

10 Key Points for a Revised Trans- European Energy (TEN-E) Regulation

Eurelectric recommendations

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Distribution & Market Facilitation Committee
Generation & Environment Committee
Markets & Investments Committee

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Revision of the Trans-European Energy (TEN-E) regulation

Eurelectric recommendations

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KEY MESSAGES

During the discussion on the new framework for the Connecting Europe Facility instrument, legislators have included a requirement for the Commission to evaluate the effectiveness and policy coherence of the [Regulation \(EU\) No 347/2013 on guidelines for trans-European energy infrastructure \("TEN-E Regulation"\)](#)¹ in light of its 2030 and 2050 decarbonisation commitments by end of 2020, and, if appropriate, accompany this with a revision. As the European Commission is going to evaluate the TEN-E Regulation in 2020 and most likely to submit this assessment to the European Parliament and to the Council by 31 December 2020, Eurelectric calls on the European Commission to:

1. Revise the TEN-E Regulation and make sure that it is fully in line with the EU energy and climate targets, as well as the EU's long-term decarbonisation commitment.
2. Increase significantly the deployment of smart grids at all voltage levels to enable the integration of renewables, support the development of e-mobility and electrification of heating & cooling.
3. Ensure that only projects contributing to a carbon-neutral economy will be eligible as projects of common interest and prioritise direct electrification.
4. Align TEN-E Regulation with the European Green Deal, a revised Ten-Year Network Development Plan (TYNDP) governance and EU financing instruments.
5. Consider the increasing need for flexibility in the energy system provided by multiple sources and the possibility to tackle systems needs other than network expansion.
6. Introduce a robust climate impact assessment as condition for the eligibility of the Projects of Common Interest (PCIs) for the EU's financial assistance.
7. Identify and develop synergies with other sectors, such as transport, digital, heating, cooling and industry.
8. Support the deployment of digital technologies to increase the smartness of the system, higher renewable penetration and sector integration.

¹ The Commission shall evaluate the effectiveness and policy coherence of Regulation (EU) No 347/2013 and submit an evaluation to the European Parliament and to the Council with the result of this review by 31 December 2020. In that evaluation the Commission shall consider, inter alia, the Union energy and climate targets for 2030, the EU long-term decarbonisation commitment, and the energy efficiency first principle. The evaluation may, where appropriate, be accompanied by a legislative proposal to revise that Regulation.

9. Strengthen the efficiency of the PCI permitting process.
10. Maintain the level of ambition for the deployment of electric transmission and interconnectors projects, also including those in non-EU countries.

1. Revise the TEN-E Regulation and make sure that it is fully in line with the EU energy and climate targets as well as the EU's long-term decarbonisation commitment.

A revised TEN-E Regulation would have to reflect the EU's energy and climate targets for 2030, the EU long-term decarbonisation commitment, and the energy efficiency first principle. The decarbonisation of Europe's power sector is achievable by 2045 and will underpin the wider decarbonisation of the EU economy for which especially electrification will be a crucial driver. This transition will encompass very significant investments in carbon neutral power generation, industrial and energy efficiency solutions, digitalisation, various flexibility enablers (such as storage, electro-mobility, demand-side management), negative emission technologies, low, medium and high voltage networks as well as the entire spectrum of smart grid solutions. The decarbonisation of the power sector by 2045 will in itself require at least 100 billion EUR/year² of investments in generation and storage. In addition, between 60 and 110 billion EUR/year should be further invested into transmission and distribution systems.³ In this context, the TEN-E Regulation should facilitate the fast and coordinated build-out of a European electricity infrastructure. A well-connected European-wide electricity network is one cornerstone of a decarbonised electricity system and will help integrate an ever increasing share of renewable electricity.

2. Increase significantly the deployment of smart grids at all voltage levels to enable the integration of renewables, support the development of e-mobility and electrification of heating and cooling.

To date, only a few smart grid projects have been eligible as PCIs mainly due to too existing strict criteria⁴. **It is paramount to broaden eligibility criteria, indicators, thematic areas as well as the energy infrastructure categories to the specificities of smaller, decentralised infrastructure projects.** The current decentralisation, electrification and digitalisation trends are transforming the power grid, trickling potential effects to the wider European energy system. Threats stemming from cyber-attacks or natural disasters are also increasing as systems and networks, even local, are becoming more interconnected across the EU. **In the light of changing infrastructure and system security needs, a revised TEN-E regulation should take a wider system approach and help to address the challenges faced by the distribution grid as well as reflect the role of distribution system operators (DSOs)⁵ in facilitating this transition and further contributing to the European Union's objectives.** For instance, support towards cybersecurity and projects aiming at increasing the climate resilience should be further encouraged in TEN-E. The overarching objectives of the revised TEN-E regulation have to remain the stability of the overall system, the security of supply and the large-scale integration of renewables.

² [Eurelectric, Decarbonisation Pathways, 2018](#)

³ EC long term strategy 2018, COM/2018/773 final

⁴ Between 2014 and May 2019, only 3 smart grid projects have benefited from CEF-Energy funding against 63 gas and 61 electricity transmission projects being financed.

⁵ [Eurelectric, the Value of the Grid, 2019](#): Over 90% of all distributed RES generation is and will most likely continue to be connected at distribution grid level. More and more consumers, mostly connected to the distribution grid are expected to provide demand-side flexibility, with 120 GW-150 GW of flexible load available by 2045. Investments will also be required to enable electrification in transport and buildings, and further facilitate the integration of 30 million electric cars on the road by 2030.

3. Ensure that only electricity and gas projects contributing to a carbon neutral economy will be eligible as projects of common interest and prioritise direct electrification.

Projects fostering electrification and direct use of electricity supplied from renewable and low carbon sources should be the preferred option as it is the key means of decarbonisation. A revised TEN-E regulation should give priority to integration of renewable energy and system flexibility projects while fostering interconnection and cross-border exchanges. In a high renewable future, balancing and flexibility options from both within and outside the power sector will compete. The required flexibility will primarily be provided by the electricity system itself but other options, such as energy storage or power-to-gas products (e.g. Hydrogen), will also play a role. However, the uncertainty around future power-to-gas innovation and the expected potential for future commercial availability/maturity must be acknowledged. The transformation of an infrastructure fit for renewable and decarbonised gases should be mainly based on the repurposing of the existing network which would not only avoid stranded investments but also ensure a cost-efficient transition. However, the construction of new infrastructure could become necessary in specific places to successfully build-up a grid for renewable and decarbonised gases, as long as it contributes to a cost-effective and future-proof decarbonisation pathway. In any case, possible new gas infrastructures or network upgrades should undergo a sound cost-benefit analysis in order to avoid stranded costs. The increasing importance of potential substitutability and synergies between the electricity and gas infrastructures should be considered in order to provide additional efficiency and flexibility solutions for the entire energy system and successfully decarbonise all segments of the European economy. This is why **the effective coordination of the planning and operation of infrastructure of the different energy carriers becomes key**. Further, the inclusion of a sustainability indicator in monitoring of gas markets by ACER would help to guide decisions to prioritise solutions towards reducing the use of unabated fossil gas in line with EU decarbonisation commitments.

4. Align TEN-E with the Green Deal, a revised TYNDP governance and EU financing tools.

The revision of the TEN-E should be embedded into an overarching public investment plan i.e. the recently announced Green Deal Investment Plan and further reflected by energy and economic governance tools such as NECPs and the European Semester. **Alignment with the Sustainable Finance Strategy (especially the EU Taxonomy) as well as the EIB energy lending policy is needed to provide project holders and Member States with a long-term certainty of what type of infrastructure projects could be further financed.** Consistency should be sought to ensure that infrastructure planning instruments (such as TYNDP scenarios, future DSO network development plans) and the CBA⁶ used for the PCIs projects are aligned with the Paris Agreement and contribute to EU energy & climate objectives. In this regard, a revised governance for the elaboration of the TYNDP for electricity and gas should be accomplished during the review of the TEN-E Regulation. The European Commission, ACER, NRAs and Member States should ensure a close oversight of this process. It shall be made sure that ENTSOs proactively consult various stakeholders (such as market parties and DSOs) at earliest stage especially when assumptions on demand and supply are being defined. A revised TEN-E Regulation will make a decisive contribution to the Green Deal by enabling investment into new infrastructure, fitting to the decarbonisation challenge.

5. Consider the increasing need for flexibility in the energy system provided

⁶ Comments from the Electrification Alliance on the ENTSO-E and ENTSO-G draft TYNDP 2020 scenario report

by multiple sources and the possibility to tackle systems needs other than network expansion.

A system-wide shift from centralised and dispatchable generation to higher shares of decentralised and variable renewables will require any kind of flexibility (from second-to-second up to long-term) to respond to the variability of parts of the production. The revision of TEN-E should provide the framework and the governance to facilitate the most efficient solution for developing cross-border exchanges. This implies considering not only network expansions or reinforcements but also additional flexibility resources at the most relevant location, whereas investment decisions have to be taken with total independence and transparency. In this regard, a **methodology could be introduced to determine whether it would be beneficial to invest in new network infrastructure or flexibility options** within a given regional market or geographical zone. In addition, **all types of flexibility resources and technologies including demand response, storage and interconnectors providing crucial system services should have the possibility to compete** for the provision of the identified system need. The opportunity to have storage projects eligible to the PCI status should be thoroughly assessed, taking into account two key elements: on the one hand, the impact of the need for new network investments. On the other hand, storage, contrary to distribution or transmission projects, is as a general rule not a regulated asset and is in competition with other sources of flexibility, including demand-side response and dispatchable generation, not being eligible to the PCI status. These providers of flexibility and essential system services, which assets are not fully integrated network components should also be considered within a revised TEN-E regulation, for instance by **introducing a specific PCI category for market-based tools relieving constraints on infrastructures, i.e. non-network related PCI flexibility & storage projects**⁷.

6. Introduce a robust climate impact assessment as condition for the eligibility of PCIs for EU's financial assistance.

Environmental benefits brought by projects such as RES integration or CO₂ reduction should also be better taken into account in the selection process. A dedicated sustainability indicator to be included in the CBA as part of positive externalities for all infrastructures projects receiving EU's financial assistance for works and studies. Access to financial assistance, such as the Connecting Europe Facility is key to materialise PCI projects and should be further improved.

7. Identify and develop synergies with other sectors, such as transport, digital, heating, cooling and industry.

Building on synergies foreseen in the new Connecting Europe Facility regulation, the revised TEN-E should therefore promote a more transversal approach between sectors. For instance, replicable projects such as cross-border LV/MV grids connecting renewables to EV charging infrastructure on dedicated thematic corridors showing a clear cross-border impact, not necessarily involving two or more Member States with a common border (e.g. with beneficial implications or synergies for more than one Member State). As a consequence, a revised TEN-E should put specific emphasis on multi sectoral synergy projects as well as Renewable Cross-Border Projects, introduced by the CEF Regulation. For instance, projects aiming at maximising the deployment and integration of offshore renewables to two or more countries could be further prioritised.

⁷ Network components as defined in Directive (EU) 2019/944 on common rules for the internal market.

8. Revise eligibility criteria to support the deployment of digital technologies and process with the aim to increase the smartness of the system, higher renewable penetration and sector integration.

Significant investments are needed to digitalise and modernise the energy system. Projects using innovative technologies face financing gaps due to high investment risks, high capital expenditures and partly also a higher share of operational costs. These additional costs and risks are generally not covered by the regulatory support. To bridge the gaps and avoid overlaps with other innovation and research schemes such as Horizon Europe, a **revised TEN-E regulation could further support mature technologies meeting a certain technology readiness level**. This would include for instance digital platforms, sensors, protection to control voltage, software and hardware tools aiming at active coordination of grid users, including data communication (ICT).

9. Strengthen the efficiency of the permitting process of PCI projects.

As permitting is still the most frequent reported reason for delays in the realisation of PCI projects, a revised TEN-E should further seek ways to accelerate permit granting. This could be achieved by highlighting the overriding public interest in permitting of all PCI projects, whereas also **project related infrastructure and measures should be seen as integral elements of a PCI project - further leading to a swift, prioritised and streamlined permitting process of PCIs in Member States**. For this purpose, the Commission should monitor the permitting process more closely and should enforce the time schedules for permitting foreseen in the regulation more strictly. Furthermore, the reporting to ENTSO-E and to the Commission for all non-network related PCIs should be adjusted to the technology at hand to reduce the bureaucratic burden and increase the informative value of the data.

10. Maintain the level of ambition for electric transmission projects, also including third countries.

The further development of transmission capacities is paramount to ensure an optimal integration of higher share of renewables in the system and further deliver the EU energy and climate objectives. For instance, the acceleration of offshore projects will require that the offshore grid does not become a bottleneck, and the revised TEN-E needs to take this into account by prioritising projects that contribute to this. **Proposed changes should be considered as an addition to the existing framework and should not be conducted to the detriment of electric transmission projects as it would unnecessarily hinder the development of infrastructures in Europe**. A broadening must go hand in hand with **an increase of the overall envelope**, being allocated to the projects. In this regard, the revised TEN-E regulation should take into account the contribution of third countries and to ensure the continuous eligibility of cross border projects, all complying with European environmental standards. Third countries can provide competitive balancing capacity, clean energy to Europe and therefore contribute to the EU's energy and climate objectives for 2030 and 2050 through high renewables penetration. In this regards, it is particularly important to ensure the market integrity across Northern Ireland and Ireland borders and regardless of Brexit.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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