

## Input on the Hydrogen and Gas markets decarbonisation package Combined Evaluation Roadmap / Inception Impact Assessment

### CEER Note for the European Commission

9 March 2021

#### Introduction

CEER welcomes the European Commission's initiative to develop legislative proposals to update and future-proof the legal and regulatory framework for Europe's gases sector and thanks the European Commission for giving the public an opportunity to provide feedback on its combined roadmap / Inception Impact Assessment on a Hydrogen and Gas markets Decarbonisation Package. This note constitutes [CEER's feedback on the roadmap of the initiative "Gas networks - revision of EU rules on market access"](#). Seen in conjunction with related European Green Deal initiatives being developed by the European Commission, including on methane emissions and revisions of the TEN-E Regulation and the Energy Efficiency and Renewables Directives, CEER believes a hydrogen and gas markets decarbonisation package will be important to enable Europe to move towards its goal of a carbon-neutral society.

With this in mind, CEER would like to reiterate its views on key aspects of a future-proof hydrogen and gas decarbonisation framework, based on the four problem areas identified in its combined roadmap / Inception Impact Assessment:

#### 1 Hydrogen infrastructure and hydrogen markets

CEER agrees that hydrogen pipeline transportation is not properly addressed by the current regulatory framework. However, CEER believes that this does not necessarily mean that this risks creating non-regulated monopolies that hamper the entry of new players and competitive market outcomes. As pointed out in our white paper [When and How to Regulate Hydrogen Networks?](#) the need for regulatory intervention for hydrogen network infrastructure will depend on how the hydrogen sector will evolve, including the need for transport of hydrogen. In particular, if the hydrogen network shows characteristics of a natural monopoly and can be considered an essential facility, where hydrogen producers and consumers need access to a hydrogen transport facility that is difficult to duplicate, there is a structural risk of an abuse of market power that would need to be addressed. However, the development of hydrogen infrastructure is still at an early stage and it is uncertain how it will evolve in practice. In addition, national market conditions may evolve differently between Member States as the development of a hydrogen sector may occur at different speeds. Therefore, flexibility is needed to decide when the implementation of possible network regulation should kick in. Energy regulators advocate for a gradual approach to the regulation of hydrogen networks in line with market development.

This approach could consist of a dynamic regulatory approach based on periodic market monitoring. This includes an assessment of the market structure and, in particular, of the market circumstances that increase the risk of abuse of dominant position by hydrogen network owners. National Regulatory Authorities (NRAs) should monitor when possible regulation of hydrogen networks should kick in, based on pre-defined EU-wide principles. The governance of this dynamic regulatory approach might be inspired by the model of the existing EU regulation of telecommunications, which has proven its value in dealing in a flexible yet predictable way with changing market circumstances, allowing NRAs to evaluate regularly the need and appropriateness of regulatory interventions.

In the European Commission's inception impact assessment, it is noted that early regulatory intervention may provide an opportunity to avoid the costs and sunk-investments created by ex-post harmonisation and create regulatory predictability for investors, in infrastructure and upstream and downstream markets alike. CEER agrees that it is important to provide certainty to (potential) investors. Instead of 'early regulatory intervention', which might lead to unnecessarily impacting private-sector activities, CEER advocates for providing clarity on when the regulation should kick in, depending on the outcome of the monitoring activity, and regarding the general principles that will be applied to the future European regulation of the hydrogen sectors (in particular unbundling, third-party access, transparency, non-discrimination, monitoring and oversight by the relevant NRA). In this regard, we also reiterate our view that temporary regulatory exemptions for existing and new hydrogen infrastructure developed as business-to-business networks should be foreseen. We should clarify the regulatory framework from the outset for private hydrogen networks that are constructed as business-to-business networks. Temporary exemptions to future regulation may be explicitly foreseen in the forthcoming EU legal framework, avoiding that point-to-point pipelines are unnecessarily impacted, while ensuring that those exemptions are given under the same EU regulatory framework.

Energy regulators agree with the notion in the document that, as a relatively low-cost option, existing gas infrastructure could be repurposed for the use of hydrogen transport when no longer needed for natural gas and that barriers for their repurposing be removed. Repurposing gas assets for the transport of hydrogen may have benefits for both gas and hydrogen end users. This should be assessed on a case-by-case basis by cost benefit analyses (CBAs), taking into account all relevant factors. As a first step, the role of the National Development Plans (NDPs) of gas network operators could be extended to identify also assets that could be converted to hydrogen.

The document correctly notes that existing natural gas pipelines are owned by network operators that are often not allowed to own, operate and finance hydrogen pipelines. In this context and in the case of repurposing gas assets, energy regulators believe these assets should be removed from the regulatory asset base (RAB) of the gas network operators. They should be valued, as a reference, based on their specific value in the RAB at time of transfer, taking into account the depreciation applicable to these assets. This avoids users paying twice for the same network assets. One should apply cost-reflectivity to avoid cross-subsidisation between the gas and hydrogen network user.

CEER is of the view that investment in and management of power-to-gas installations shall be market-based activities which are open to competition among market players. This is needed in order to establish a level playing field with other activities through which similar services could be provided. Transmission and distribution system operators (TSOs/DSOs) should as a rule be precluded from investing in and running such installations (as is currently the case).

By way of derogation, TSOs/DSOs may invest in power-to-gas installations only if this is necessary to guarantee secure, reliable and efficient network operations and if no other market party is willing to carry out the investment. This derogation must follow a step-wise approach and be carried out under clear and limited conditions defined by NRAs (e.g. limitations in scope, scale and time), after it has been proven that the market is not willing to invest in such installations and foreseeing a procedure to transfer such installations back to a market-based regime once the derogation expires.

## **2 Access of renewable and low-carbon gases to the infrastructure and the market**

CEER considers it important to ensure the traceability of renewable energy throughout the integrated energy system. Definitions and criteria for sustainable gases should be set unambiguously in order to monitor whether the gases coming from power-to-gas installations are environmentally sustainable, thereby allowing their economic valorisation (for example, through a Guarantees of Origin system). Indeed, as the EU's Hydrogen Strategy points out, power-to-gas installations will only produce renewable hydrogen if the electricity stems from renewable sources. In particular, it is important to improve the often used "colour labelling" of hydrogen production, and to set criteria to define the carbon emissions associated to the overall production process. The use of renewable energy should also be traceable across the whole value chain (also through the existing instruments in Directive (EU) 2018/2001).

Regarding the idea of improving the functioning of the existing gas system, provided the changes benefit renewable and low carbon gases, the regulation of Liquefied Natural Gas (LNG) should ensure transparency, objectivity and non-discriminatory access. This may require regulations to adapt quickly to changing conditions. An evolution towards "Dynamic regulation" could provide the necessary tools to provide such adaptation and aim to guarantee access to new LNG infrastructure, define flexible services, facilitate quick adaptations to market needs with the participation of all stakeholders and update remuneration schemes (maybe tailor-made to new necessities).

## **3 Consumer rights, competition and transparency**

CEER fully agrees with the European Commission that the provisions on consumer rights and protection for gas consumers need to be updated and brought into line with those that have been adopted for electricity consumers, in the context of the 2019 Clean Energy Package, thereby taking into account technical differences between the electricity and the gas sector and differences between the respective market realities.

Ensuring that consumer rights are promoted and protected, whilst delivering on the EU's 2050 sustainability and climate neutrality objectives, is a key priority of the 2030 Vision for Energy Consumers that CEER and the European Consumer Organisation (BEUC) released in October 2020. In the Vision, we set out six principles for a "Long-term Energy Transition for Sustainability: Affordability, Simplicity, Protection, Inclusiveness, Reliability and Empowerment" ("LET'S ASPIRE"). These principles are valid for all consumers, be they electricity, gas or heating consumers. Furthermore, it is important to safeguard the rights of all these customers as we proceed with the energy transition, also recognising that in the medium term, many households and consumers across Europe will continue to use gas for their everyday needs.

CEER welcomed the improvements of the Clean Energy Package (CEP) to reinforce energy consumer rights as regards, for example, free choice of supply, market-based prices, basic contractual rights, vulnerable consumers, comparison tools, the right to switch supplier as well as the billing and billing information provisions for electricity consumers. Similar strengthened measures are urgently needed for gas and heating consumers and should be consolidated within the EU's gas market legislation, as done for electricity, to ensure consistency and clarity of legal provisions and reduce problems of legal overlaps and fragmentation in the behaviour of market participants. With the full entry force of the Electricity Directive provisions in 2021, there is a degree of urgency in ensuring that gas consumers' rights are also reinforced to the same levels as for electricity consumers.

Thinking more broadly, and as has been done in the recast Electricity Directive, we also believe that the retail market and consumer provisions in the Gas Directive must be adapted and revised to allow for future innovation, technology developments and new market trends, in particular with the emergence of new types of renewable and low-carbon gases. As we expressed in the ACER/CEER Bridge Beyond 2025 Conclusions Paper:

“Some improvements seem straightforward, such as aligning (or “mirroring”) some of the gas legislation with the strengthening of consumer rights and information introduced for electricity in the CEP. Other areas covered by the new CEP provisions, such as self-consumption, dynamic pricing, demand response and (renewable) energy communities, may seem less obviously relevant for the gas sector, but they may nevertheless merit careful consideration in order not to foreclose future technological solutions, such as developments in renewable gases.”

#### **4 Lack of integrated energy markets, in particular through network planning**

In its inception impact assessment, the European Commission states that the progressive integration and emergence of new energy markets means that infrastructure becomes more interdependent. This may require a more integrated approach to infrastructure network planning as opposed to the largely silo-based current approach of transmission system operators.

Increasingly, as new technologies and locations for supply of “green gas” are considered and substitution between energy vectors increases, gas (or electricity) network assets may become one of several ways to provide solutions to meet the low-carbon energy needs of consumers (i.e. one of the competing options), instead of being the only way and hence, an essential facility. The owners of those network assets have a vested commercial interest in how those assets are used and developed, and so may not be incentivised to encourage more economic alternatives to come to the market through forward-thinking and planning. Or, on the contrary, they may have an interest in participating in the energy transition through the development of activities which could be potentially open to competition. While, in this respect, they enjoy a privileged position to contribute to reach the decarbonisation targets, the role of network operators in the decarbonisation context must be legally clarified, to ensure that their involvement does not foreclose potentially competitive activities or distort competition in these activities. In particular, a clear separation of regulated and non-regulated activities should be ensured.

A number of specific recommendations concerning (more integrated) network planning have been developed by regulators in the recent past:

In the framework of the revision of the TEN-E Regulation (Regulation 347/2013), regulators have been calling for stronger links between the electricity and gas sectors, asking that scenarios for network development planning should be developed jointly for electricity and gas, in a neutral way. Regulators have equally been calling for a stronger role of ACER in the CBA methodology development, in order to provide the ENTSOs with clear directions on which aspects to focus on and taking care to harmonise the sectoral CBAs.

The TYNDP guidelines should be binding on ENTSOs and developed by ACER, focusing on how the TYNDP is to be developed in terms of admission criteria for projects, process, stakeholder consultation and required outputs. Aspects related to the fair treatment of all project promoters and the transparency of the process also are of paramount importance. These guidelines could also cover the objectives of cross-sectoral integration and energy transition. Binding amendment requests by ACER should be introduced, too, so as to cover any flaws of the draft TYNDPs that ACER and NRAs might identify.

The preparation of a national network development plan (NDPs) should be mandatory in each Member State, even where TSOs are under the regime of ownership unbundling. NDPs should be defined and published on a biennial basis. The timing of NDPs needs to be fine-tuned with the timing of the European TYNDP in order to provide proper and timely inputs and avoid discrepancies at later stages. In Member States with several TSOs in a sector, NDPs should be developed by all TSOs in a joint and coordinated way. Transmission projects promoted by third parties should be assessed as part of the NDPs. All projects of cross-zonal relevance included in any NDP should automatically be included in the EU TYNDP as soon as they can. Each TYNDP needs to have a reference to the latest approved NDPs and to draft NDPs, where applicable.

In about half of the European countries, the relevant NRA has been empowered to approve the network development plans. To offset specific market failures that could induce some TSOs not to consider specific investments that would bring greater social welfare in the long-run and to prevent inefficient investments whose costs would be borne by consumers, ACER and CEER recommend that, in each Member State, the relevant NRA should have the power to approve the NDP, as NRAs are best fitted to ensure their NDPs are fit for delivering a sound infrastructure development and reach a sufficient level of quality. The NRA should also have the power to amend the NDP, including the inclusion or removal of specific investments where needed.

The Clean Energy Package introduced an EU-DSO entity and national network development plans for the distribution level. While this is primarily focused on the electricity sector, also on the gas side many of the experiences and learnings with renewable energy (for example, biomethane fed into gas distribution networks) occur more at DSO than at TSO level. This implies that the possibilities and limitations of DSO networks need to be taken into account much more than before. To ensure the DSOs' views are part of the EU deliberations when developing new measures, it would be useful to bring gas DSOs into the European DSO Entity with clearly defined tasks and objectives to support new technologies.

CEER notes that, in addition to the aspects of integrated planning, issues related to integrated management and operation of the gas and electricity systems should be further assessed and considered. In the context of an integrated energy system, CEER considers that there may be a need to rethink the definitions of various activities. In the current framework, regulation of the gas and electricity sectors is done separately, utilising a silo perspective, and the definitions of the activities using one network do not consider their impact on the other network. However, assuming that the gas and electricity sectors will become fully integrated (with market development and competition becoming cross-sectoral), regulation of the two sectors should be done in a more coordinated way, considering cross-sectoral impacts. In this context, the framework of current definitions could be revisited with respect to the use of the networks, properly including all activities in the gas and electricity sectors and thereby ensuring that comparable activities are treated in a technologically neutral way. In particular, the definition of 'energy storage' in the 2019 Electricity Directive should be amended as it now includes power-to-gas installations although, in themselves, such installations are not energy storage facilities (even if they may be pivotal to support energy storage). When defining power-to-gas, it is important also to distinguish between installations that are connected to the electricity network only (such as in on-site generation for industrial purposes) and those that are connected to both the electricity and gas networks. In the former case, power-to-gas installations can be considered as electricity users. In the latter case, they can be considered as integrating elements between the gas and electricity sectors that enable "operating of the energy system "as a whole", across multiple energy carriers, infrastructures and consumption sectors" as formulated in the European Commission's Energy System Integration Strategy.



In the context of an integrated energy system, it could be also necessary to locate power-to-gas installations at specific points of the regulated electricity or gas networks, also taking into consideration that, as the network is a scarce resource, the location of power-to-gas installations may create difficulties of access for other investors with the same or other technologies. Hence, gas and electricity network operators should consider the development of power-to-gas installations in their network development planning and provide locational information to potential investors.

With respect to network tariffs, in line with the European Commission's objective to enable fair competition between different decarbonisation solutions (e.g. smart electrification, energy efficiency, and renewable and low-carbon gases), CEER believes that those should be cost-reflective, and should be applied to comparable activities across the electricity and gas sectors in a technologically-neutral way. They should not be used to subsidise technologies, activities or users and should provide a level playing field for comparable activities in the context of an integrated energy system. CEER also considers that distortive effects of taxes and levies should be avoided, in particular in the context of an integrated energy system.

### Further reflections

CEER notes that, as regards the functioning of the existing gas market, the document mainly focuses on the impact of renewable and low-carbon gases. However, potential areas of improvement do not necessarily relate to the impact of new gases and, consistently with previous positions by the European Commission (notably, the Energy System Integration Strategy), the re-examination of the current gas market regulatory framework should also ensure an integrated, liquid and interoperable EU internal gas market. For instance, in the Bridge Beyond 2025 Conclusions Paper, ACER/CEER also made the following proposals:

- to establish a new system of dynamic and targeted regulation, based on the ACER's market monitoring and NRA analysis and action; in particular, where the Gas Target Model (GTM) indicators do not meet the thresholds, this indicates potential competition concerns, and concerned NRA(s) should be required to undertake a more detailed analysis of the situation, properly defining the market, ascertaining the underlying causes and considering whether any of the options available from a "regulatory toolkit" would be likely to provide the expected improvements; any major action should be subject to a cost-benefit analysis (CBA), to ensure that benefits outweigh the costs; where there are decisions with cross-border relevance that fall on NRAs, if the latter do not agree within a prescribed period of time, the decision would be transferred to ACER;
- to introduce *ex-ante* measures for registration and licensing to mitigate the risk of fraudulent behaviour, and to require TSOs to develop a harmonised counterparty risk management policy at European level and set up a centralised EU database on creditworthiness and market behaviour accessible to TSOs, NRAs, the ACER and ENTSOG;
- to ensure mutual recognition across the EU of licensing for wholesale traders (or an equivalent mechanism), accompanied by a mechanism for enforcement action, and to introduce the right to exclude parties found to have breached requirements in another Member State;
- to develop legislative changes unlocking better regulatory tools to address any instance where cross-border tariffs become a barrier to trade and where there is a risk of foreclosure of cross-border capacity.

For further reference and explanations on the views expressed above, we invite the European Commission to consider the following regulatory policy papers prepared by CEER and ACER:

- [ACER-CEER The Bridge beyond 2025 Conclusions Paper](#)
- [CEER White Paper on Long-Term Storage](#)
- [ACER-CEER White Paper on Regulatory Treatment of Power-to-Gas](#)
- [ACER-CEER White Paper on the Regulation of Hydrogen Networks](#)
- [CEER-BEUC 2030 Vision for Energy Consumers: LET'S ASPIRE!](#)
- [ACER-CEER Position on Revision of the Trans-European Energy Networks Regulation \(TEN-E\) and Infrastructure Governance](#)
- [ACER Report on NRAs Survey - Hydrogen, Biomethane, and Related Network Adaptations](#)
- [CEER Report on How to Foster LNG Markets in Europe](#)