address the specific needs of EU's outermost regions and propose additional financial support to improve their energy system autonomy and interconnection.

- **Financing (paragraphs 35, 37, 39, 42 & 50):**
  - Increase Connecting Europe Facility (CEF) financing for electricity infrastructure in the next Multiannual Financial Framework (MFF) while ensuring that projects at distribution level are eligible;
  - Explore co-financing possibilities between CEF and the Renewable Energy Financing Mechanism;
  - Propose a dedicated funding instrument to support decentralised and innovative grid projects;
  - Strengthen financing and de-risking initiatives and tools (with the EIB) to support electricity grid expansion and modernisation.

- **Energy security and environmental solutions (paragraphs 54, 55, 56, 62):**
  - Develop guidelines for National Regulatory Authorities (NRA) to ensure initial grid project planning includes additional security measures and environmental solutions;
  - Support Member States in finding solutions to increase the protection and resilience of critical infrastructure (including cybersecurity), including financing measures and technologies;
  - Enhance recycling of critical raw materials and support strategic partnerships and trade agreements to secure access to these key materials while diversifying sources of supply.

- **Implementation of Grid Action Plan (paragraphs 27, 41 & 51):**
  - Develop a set of best practices for public acceptance and public engagement to be shared among Member States when developing new grid projects;
  - Provide guidance on the approval of anticipatory investments;
  - Mandate the biannual updating of the Technopedia to ensure accurate reflection of technology readiness levels of included technologies.

- **Digitalisation of European Grids (paragraphs 52 and 57):**
  - Enable and increase the digitalisation of the European electricity system, including data sharing and interoperability for grid planning and optimisation;
  - Develop an EU-owned Common European Energy Data Space, in cooperation with DSOs and TSOs, to ensure secure, transparent, and interoperable energy data management, exchange, and storage in the EU.

- **Electricity Market Design (paragraphs 21, 43, 44 & 47):**
  - Amend Art. 6 of Directive (EU) 2019/944 on the internal market for electricity to introduce transparent priority connection criteria for generation and consumer connections;
  - Implement the provisions of the Electricity Market Design (EMD) and ensure fair and timely compensation to system operators for costs borne by them;
  - Address bottlenecks in tariffs, connection fees, and regulations to facilitate cross-border and offshore hybrid grid investment;
  - Develop a coordinated set of best practices for investments and equitable network tariff composition, with a focus on increased transparency, collaboration with Member States and removing non-energy related charges from tariffs.

- **Other (paragraphs 2, 23, 29, 30):**
  - Implement the EU Grid Action Plan, the Action Plan for Affordable Energy, the EMD, and RED without delay;
  - Extend the 'tripartite contract for affordable energy for Europe's industry' to smaller energy producers, including energy communities, SMEs and businesses, and link the outcome of these cooperation structures with grid planning processes;
  - Propose a binding interconnection target for 2036 by June 2026, based on a needs assessment, and ensure cooperation with non-hosting Member States and neighbouring countries;
  - Promote resilience, sustainability and security in public procurement procedures for grid operators and adapt EU rules on public procurement to harmonise and simplify functional tendering specifications and ramp up production capacities of grid components.

6. Response to requests and overview of actions taken or intended to be taken by the Commission

The report is mostly in line with the Commission’s own analysis. It is also to be viewed in the light of future developments as regards the regulatory framework on EU energy systems, the next MFF and the overall geopolitical context.

Response to concrete requests by the European Parliament:

1) **Upcoming Grid Package and streamlining of permitting procedures (paragraphs 7, 12, 13, 15, 18, 24, 26, 48, 69, 72 & 73)**

As announced in the Affordable Energy Action Plan, by the end of 2025 the Commission intends to put forward a European Grid Package.

The Package will be a major step forward to accelerate the roll-out of a more secure and cost-efficient cross-border infrastructure that delivers reliable, clean and affordable energy to European citizens and businesses. As set out in the Call for Evidence and Open Public Consultation, the Commission is assessing to what extent the TEN-E Regulation, as the main legal framework for cross-border energy infrastructure planning, should be adjusted. The main elements emerging from the assessment include the following and seem well aligned with the Parliament's report:

- the need to strengthen cross-border energy infrastructure planning that supports a more coordinated identification and follow-up of necessary cross-border projects to ensure sufficient interconnectivity between all Member States;
- the need to ensure a more integrated and cross-sectoral infrastructure planning and the further alignment with NECPs to contribute to the fulfilment of EU energy and climate policy objectives, including the further integration of renewable energy sources;
- the need to ensure more efficient use of existing infrastructure also based on strengthened digitalisation and innovation;
- the necessity for more effective cost and benefit sharing mechanisms for infrastructure of cross-border relevance in view of improving existing mechanisms such as the framework for cross-border cost allocation;
- the necessity for better protection of critical energy infrastructure;
- simplification of processes to reduce the administrative burden on project promoters including Transmission System Operators (TSO) and Distribution System Operators (DSO);
- the necessity for measures to shorten the permitting process for networks, renewables and storage by streamlining and simplifying procedures.

In addition, the Commission is committed to prepare guidance on grid connections aiming to equip Member States and NRAs with tools to address growing delays in connections of new loads and generation. The Commission also intends to follow-up on the Action Plan for Grids on the

Action related to visibility, including on distribution grid planning and grid hosting capacity transparency.

As regard the implementation of the Renewable Energy Directive (RED), the Commission has opened 27 infringements procedures with regards to the transposition of the permitting provisions of the revised RED and is in regular contact with the Member States for their progress. Moreover, the Commission has contracted a study on monitoring the implementation of its recommendations for speeding-up permitting of renewables and related infrastructure and a study on monitoring the implementation of several permitting articles in the RED and identifying and developing indicative key performance indicators that could be used to monitor progress on RES project permitting across the EU. The Commission has published on 2 July 2025 guidance for Member States on the implementation of Art. 15e of the RED.

On tacit approval, the Commission recommends in its Recommendation on speeding up permit-granting procedures that Member States take measures for tacit approval even for permitting of projects outside of renewables acceleration areas. Moreover, in its study monitoring the implementation of this Recommendation, the Commission collected examples of implementation of tacit approval and is available for technical questions via its online Q&A tool for Member States. The Commission will keep monitoring the transposition of RED Art. 16a and investigate the need for further guidance.

As per Art. 16(3) of the RED, by 21 November 2025, Member States shall ensure that all permit-granting procedures are carried out in electronic form. Additionally, in the Recommendation on speeding up permit-granting procedures the Commission has emphasised the opportunity of using innovative technologies such as Artificial Intelligence to speed up the processing of information and the whole procedure as such. The Commission will keep monitoring the transposition of the existing provisions and their implementation across Member States. At the same time, the Commission is committed to supporting Member States through technical assistance and capacity building with the aim to replace completely the use of paper forms and promote the use of single digital platforms to unify the different application processes and to ensure transparency by facilitating access to data, including relevant environmental data.

As regards the cooperation with third countries, in the last revision of the TEN-E Regulation the importance of cross-border energy infrastructure with Union’s neighbouring countries was recognised by the introduction of the status of Project of Mutual Interest (PMI) with third countries. The Commission will continue to enhance cooperation with neighbouring countries through PMIs with non-EU countries.

The development of Offshore Network Development Plans, as introduced in the revised TEN-E Regulation, has fostered regional cooperation on grid planning and energy cooperation across all sea basins and with EU neighbouring countries. The Commission will continue to use the TEN-E

framework as well as relevant High-Level Groups to strengthen regional cooperation, e.g. through the North Seas Energy Cooperation (NSEC) which includes Norway and has concluded a Memorandum of Understanding with the UK for cooperation on the offshore renewable.

2) Financing (paragraphs 35, 37, 39, 42 & 50)

In parallel to the Grid Package, the Commission is also preparing the proposals for the new MFF which was adopted in July 2025[1].

The Commission has repeatedly acknowledged the importance of supporting grid developments with the EU budget. Several financing instruments are available to support grids. CEF provides funding to energy infrastructure projects in the electricity, hydrogen and carbon dioxide sectors that have a significant cross-border impact and have been awarded the status of a project of common interest (PCI) or project of mutual interest (PMI) under the TEN-E Regulation. It also supports cross-border projects in the area of renewable energy. Moreover, the national plans under the Recovery and Resilience Facility include significant investment into energy infrastructure. Also, EU Cohesion Policy funds do provide funding for energy infrastructure. Notably, with the proposal for Modernisation of Cohesion policy in the context of the Mid-Term Review, a new objective would be supported, to finance energy interconnectors and related transmission infrastructure.

On 19 June 2025, the European Investment Bank (EIB) approved a new counter-guarantee product developed in close cooperation with the Commission to mitigate risks associated with manufacturing new grid components with a capacity of EUR 1.5 billion, which is crucial for the expanding network needs across Europe.

3) Energy Security and environmental solutions (paragraphs 54, 55, 56, 62)

The Commission is committed to continuing its support for Member States and operators in enhancing the protection and resilience of critical energy infrastructure, including grids as envisaged in the horizontal framework provided by Critical Entities Resilience (CER) and the Network & Information Security 2 (NIS 2) Directives. The review of the gas and electricity security framework, expected for next year, aims to take into account specifically emerging challenges and threats to the energy system, such as hybrid attacks. The recently adopted EU Preparedness Union Strategy, the Internal Security Strategy “Protect EU”, and the White Paper for European Defence and “ReArm Europe”

[1] EU budget 2028-2034: https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/eu-budget-2028-2034_en#legal-documents

plan highlight the need to invest more in critical infrastructure protection. While we cannot predict the outcome of upcoming MFF discussions, we can reaffirm that this topic remains a high priority on our agenda.

The Commission is committed to the swift implementation of the Critical Raw Materials Act. This includes fast-tracking Strategic Projects across the value chain while upholding high environmental, social and governance standards. The Commission also supports enhanced recycling, circular economy measures, and investments in sustainable processing. In parallel, the Commission is deepening strategic partnerships and trade agreements with third countries to diversify supply and promote responsible sourcing in line with the Global Gateway strategy.

To support the swift deployment of energy transmission infrastructure in line with the objectives of the EU nature legislation, the Commission published in 2018 a Guidance on energy transmission infrastructure and EU nature legislation. The guidance promotes the use of appropriate solutions and mitigations measures for electricity grids to avoid or mitigate negative impacts on biodiversity.

4) Implementation of Grid Action Plan (paragraphs 27, 41 & 51)

The report rightly highlights the EU Grid Action Plan as an important stepping stone for further action.

Action 12 of the EU Grid Action Plan aims for early, regular and meaningful stakeholder engagement for the development of grid projects. The first step in delivering on this action was taken in 2023, during the PCI Energy Days, when Commission launched the “Pact for Engagement”. The Pact and its signatories specifically aim to ensure early, regular and meaningful stakeholder engagement in grid development to address potential public opposition and ensure the highest standard in stakeholder engagement. Today the number of co-signatories of the Pact has reached over 30, amongst which are TSOs, DSOs, industry associations and civil society organizations. Commission and signatories to the Pact continue to work on the operationalization of the Pact and have agreed to Ten Guiding Principles for Public Engagement in 2024, which are matched with best practices of TSOs and DSOs. Since July 2024, regular stakeholder meetings for public engagement are organized by the Commission, in which best practices are shared and discussed.

On the 2 June 2025 the Commission published the Guidance document on anticipatory investments for developing forward-looking electricity networks. The document addresses EU Member States, NRAs, as well as TSOs and DSOs, and offers guidance to help them create the right conditions so that grid investments reflect future needs, while also

ensuring affordability for consumers and the competitiveness of industry. The guidance puts forward concrete recommendations in 3 main areas: network planning, regulatory scrutiny and costs and incentives.

On the 29 April 2025 the EU DSO Entity and ENTSO-E opened the application process for common DSO/TSO Technopedia platform, as mandated by Action 7 of the EU Action Plan for Grids. This platform will allow system operators to explore how others are leveraging various technologies, sharing good practices and adopting similar solutions in their own grids. The platform is also open to contributions from stakeholders. Based on discussions with the ENTSO-E and the EU DSO entity, the platform should be open to new applications and be updated annually, to track most recent developments in grid enhancing technologies, smart and digital solutions.

5) Electricity Market Design (paragraphs 21, 43, 44 & 47)

Article 18 of the Electricity Regulation is directly applicable in Member States, including the obligation to ensure that a mix of both capital and operational expenditure is considered in the remuneration of system operators. This ensures that, not only capital expenditure but also operational costs borne by system operators to boost the flexibility of the system, are to be considered as allowed costs by NRAs and can therefore be recovered in a timely manner. This incentivises flexibility and, in combination with the obligation to consider flexibility alternatives and non-wire solutions for TSOs and DSOs, boosts the ability of the electricity network to respond to changing system needs in a cost-efficient manner.

To support NRAs and System Operators in the design of tariff methodologies and regulatory incentives, the Commission adopted on 2 July a Recommendation and a Guidance on Future-proof electricity network charges to reduce energy system costs, which includes best practices from around the EU. This also includes Guidance on incentive regulation to promote the use of efficiency incentives for system operators. In combination with ACER best practice report and recommendations on tariff methodologies[2], and the joint work of ACER, CEER, ENTSO-E and the EU DSO Entity on Smart Grid Indicators, NRAs and system operators can learn from each other how best to manage the energy transition and facilitate cross-border trade.

Furthermore, to boost flexibility at the local level, including through flexible connection agreements, the Commission is currently preparing a proposal for a Network Code on Demand Response. This proposal will

[2] https://www.acer.europa.eu/sites/default/files/documents/Reports/2025-ACER-Electricity-Network-Tariff-Practices.pdf

support the removal of remaining barriers to flexibility at national level and the introduction of local flexibility markets to manage congestion and voltage issues in the grid. The Commission has conducted a targeted stakeholder consultation over the summer (closed on 12 September 2025). Following this, the Commission will finalise the draft proposal with the aim to adopt it by Q1 2026. Facilitating data exchange between different parties in the energy system is key to a successful implementation of the network code and therefore the Commission is preparing to set up a Common European Energy Data Space.

The Commission has also presented the first draft of the revised Guideline on Capacity Allocation and Congestion Management in Q2 2025 and will continue to discuss this implementing act with Member States throughout the autumn. This proposal seeks to boost cross-border trading and the ability of renewables and flexibility to participate in cross-border markets and future-proof the organisational and operational processes. The draft proposal also contains provisions to operationalise the Transmission Access Guarantee, which act as an insurance for market access for offshore renewable hybrid projects, a key element from the EMD negotiations in 2024.

The Commission will publish a report on EMD implementation. With regard to grid connections, the Commission will put forward a guidance on how to handle grid connection requests in situations with grid capacity constraints in line with Electricity Directive, as part of the European Grids Package. The guidance will outline a horizontal approach to addressing the issue of grid connections in a coherent manner across sectors and shall provide recommendations and best practices to Member States.

6) Digitalisation of European Grids (paragraphs 52 and 57)

In October 2022, the Commission adopted an Action plan for digitalising the energy system, outlining two specific measures aimed at advancing the digitalisation of Europe’s electricity grids: the digital twin of the electricity grids and the smart grid indicators.

Since 2024, the Commission is working in a Joint Task Force with the grid operators (ENTSO-E, EU DSO Entity) for developing a digital twin of the electricity grid. Furthermore, the Commission has funded a Horizon Europe research and innovation project (TwinEU) with EUR 20 million.

The Commission is also working with the energy regulators (CEER, ACER) and grid operators (ENTSO-E, EU DSO Entity) to develop a set of common indicators for smart grids to drive investments. The Smart Grid Indicators will be instrumental to provide more regulatory certainty to network operators to invest in smart and digital technologies faster.

In the upcoming Strategic Roadmap for digitalisation and AI in energy (planned adoption in Q1 2026), the Commission will deepen the work on digital twin and smart grid indicators, by outlining specific follow-up actions for implementing the digital twin and enabling NRAs to apply the smart grid indicators in practice. The Commission will also propose concrete action to establish the governance of the common European energy data space to facilitate innovative energy services such as demand side flexibility and bidirectional charging of electric vehicles (EV).

Since 2024, the Commission has established the Data 4 Energy (D4E) working group under the Smart Energy Expert Group. The D4E group brings together stakeholders representing grid operators, equipment manufacturers, service providers and the Member States. The group's objective is to agree on common rules for exchanging data to facilitate demand side flexibility and bidirectional charging of EVs and overall advance setting up of the common European energy data space.

7) Others (paragraphs 2, 23, 29, 30)

The Commission is committed to ensure swift implementation of existing energy initiatives, including the EU Grid Action Plan, the Affordable Energy Action Plan, the EMD, the Digitalisation of Energy Action Plan and the RED. It will monitor any developments closely and take due action where needed. The Sectoral Tripartite Contracts for Affordable Energy are part of the Action Plan for Affordable Energy, aimed at accelerating clean energy build-out and reducing costs through structured public-private partnerships. These contracts are tailored to address sector-specific barriers and promote collaboration among the Commission, Member States, and key stakeholders in the energy sector.

The Commission will assess and propose the revision of the interconnectivity target in the context of the upcoming review of the Governance regulation which is planned for Q4 2026. The Commission agrees that deployment of interconnectors also requires involvement of non-hosting countries and EU neighbours including through regional cooperation in the infrastructure planning process.

As announced in the Communication "The Clean Industrial Deal" the Commission will make a proposal to revise the Public Procurement Framework in 2026. This is intended to allow for sustainability, resilience and European preference criteria in EU public procurement for strategic sectors. In its revision, the Commission intends to consolidate and clarify the interactions between public procurement provisions across different pieces of legislation, to simplify their application. Furthermore, under the existing access to market rules, as set out by the Net-Zero Industry Act, a set of additional, non-price criteria has been prescribed for the use in public procurement of net-zero technologies, including electricity grid technologies. These rules apply for public procurement procedures falling

within the scope of Public Procurement Directives[3], where contracts or works contracts include net-zero technologies. These criteria include minimum mandatory requirement on environmental sustainability, the resilience contribution, and among the three additional criteria where at least one should be selected, the need to demonstrate compliance with cybersecurity requirements.

To drive forward their relationship, the Commission and the UK agreed on a “Common Understanding”. With regards to electricity, the “Common Understanding” goes beyond an electricity trading arrangement proposal, as mentioned in the Parliament report. Instead, it proposes for the UK and the Commission to explore the participation of the UK in the EU’s internal electricity market. This would entail that electricity is traded within and between the UK and the EU on the same terms and conditions as between EU Member States.

[3] Directives 2014/23/EU, 2014/24/EU, 2014/25/EU