

# A Technology-Neutral European Grids Package for an Integrated Energy System

The European Grids Package represents an important step toward strengthening Europe's energy infrastructure and enabling energy transition. Accelerating infrastructure deployment, improving cross-border coordination and strengthening infrastructure planning will be essential to deliver decarbonisation, affordability and security of supply.

Europe's future energy system will be built on multiple energy vectors, including renewable and low-carbon gases, such as biomethane and hydrogen, and CO<sub>2</sub> transport and storage infrastructure. **Infrastructure frameworks must therefore remain technology-neutral and system-oriented**, enabling the most efficient solutions across sectors and regions.

Eurogas supports the objectives of the European Grids Package and proposes targeted improvements to permit-granting procedures and to EU infrastructure planning under TEN-E.

## 1. Align Permitting Across All Energy Vectors

### *Policy recommendations*

- **Replicate electricity permitting acceleration measures across energy carriers (Art. 8).**

The permitting acceleration measures introduced for electricity infrastructure under Article 8 of the proposed amendments to the Electricity Directive, in particular the streamlined permitting procedures and binding timelines set out in paragraphs (6)–(10), should be replicated for renewable and low-carbon gases infrastructure, including hydrogen, biomethane and e-methane production, injection and transport infrastructure in the Hydrogen and Decarbonised Gas Directive. Where relevant, additional enabling provisions such as those related to exemptions from nitrogen constraints under paragraph (11) should also be considered for renewable and low-carbon gases infrastructure. Applying permitting simplification consistently across energy carriers would avoid reinforcing an electricity-centric implementation and support the development of an integrated energy system.

- **Ensure equal permitting treatment for hydrogen storage infrastructure (Art. 16h).**

Hydrogen storage should benefit from the same accelerated permit-granting procedures applicable to other stand-alone energy storage technologies, while taking into account the specific characteristics of large-scale infrastructure. The current exclusion of hydrogen storage from Article 16h creates regulatory asymmetry and risks undermining investment certainty for long-duration storage infrastructure required for renewable hydrogen integration.

### *Why technology-neutral permitting matters*

Lengthy and fragmented permitting procedures remain one of the main barriers to infrastructure deployment across Europe.

Technology-neutral permitting frameworks will enable all infrastructure needed for the energy transition – including electricity networks, hydrogen infrastructure, renewable and low-carbon gas infrastructure, and CO<sub>2</sub> transport networks – to develop in a coordinated and efficient manner.

## 2. Strengthen TEN-E for a balanced and responsive infrastructure planning

### *Policy recommendations*

- **Ensure balanced operator participation in EU energy system planning (Art. 11).**

EU-level infrastructure planning scenarios should be developed in close cooperation with Gas and Electricity transmission system operators (TSOs), distribution system operators (DSOs) and hydrogen network operators (HNOs) to ensure operational realism and credible demand assumptions. The governance framework should also ensure the structured involvement of the European Network of Network Operators for Hydrogen (ENNOH) and the EU DSO Entity in the joint scenario process, including through data provision and participation in scenario development, so that planning assumptions adequately reflect infrastructure realities and distribution-level developments across the energy system.

- **Maintain shorter and responsive infrastructure planning cycles (Art. 11).**

Infrastructure planning frameworks should remain responsive to rapidly evolving energy system developments. Extending planning cycles from two to four years risk limiting the ability to adapt planning assumptions to evolving demand, technologies and market conditions. **We recommend maintaining TYNDP planning cycles within a two-year timeframe.**

- **Ensure proportionate eligibility criteria for hydrogen projects under TEN-E (Annex II).**

The proposed increase of the electrolyser capacity threshold for Projects of Common Interest (PCI) and Projects of Mutual Interest (PMI) eligibility from 50 MW to 500 MW risks excluding many viable hydrogen projects, including phased developments, industrial clusters and regional hubs that are essential for the gradual build-up of the hydrogen market. **The existing 50 MW threshold should be maintained.**

- **Simplify procedures for existing PCI and PMI projects on the Union List (Annex III).**

Where PCI and PMI projects remain on the Union list and have already obtained regulatory approval, reached a final investment decision or demonstrate sufficient construction progress, project promoters should not be required to resubmit the full project documentation. **Simplified update procedures focusing only on project updates, national support and implementation progress would reduce administrative burden and streamline the Union List process.**

- **Support the development of hydrogen infrastructure, including repurposed gas assets (Art. 2(17)).**

Hydrogen infrastructure will be a key pillar of a decarbonised energy system. TEN-E provisions should enable the repurposing of existing gas infrastructure and provide regulatory clarity for hydrogen-ready pipelines to safeguard the bankability of repurposing projects. In addition, hydrogen blending in existing gas distribution networks should be recognised as a cost-efficient transitional pathway to support early hydrogen market development, particularly in emerging markets. In this context, DSOs should not be required to transport pure hydrogen from commissioning where technical, safety or market conditions do not justify it. **The definition of ‘repurposing’ in TEN-E should reflect the progressive deployment of hydrogen networks.**

- **Adapt permitting arrangements for multi-country CO<sub>2</sub> infrastructure projects under TEN-E (Art. 8).**

For cross-border CO<sub>2</sub> transport value chains where infrastructure components are developed separately across different Member States, the TEN-E permitting framework should allow flexibility in the designation and coordination of competent authorities under Article 8. **This would ensure efficient permitting while recognising that different parts of the value chain may be developed and authorised separately.**

- **Support the development of CO<sub>2</sub> transport and storage infrastructure under TEN-E.**

TEN-E provisions should facilitate the deployment of CO<sub>2</sub> transport and storage infrastructure required to support industrial decarbonisation and EU climate objectives. Permitting timelines under TEN-E should be significantly reduced and aligned with EU industrial decarbonisation objectives, including the objective of EU-wide annual injection capacity of at least 50 million tonnes by 2030 established under the Net-Zero Industry Act, to enable the timely deployment of CCS infrastructure. In particular, the duration of the pre-application and permitting phases should allow CCS projects to reach final investment decisions in time to support the EU’s 2030 CO<sub>2</sub> storage capacity targets.

#### *Why coordinated and inclusive planning is essential*

Effective infrastructure planning is essential to ensure that investments across the energy system are coordinated, efficient and aligned with decarbonisation and security objectives.

The energy transition will largely occur at local level, across buildings, industry and transport systems. Currently, biomethane injections in the gas network occur mostly at the distribution level, while DSOs are formally positioned to play a key role in hydrogen integration. Infrastructure planning must therefore combine EU-level coordination with strong input from national and local actors to ensure that planning reflects real system needs and supports resilient and affordable energy solutions.

At the same time, TEN-E planning and governance frameworks must support the timely development of emerging infrastructure such as hydrogen networks and CO<sub>2</sub> transport and storage systems, while enabling the repurposing of existing gas infrastructure where appropriate.

## Conclusion

The European Grids Package offers an important opportunity to strengthen Europe’s infrastructure framework and accelerate energy transition. By promoting technology-neutral permitting frameworks, balanced infrastructure planning and governance under TEN-E, and support for hydrogen, renewable and

low-carbon gases, and CO<sub>2</sub> infrastructure, the Grids Package can contribute to delivering a resilient, affordable and secure European energy system while enabling the gradual decarbonisation of Europe's economy.

**Leveraging the complementarity between renewable molecules and electrons will be essential to deliver a secure, competitive and affordable European energy system.**