European Network of Transmission System Operators for Electricity

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ENTSO-E Position on the EU Electrification Action Plan

15 September 2026

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ENTSO-E welcomes the European Commission's Electrification Action Plan, adopted on 17 July 2026, which identifies electrification as a key means for Europe's decarbonisation, competitiveness and security. The electrification of our economy will be the key catalyst for turning Europe's competitiveness, energy security and decarbonisation ambitions into reality. ENTSO-E particularly welcomes the recognition that electrification, grid enforcements and development, together with addressing the complexities of power system operation, must advance hand in hand. Every electric vehicle, heat pump and newly electrified industrial process can contribute to a resilient, affordable and flexible power system. The same applies to growing electricity demand from data centres and electrolysers.

Delivering Europe's electrification ambitions requires not only timely grid development and grid connections, but also an accelerated regulatory framework that incentivises investment through future-proof network charges, electricity bill reforms, and taxation measures. Reinforcing and efficiently utilising existing electricity grids, as well as expanding transmission capacity will be essential to connect growing electricity demand with generation and to balance increasingly diverse load and generation profiles across Europe. Flexibility resources and storage will play an essential complementary role in ensuring the efficient use of the electricity system. However, they will not replace the need for timely grid development.

Therefore, **the success of the Electrification Action Plan will depend on three factors**:

- Enabling timely investment in grid infrastructure through adequate financing, faster permitting procedures and resilient supply chains.
- Unlocking flexibility across electricity generation, consumption, storage and optimised grid use.
- Improving the management of grid connection requests to accelerate access to the grid.

In this context, **ENTSO-E supports**:

- **The proposal to set an ambitious indicative electrification target by 2040 supporting Europe's strategic objectives.** This would provide stakeholders and investors with clarity on the direction, while guiding electrification efforts without imposing overly prescriptive national or sectoral policies.
- **The focus on the electricity grid**, through measures including the revision of existing network codes on requirements for generators and demand connection, rapid smart-meter deployment, and support for smart charging and vehicle-to-grid solutions. Storage and demand response can make a significant contribution to future power system flexibility, the quantification of which can be supported through an assessment of the EU's long-duration flexibility needs for 2030, 2040 and 2050. Such an assessment should not be seen as a separate task, but should largely leverage existing processes and methodologies, notably the Flexibility Needs Assessment (FNA), which could evolve to cover these expectations. ENTSO-E stands ready to exchange with the Commission on how this could be achieved, drawing on the extensive operational and planning experience of TSOs. Together, these measures can help balance electricity surpluses and deficits in time and space, improve grid observability and controllability, and unlock flexibility from storage, electric vehicles, heat pumps and

demand response, while providing a stronger analytical basis for future investments in storage, flexibility and network infrastructure. In addition, connection requirements for large electricity consumers should continue to support system resilience. As electricity demand from data centres, electrolysers and other large loads grows, adequate demand connection requirements can help ensure predictable system behaviour during disturbances and avoid abrupt demand disconnections that could negatively affect system operations.

- **The focus on speeding up permitting.** This is particularly important for electricity infrastructure, as more than half of the transmission projects needed by 2030 are still awaiting permits. Permitting measures should ensure genuine simplification and transparency for infrastructure developers while safeguarding the environment and avoiding regulatory overlaps. This should build on the full implementation of existing EU legislation, notably Article 15e of RED III, as well as the ongoing Permitting Directive proposal under the Grids Package once finalised.
- **The focus on skills, workforce and cooperation across the electrification value chain**, including the creation of an Electrification Action Plan Alliance bringing together national authorities and relevant stakeholders. The Alliance can help ensure that electrification pathways remain aligned with electricity system needs, infrastructure planning and security of supply considerations. ENTSO-E also encourages greater attention to workforce shortages affecting grid build-out, system operation and electricity infrastructure delivery, which are critical enablers of large-scale electrification.

However, without adequate investments in infrastructure upgrades and enabling regulatory developments, large-scale electrification will be difficult to achieve. Therefore, **ENTSO-E recommends strengthening the implementation of the Action Plan to:**

- **Align the electrification target with electricity system development.** The proposed indicative target can guide electrification efforts while preserving flexibility for implementation at national level. It should also ensure that conditions are in place for the required investments in grid expansion, in line with electrification ambitions. ENTSO-E considers that the forthcoming Commission's impact assessment should provide a clear understanding of the infrastructure, flexibility and storage requirements needed to support such an electrification pathway, leveraging the relevant technical expertise of key stakeholders, including ENTSO-E. In assessing flexibility and storage requirements, the Commission should build on existing methodologies, notably the FNA, leveraging the operational and planning experience of TSOs and ENTSO-E. It should consider the impact on peak load, adequacy and grid connection requests, as well as realistic permitting, supply chain and project delivery timelines. It should also assess the assumptions regarding the implementation of existing grid-related measures and their contribution to the electrification pathway. ENTSO-E's scenarios, adequacy assessments and Ten-Year Network Development Plan can provide relevant technical inputs.
- **The focus on reducing electricity system costs through well-designed network charges.** ENTSO-E supports cost-reflective, transparent and non-discriminatory network charges that encourage flexible and system-friendly use of the grid, including by storage installations. For more details, see ENTSO-E's initial comments on the legislative proposal on network charges.
- **Strengthen supply chains for electricity grid infrastructure.** Clear and predictable industrial policies and simplified public procurement rules are needed to expand European manufacturing capacity and address spiking prices, long lead times and booked-out supply chains for critical grid components.

- **Ensure ENTSO-E's involvement in the implementation of storage measures.** Building on the Tripartite Agreement on Storage, ENTSO-E should contribute to its implementation by providing, together with TSOs, technical expertise on grid development and solutions to enable the efficient integration of storage into the electricity system. Additionally, ENTSO-E is well positioned to support the assessment of storage and flexibility requirements across the EU, drawing on expertise developed through National FNAs and technical studies, including the System FNA. ENTSO-E can contribute to developing robust and transparent estimates of future storage and flexibility needs, ensuring that any EU-wide targets, indicators and assessments are aligned with established methodologies and the results of national FNAs. This contribution will be particularly relevant in supporting the implementation of flexibility and storage measures under the Action Plan and in ensuring that evolving storage and flexibility needs are assessed through credible, evidence-based processes.
- **Coordinate sectoral electrification with grid planning.** Sector-specific electrification roadmaps can provide valuable inputs for scenario modelling and help anticipate future electricity demand, infrastructure needs and flexibility requirements. ENTSO-E, TSOs and DSOs should be involved in their development, particularly for industrial electrification, to ensure that infrastructure readiness, connection needs and system impacts are adequately reflected. This coordination will also help ensure that expected developments in demand are appropriately reflected in future electricity demand forecasts and grid planning.
- **Ensure GeoDep builds on existing grid planning tools and processes.** The Commission should clarify the methodology underpinning the GeoDep platform, including how infrastructure availability, connection timelines and planned network developments will be reflected. Existing grid development tools, platforms, data and planning processes should be leveraged to avoid creating parallel or potentially inconsistent assessments of grid availability. ENTSO-E and TSOs should be consulted in the development of the platform where electricity infrastructure data and network planning information are used, to ensure consistency with established planning methodologies and processes.