

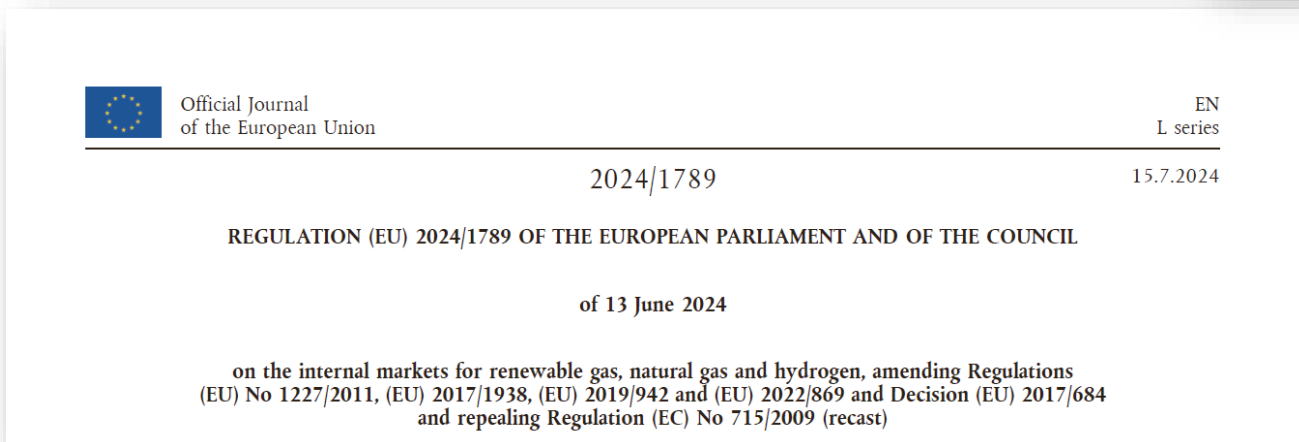
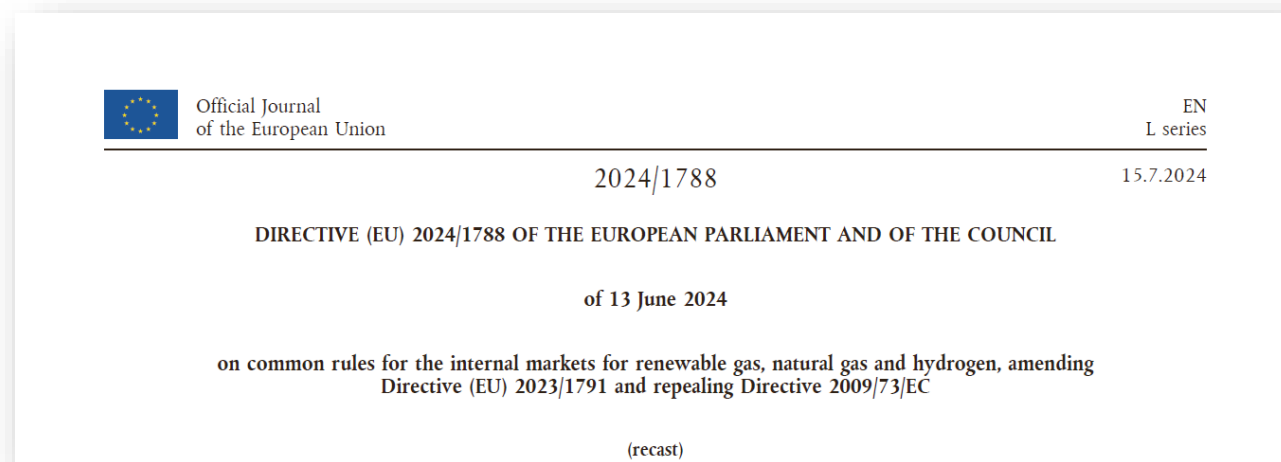
EU gas decarbonization package

13th February 2025



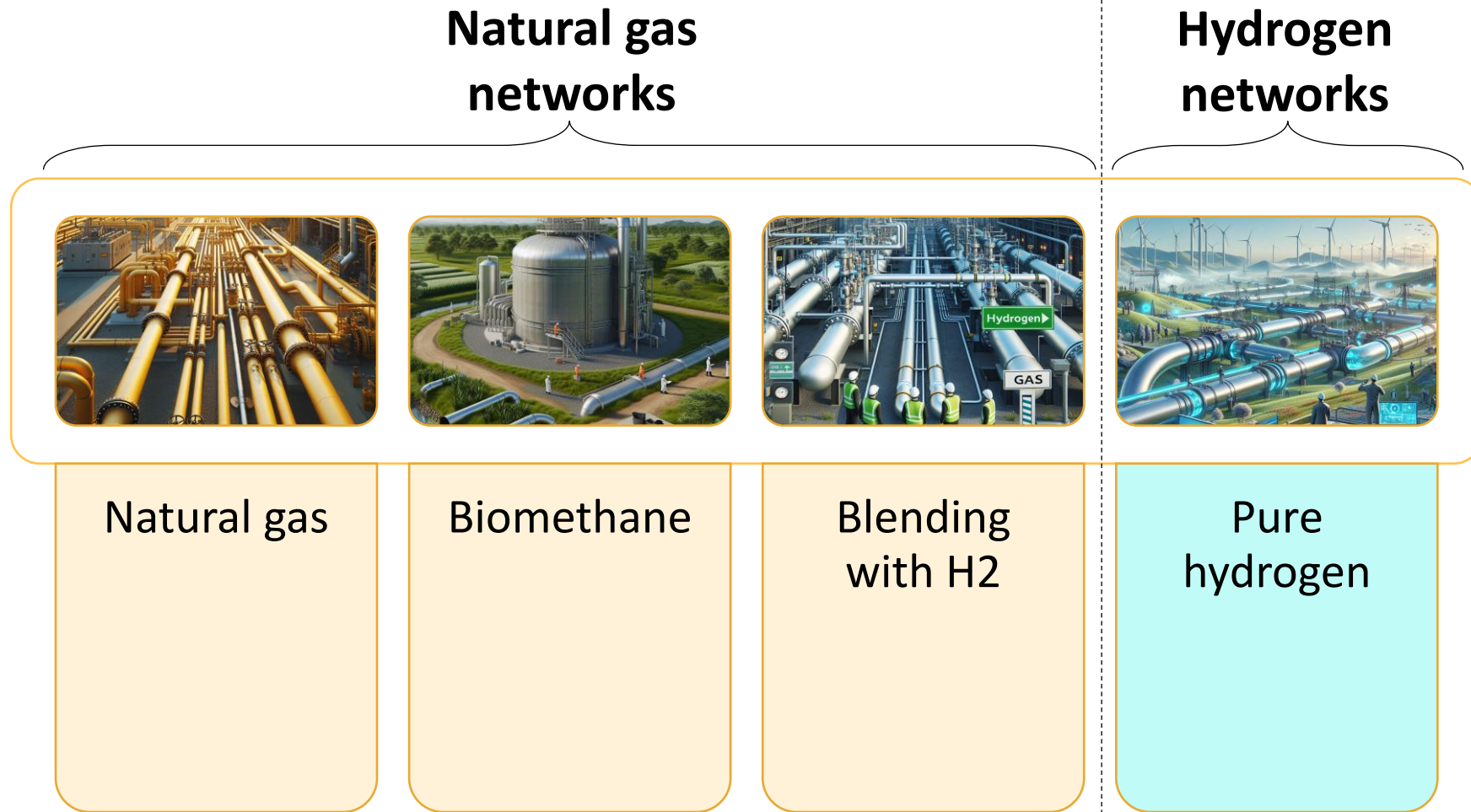
EU Gas decarbonization package

Directive
(Needs to be transposed)
Transposition by 5 August 2026)



Regulation
(Direct application, 6 months after)
Applicable from 5 February 2025

Scope of the regulations



Scope of the regulations

Some considerations about blending



Blending with H2

It is a real option, for example for the take off of new renewable hydrogen projects but it should be a **last-resort solution**, as:

- It is less efficient compared to using hydrogen in its pure form.
- It diminishes the value of hydrogen.
- Impacts the operation of gas infrastructure, natural gas end-user applications, and the interoperability of cross-border systems.

Nevertheless:

- MS retain the right to decide whether to allow hydrogen blending in their national gas systems and to what degree such blending will be allowed

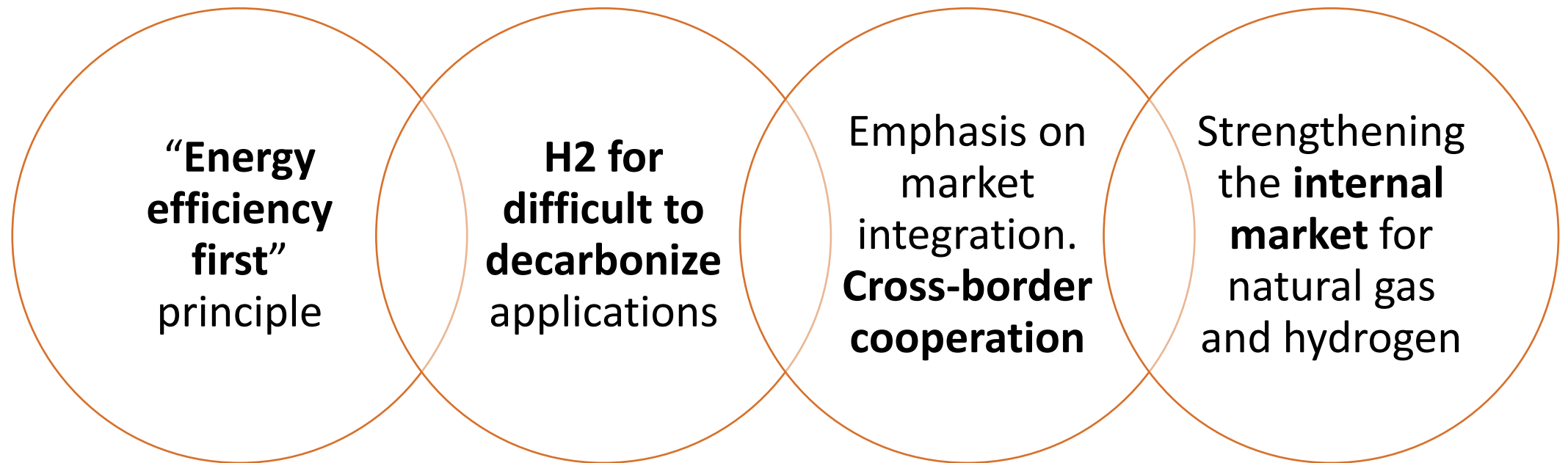
Objectives

1. **Decarbonization** of the internal natural gas market
2. Creation of an internal **hydrogen** market

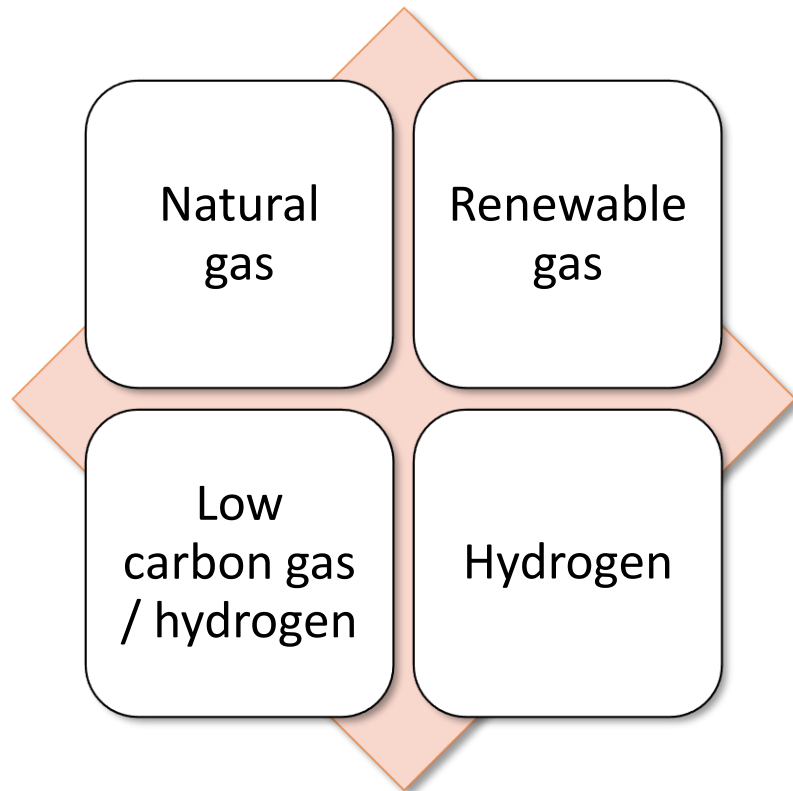
and...

3. Integrated **planning** of energy vectors
4. Strengthening rules for **consumer** protection and **security of supply**

Main principles



Different kind of gases



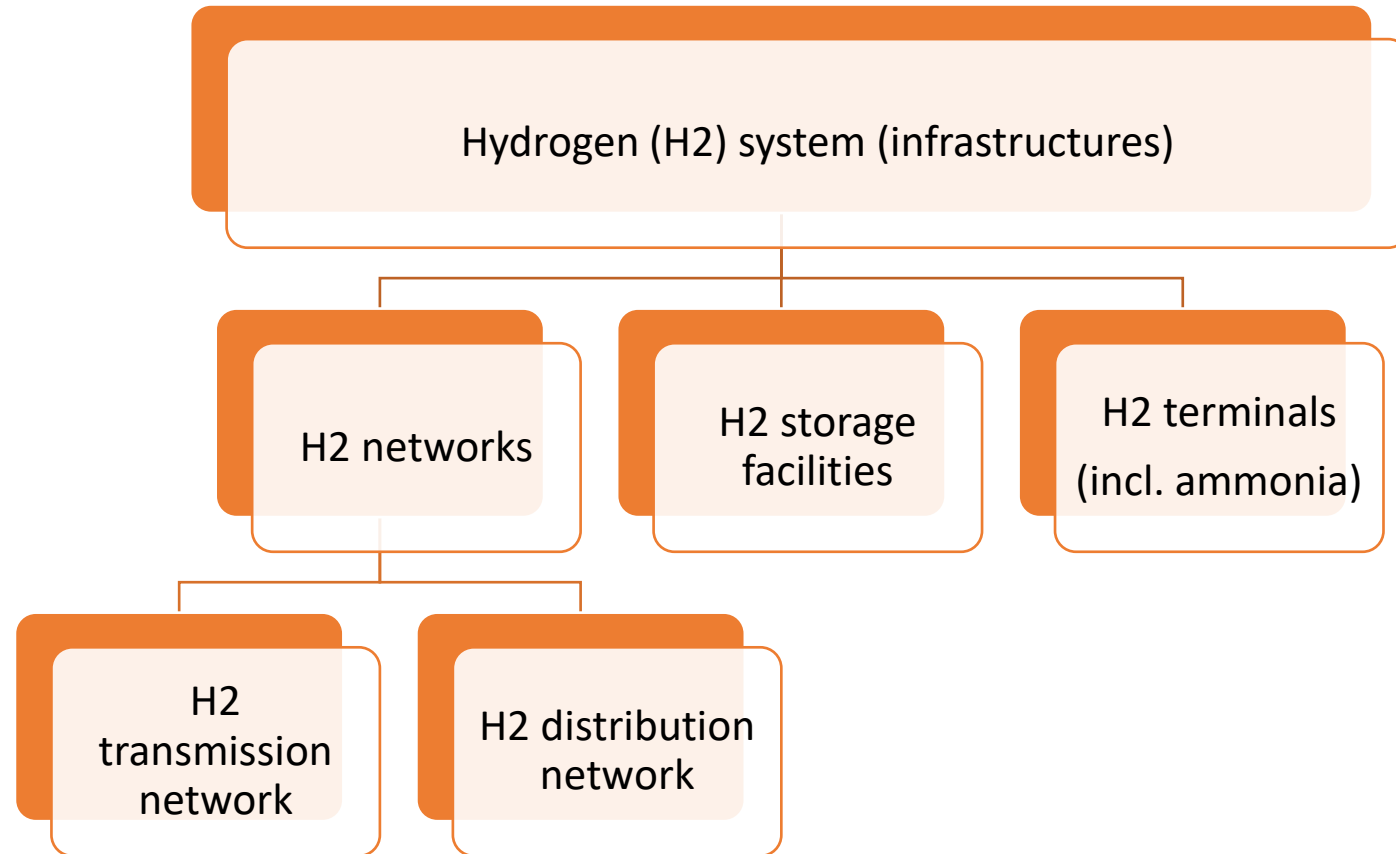
Natural gas: gas that primarily consists of methane, including biomethane, that can be injected into the natural gas system.

Renewable gas: biogas, including biogas upgraded to biomethane, and renewable fuels of non-biological origin (RFNBO), i.e. renewable hydrogen.

Low-carbon gas: recycled carbon gases, low-carbon hydrogen and synthetic gaseous fuels the energy content of which is derived from low-carbon hydrogen, that meet the greenhouse gas emission reduction threshold of 70 %.

Low-carbon hydrogen: hydrogen the energy content of which is derived from non-renewable sources, which meets the greenhouse gas emission reduction threshold of 70 %.

Hydrogen system



Consumers protection and retail markets

1. Supply prices and PSOs for natural gas and H2:

- Prices freely set and reasonable. Possibility to intervene in the price of natural gas (vulnerable and small customers).
- Possibility to implement public service obligations.

2. Contractual rights, switching and billing (natural gas and H2):

- Contractual rights are regulated, including notice periods, etc.
- Right to change supplier (within 24 hours from 2026) without charges.
- Possible penalties for early cancellation only for fixed-price contracts, with conditions.
- Accurate, easy billing, understandable, etc.

3. Consumer protection during the natural gas phase-out:

- MS shall consult, inform and advise customers with options, financing, etc.
- Particular attention to vulnerable clients.

4. Comparison tools:

- For customers up to 100 000 kWh/y of consumption.
- One or more, public or private platforms.
- Each MS will designate a competent authority to issue trust marks or develop a public tool.

Consumers protection and retail markets (cont.)

5. Active customers:

- Producers of renewable gases.
- Facilitate connection and participation in the market.

6. Smart meters:

- For natural gas, subject to CBA.
- For H2, CBA only for household consumers.

7. Single points of contact:

- To provide customers with all necessary information concerning their rights, comparison tools, etc.

8. Out-of-court dispute settlement:

- Simple, fair, reasonable, transparent, independent, cost-effective and efficient mechanisms to solve disputes.

9. Protection of vulnerable customers and consumers affected by energy poverty:

- Protections reinforced, in particular when affected by decommissioning of the natural gas system.
- Last resort supplier.

Renewable gases integration

1. Access/connection to the natural gas transportation and distribution network:

- Access must be allowed and only denied in case of lack of capacity.
- MS shall ensure that companies make the necessary investments if it is economically viable or if the user is willing to pay.

2. Publication of technical regulation for connections:

- TSOs and DSOs will establish procedures for the non-discriminatory connection of producers of these gases.

3. Connection costs:

- MS shall provide an enabling regulatory framework in relation to connection fees and costs.
- Connection fees and costs must be published as part of the procedures for the connection.

4. Certification of renewable and low-carbon fuels:

- Renewable gases certified in accordance with RED II and for low-carbon fuels still pending further development.
- Certification bodies will be subject to EC recognition.

5. Reverse flows:

- DSOs and TSOs must work together to enable reverse flows or alternative means to facilitate the market integration.
- Major investments in the transmission network resulting from shall be reflected in the TYNDP.

Integrated network planning

1. Planning of transmission networks (for both, hydrogen and natural gas):

- TSOs must prepare a ten-year plan at least (NDP) at least every 2 years, coordinated with electricity and H2.
- Based on the joint supply-demand scenario of gas/electricity/H2.
- One for natural gas and one for hydrogen or one joint plan for natural gas and hydrogen per MS.
- The plan will include reinforcements for renewable gases and possible reverse flows, reconversions, etc.

2. Planning of distribution networks for:

a) Hydrogen:

- DSOs will present a ten-year development (H2) plan every 4 years, coordinated with electricity and heating/cooling.
- The plan will distinguish hard-to-decarbonize consumption and the reuse of pipelines.
- Consistency with national and European scenarios and plans.
- Alternatively, the MS may apply transportation planning requirements to distribution.

b) Natural gas:

- Same plans but for decommissioning (in case of demand reduction).
- Possible one joint plan hydrogen/natural gas, if allowed by MS, but separate modelling.

Integrated network planning (cont.)

3. Hydrogen infrastructures operators:

- The tasks of the operators of hydrogen infrastructures will be like those of the natural gas sector.
- These include optimising the location of production vs consumption, ensuring capacity to meet reasonable demand, preventing emissions, integration with the European system, effective quality management and balancing.

4. Authorisation of infrastructures (both hydrogen and natural gas):

- By MS or the competent authorities. They will also authorise the activity of supplying natural gas and hydrogen.

5. Hydrogen Interconnections:

Between MS:

- If there is a gap between benefits and costs, possible cross-border cost allocation, prior approval by regulators.

With third countries:

- The EU will make a prior international agreement (which may be intergovernmental, if allowed by the EC) to ensure consistency with EU rules.
- Additionally, the EU and MS could enter into dialogues with connected third countries, including to establish cooperation on matters relevant for the production of hydrogen, such as social and environmental matters.

Third Party Access

1. TPA regimes:

- For natural gas, regulated TPA for transport and LNG terminals and either regulated or negotiated for UGS.
- For hydrogen, regulated TPA for networks and storage (possible negotiated until 2032), and negotiated for terminals.
- Maximum duration for TPA contracts of 15 years (20 years until 2027 for hydrogen).

2. Exemptions:

- Possibility to grant exemptions also to major new infrastructures (interconnectors, storages and terminals).
- Exemptions on TPA, unbundling and transparency (except for tariffs, available capacities, flows and gas stored).

3. Tariffs:

- Regulators will approve TPA tariffs or their methodology (gas and hydrogen), avoiding cross-subsidies.
- Possible discounts (100%) at the entry and exit points of natural gas for terminals and UGS (beyond 2026 only for SoS).
- Discounts for renewable (100%) and low-carbon (75%) gases at: injection points, entry and exits from UGS and, in the case of interconnections, since August 2025 (possible compensation mechanism if needed).
- Assess the LT evolution of transmission tariffs considering the expected changes to the allowed revenue and demand.

4. Transparency:

- Transparency obligations are extended to hydrogen network operators, similar to those for natural gas.
- Terminals and storage operators (natural gas and hydrogen) will publish services, access conditions and technical info.

Third Party Access (cont.)

5. Capacity allocation mechanisms and congestion management procedures:

- The CAM and CMP principles established for natural gas are extended to hydrogen, as well as the trading of capacity rights, balancing rules, surcharges for imbalances and the certification of transporters.

6. Supply restrictions:

- Possibility for MS to temporarily restrict LNG supplies from the Russia and Belarus, for a fixed term.
- No LT contracts for the supply of unabated fossil gas with a duration beyond 31 December 2049.

7. Blending

- No restriction of cross-border natural gas flows with up to 2% hydrogen
- TSOs will cooperate to avoid cross-border restrictions.

8. Revenue of TSOs (natural gas):

- Transparency of the methodologies, parameters and values used to determine allowed or target revenues.
- The costs of the TSOs shall be subject to an efficiency comparison, carried out by ACER.

9. Demand aggregation and joint purchasing of natural gas, and mechanism to support the hydrogen market

- The EC shall establish a mechanism for voluntary demand aggregation and the joint purchasing of natural gas.
- The EC may establish a mechanism to support the market development of hydrogen.

Unbundling of activities

1. Vertical unbundling:

- For natural gas, TSO separation models are maintained: OU (ownership), ISO (independent manager) and ITO.
- For hydrogen, OU separation by default, although the ISO and ITO models are also possible.
- Natural gas TSO may, under certain conditions (ITO model and repeal of horizontal separation), carry out production and/or supply of H2 (but not gas or electricity), but may not inject H2 into their gas networks.

2. Horizontal unbundling:

- For Hydrogen TSOs, legal horizontal separation from the transport and distribution of electricity or natural gas. Exemptions possible, based on a Cost Benefit Analysis.
- For Natural gas and Hydrogen DSOs, legal and functional separation and independence in decision-making. Possible derogation for gas and H2 DSOs with less than 100,000 customers.
- Possibility of leasing H2 distribution infrastructures between companies in the same group. Supervision by the RA or other competent authority.
- Separate accounts for infrastructures (transport, terminals, distribution and storage of natural gas and H2), avoiding cross-subsidies.

3. Combined operators:

- Possible combined operators of natural gas, H2 or natural gas/H2 transport, distribution, storage and terminals.

Associations of European operators

1. European Network of Transmission System Operators for Gas (ENTSOG):

- Tasks are essentially maintained.
- Preparation of a gas quality report from January 2025.
- The TYNDP will include the decommissioning and will take due account of the opinion of ACER.

2. Asociation of Distribution System Operators (EU DSO):

- Natural gas DSOs will participate in the association, while H2 DSOs may participate.
- The costs will be borne by DSOs.

3. European Network of Network Operators for Hydrogen (ENNHO):

- It will be established, analogous to ENTSOG.
- It will cooperate with ENTSOG and ENTSOE.
- Supervision by ACER

Regulatory Authorities (RA)

1. Reinforcement of Regulatory Authorities independency:

- A single regulatory authority (natural gas and H2) at national level.
- It will have all the human and financial resources to carry out its functions.
- Commissioners: will have the necessary knowledge and experience and will be appointed through an independent and impartial procedure. Provisions on conflicts of interest and confidentiality obligations.
- Separate annual budget and autonomy in its implementation.
- Active supervision of the compliance with the independence of the Regulatory Authorities by EC.

2. Main functions:

- General extensions of natural gas related functions to hydrogen: network tariffs, certification, access, connection and balancing methodologies, etc.
- Supervision tasks: unbundling, negotiated access (hydrogen terminals), certification, transparency, etc.
- Others...

Thank you for your attention