

# Trans-European energy infrastructure: guidelines

2025/0399(COD) - 10/12/2025 - Legislative proposal

**PURPOSE:** to contribute to the timely and efficient development and interoperability of resilient energy infrastructures across the EU.

**PROPOSED ACT:** Regulation of the European Parliament and of the Council.

**ROLE OF THE EUROPEAN PARLIAMENT:** the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

**BACKGROUND:** energy network infrastructures play a crucial role in boosting EU competitiveness, ensuring the Union's security, and driving the energy transition and decarbonisation. At the same time, the development of energy networks is confronted with new and significant challenges.

Electricity grids will need to serve **growing demand linked to electrification** of end-uses and the ramp-up of the hydrogen system. Electrification of final energy consumption in the Union is aimed to increase from around 23% currently to around 32% in 2030. Member States should aim for an **electricity interconnectivity level of 15% by 2030**. Grids will need to adapt for the EU to have a more decentralised, digitalised and flexible electricity system with millions of rooftop solar panels and local energy communities sharing resources. By 2040, electricity transmission and distribution grids will require investments of EUR 1.2 trillion and hydrogen networks of EUR 240 billion.

The Draghi report called for **simplifying and streamlining permitting and administrative processes** as well as for a coordinated strategic approach to cross-border infrastructure development between the EU and Member States. The Council invited the Commission also called for Union-wide long-term investment planning to fully integrate and interconnect the EU electricity market, contributing to the Union's energy security, and infrastructure protection and resilience.

The European Parliament highlighted the importance of modernising and expanding grids, as well as investment into digitalisation, with a focus on integrated cross-sector and cross-level planning. It also emphasises cross-border infrastructure as a condition for successful deepening of the single market and for increasing the Union's resilience.

While the objectives of the 2013 TEN-E Regulation remain valid, **several gaps need to be addressed** to ensure the framework is suitable for supporting a decarbonised, competitive, and resilient energy system by 2050. First, existing and planned infrastructure projects are not sufficiently focused on achieving EU energy and climate objectives. Second, the implementation of cross-border infrastructure projects is too slow, increasing overall project costs and hindering system decarbonisation. Lastly, there are concerns regarding infrastructure security.

**CONTENT:** the proposal aims to **ensure the timely and efficient development and interoperability** of resilient energy infrastructure, renewable energy sources, and flexibility, including storage and recharging stations, across the EU. This will enable the EU to deliver on its energy and climate objectives, including ensuring energy affordability through better interconnectivity, leading to price convergence, reduced wholesale electricity prices and lower volatility of electricity prices as well as to accelerated connection of generation and demand.

To achieve the overall objective, this initiative is structured around four specific objectives:

- ensure that projects included in network development plans and selected as **projects of common and mutual interest** (PCI/PMIs) address appropriately and effectively identified infrastructure needs ensuring timely and efficient development of energy infrastructure;
- facilitate the use of cost-sharing tools for faster deployment of **cross-border infrastructure projects**, leading to an increased use of cost-sharing tools and a reduction in project deployment time;
- **shorten and simplify permitting procedures** for energy infrastructure, renewable energy and storage projects, as well as recharging stations, leading to shorter time to obtain necessary permits, making it feasible to meet the existing

deadlines, and simplified permit requirements;

- **enhance physical and cyber security** and resilience of cross-border energy infrastructure (PCIs/PMIs) by increasing the number of protection and resilience equipment and installations on critical network elements.

The Commission is tasked with the development of a **comprehensive central scenario** and sensitivity analyses, as necessary, at least every four years for the electricity, hydrogen and gas sectors to be used for the Union-wide ten-year network development plans (TYNDP). For the purpose of the central scenario development, the Agency for the Cooperation of Energy Regulators (ACER) is tasked with: (i) supporting as well as verifying the data collection by the Commission; (ii) developing and publishing a binding framework methodology for the identification of infrastructure needs. ACER is mandated to update its Cross-Border Cost Allocation (CBCA) recommendation and establish a central repository of all CBCA decisions.