

# ENTSOG PROPOSALS FOR TRANS-EUROPEAN NETWORKS FOR ENERGY (TEN-E) REGULATION REVISION

The European Commission has announced a revision of the Trans-European Networks for Energy (TEN-E) Regulation in order to reflect EU climate and energy priorities as well as taking stock of experiences on EU level energy infrastructure planning. Since TEN-E serves as entry portal for selection of EU supported Project of Common Interest (PCI), **the future-proofed TEN-E and PCI selection process driven by European Green Deal and EU sustainability agenda, will require a full energy system view, with local and European dimension. It shall support smart sector integration solutions, that respond to system needs in the most efficient way, also by fostering respective pilot projects and dedicated research/investment programs for new technologies.** Building on expertise and cooperation between 90 electricity and gas TSOs, and on feedback from multiple stakeholders, ENTSOG proposals for the TEN-E revision include:

## Proposal 1 – Sustainability: Delivery of EU targets & Green Deal

1. ENTSOG is ready to take on the role of the Hydrogen TSO association which would be efficient in terms of time, expertise, cost and delivery. **ENTSOG is committed to delivery of the needed EU-wide hydrogen infrastructure, starting already with TYNDP 2022.**
2. Revise and strengthen the **corridor concept** to include focus on hydrogen to enable the medium-term development of an EU Hydrogen market. National Hydrogen Strategies aligned with the EU Hydrogen strategy require proper consideration under TEN-E.
3. TEN-E should further define the **sustainability criteria** building on EC sustainability indicators in line with the Trinomics/Artelys study (published in October 2020). ENTSOG is working together with EC on implementing the sustainability indicators and this will be **included already in the TYNDP 2020 project assessment**. In summary, it considers fuel switching taking into account GHG emissions, including methane emissions along with non-GHG emissions (pollutants such as NO<sub>x</sub>, SO<sub>2</sub>), as well as energy efficiency measures. The study concludes the following on the sustainability indicators:
  - Use simulations prioritising existing infrastructure over projects in the future operation of the gas network.
  - Allocate CO<sub>2</sub> emission savings based on flows instead of capacities, ensuring that projects which are not used in simulations are not allocated benefits.
  - The increase of gas demand results in fuel switches only when there is a corresponding decrease of the demand for other carbon-intensive fuels. Evaluate effects of fuel switching on emissions of other gases (NO<sub>x</sub>, SO<sub>2</sub>...)
  - An indicator building on an interlinked gas, heat and electricity model: allows for better computation of sustainability indicators on all aspects (CO<sub>2</sub>, non-GHG-emissions, impact of RES integration and renewable gas integration). In TYNDP 2020 ENTSOG considers GHG non-CO<sub>2</sub> emissions as these emissions are assessed as part of the joint scenario building exercise and simulations.
  - Implementing RED II criteria, while considering gases with comparable carbon footprints to renewable gases, such as low-carbon hydrogen.
  - Reflect alternatives to infrastructure investments, such as energy efficiency measures, in line with the Energy Efficiency First principle; Consider methane emissions.
4. **The PCI selection: Should consider investments enabling renewables, low-carbon and decarbonised gases, including Energy Transition Related projects to convert gas grids** to accept hydrogen blends, as well as pure hydrogen under European Hydrogen Backbone, and CO<sub>2</sub> grids.

- Should consider infrastructure projects supporting concrete plans for achieving carbon emission reductions medium-term via a **Coal-to-Gas Switch** and potentially longer-term switch to hydrogen/low carbon gases, and address just transition of coal regions and role of CCGT as back up for renewables.
- More specifically, pipelines that are initially operated with natural gas, and accommodating increasing hydrogen share and allowing from a certain date onwards a switch to hydrogen, should be PCI-eligible when ready to operate with pure hydrogen.
- **Projects currently in execution phase should not be impacted by upcoming changes of the regulatory framework.**

TEN-E revision is an opportunity to clarify access to EU level financial support for the hydrogen project promoters gaining renewed PCI label and access to Connecting Europe Facility (CEF) funding. In relation to the general discussion on financial support, it could also be an opportunity to bring clarity to the role of funding instruments such as IPCEI, Recovery and Horizon Europe, central EU lending via EIB and EBRD for the projects supporting the local or regional transition, even though not demonstrating immediate trans-European and/or cross border effect in CBA.

## Proposal 2 – Coordinated development of an EU-wide Hydrogen Backbone

European Commission in Hydrogen Strategy finds that using repurposed existing gas pipelines is the most cost-effective and sustainable manner of developing the Hydrogen Backbone. Planning and execution of European Hydrogen Backbone, mainly based on repurposed infrastructure, should start now and can contribute to successful delivery of Recovery Plan objectives.

**ENTSOG believes that TEN-E should support the hydrogen ‘backbone’ planning.** However, TEN-E will need to be updated to take account of the new market realities – including the local development of hydrogen production and consumption centres, even if not of the cross-border relevance yet.

The TEN-E should also recognize that the TYNDP process remains the foundation for future network planning at EU level, not at least given the increasing inter-linkage between sectors which is the foundation of Energy Sector Integration, including electricity, gas and hydrogen networks.

**ENTSOG is ready for the upcoming TYNDP 2022 to include the Hydrogen and Energy System Integration strategies.**

To fully update the TYNDP process, a change to the existing TYNDP process, PCI criteria and the underlying CBA methodology will be required. ENTSOG finds it beneficial that this change will happen in 2021 already. To speed up repurposing of existing infrastructure, a proper incentivisation and a suitable regulatory framework via revision of the gas legislation is needed. ENTSOG is committed to facilitate such delivery of an EU-wide hydrogen infrastructure, starting with the upcoming TYNDP 2022: hydrogen is already included in joint TYNDP 2020 scenarios, in project collection and in network modelling, and ENTSOG will work jointly with ENTSO-E to deliver on the Energy System Integration strategy.

## Proposal 3 – Joint Advisory Panel for Scenarios

**ENTSOG proposes to establish a Joint Advisory Panel for Scenarios (between ENTSOG and ENTSO-E). The main tasks of such panel would be to provide transparency and exchange of expertise on TYNDP scenarios** and other elements of the Interlinked Model, on the best ways to address:

- EU policy goals including Hydrogen & ESI strategies and Energy Efficiency First principle.
- Avoiding unsustainable and stranded investments.
- Applying the full energy system perspective: life cycle analysis and address the issue of emissions abatement thanks to technologies applied locally (also at DSOs levels), not exclusively in the regional/cross border context (P2G,-

decarbonising local industrial clusters, hydrogen valleys, hydrogen storage, coal-to-gas switch).

- The interlinked model achievements and further developments.

The panel is to deliver publicly transparent high-level stakeholders’ opinions and advice regarding the TYNDP process. The governance of the panel would be discussed and agreed on between ENTSO-E and ENTSOG and in close dialogue with the EC. The composition should be a broad representation of industry, institutions and civil society/NGOs.