



ANSWER TO THE CONSULTATION

Contribution of the *Commission de régulation de l'énergie* to the public consultation on the revision of the European Union rules on access to the gas market and networks

On March 26, 2021, the European Commission launched a public consultation covering all aspects of the organization of the natural gas market and the prospect of creating a hydrogen market. Against the backdrop of the Green Deal and the European Union's goal of achieving carbon neutrality by 2050, this consultation aims to gather stakeholders' views on the measures to be taken to promote the integration of renewable and low-carbon gases and on the possible regulation of the hydrogen market. The *Commission de régulation de l'énergie* (CRE) would like to take this opportunity to share a number of positions on the gas market and its evolution, positions that are the basis of the answers it proposes to the questions asked.

Having in mind the challenges posed by the need to reduce greenhouse gas emissions, CRE believes that gases, whatever their nature, have a role to play in the transition to a low-carbon economy as a lever for the evolution towards an energy mix in which renewable energies will play a greater role. Gases will also be key to meet energy needs in sectors where electrification is not possible in the short or medium term. Renewable and low-carbon gases are possible substitutes for fossil fuels used in industry, transport and heating, and can help provide the flexibility essential to the energy system (seasonal storage, power-to-gas in particular) and the integration of intermittent renewable electricity production sources. Hydrogen is one of the major axes of the European strategy, on the one hand to reduce the environmental footprint of hydrogen consumed by industry (fertilizers, refining), but also as a new energy vector for transport and certain industrial uses. The extension of its use to other sectors is envisaged but presents a certain number of difficulties which are the subject of exchanges with experts of the sector.

In this context, while efforts to develop the production of biogas and synthetic gas are increasing, fossil natural gas – which is imported for the most part – will continue to account for a large share of consumption in the years to come. **CRE believes that a major revision of the rules of the natural gas market is not desirable**. In fact, the model put in place with the third package has proved its worth, allowing the creation of efficient marketplaces and the emergence of a European price index, the development of competition and a very satisfactory level of cross-border integration. The system of access to the network, with an entry-exit tariff, allows for a fair distribution of costs among European consumers, and must therefore be preserved, at least as long as most of the gas consumed is imported.

The integration of decentralized production is possible within the current framework. In this respect, the French experience with the 'right to injection' and with the development of biogas production shows that significant progress can be made without calling into question the current market organization. Nevertheless, legislative changes could be justified if there are barriers to market access for renewable and low-carbon gases.

Hydrogen is the other major component of the work undertaken by the European Commission. CRE welcomes the wide-ranging mobilization of experts from various backgrounds; studies and workshops are multiplying, providing an increasingly detailed understanding of the challenges and potential of the sector. In this light, CRE recommends a dynamic and pragmatic approach that best supports the needs of hydrogen professionals while avoiding premature constraints. The regulatory experience gained in the electricity and gas sectors cannot be transposed without taking into account the fact that the hydrogen market is still in the making. Its characteristics will therefore respond to specific logics that should be allowed to develop and that should then be analysed. For example, closing the door to integrated business approaches seems premature.

The need for hydrogen transport or storage infrastructures will have to be evaluated on the basis of a better knowledge of the production and consumption prospects, in particular according to their location. The gas transmission operators have made proposals to convert gas pipelines, but they have difficulty in demonstrating that they

meet solid usage prospects. In any case, CRE considers that the hydrogen market must be considered in an autonomous economy, without being subsidized by the gas and electricity sectors. The implementation of regulated regimes for the infrastructures could intervene as soon as the necessity appears (development of natural monopolies presenting issues in pricing and third-party access). CRE is aware of the need to offer perspectives to the hydrogen sector, but premature and inappropriate regulation is likely to be detrimental to investments and to the growth of this market.

The European Commission's consultation finally addresses the rights of gas consumers. While consumer protection is one of its fundamental missions, CRE wishes to give its full support to ensuring the consistency of the provisions adopted for electricity as part of the "Clean Energy for All Europeans" package. However, the specific characteristics of gas need to be taken into account.

1. Preserving the strengths of the gas market model

Gas will continue to play a key role in the European energy mix by 2030, whatever its nature, as it provides a significant degree of flexibility to the energy system, which is even more useful as intermittent energy sources develop. Gas also remains the reference option for decarbonising certain sectors of the economy for which electrification is not an effective solution, as a substitute for more CO₂-emitting energy sources such as oil and coal.

More than a decade after the entry into force of the 3rd Gas Directive, CRE considers that the European gas market is now functioning satisfactorily, particularly in a vast region in North-Western Europe, which now extends to Italy and Central Europe. It presents a high level of security of supply, a very good development of competition and a strong price correlation in the wholesale markets. These are signs of a very good cross-border integration. The European gas system has also demonstrated its resilience to supply crises and climatic hazards. CRE therefore believes that the fundamental principles of the organisation of the European gas market should not be called into question by future legislative developments.

The model put in place with the Third Package has proved its worth, allowing the creation of efficient natural gas marketplaces and the emergence of a European price index, the development of competition and a very satisfactory level of European integration.

Message 1: CRE believes that a major revision of the rules of the natural gas market is not desirable.

Network codes have also proved successful in removing barriers to cross-border trade, and priority should be given to further implementation efforts. Future developments may justify revising some rules to better match the needs of market players. CRE recommends an incremental and case-by-case approach. In this respect, mention can be made of the work currently being carried out by ACER, the national regulators and ENTSOG on possible changes to the timetable and algorithms for auctioning firm capacity at interconnection points governed by the "CAM" network code. Future developments should be exclusively driven by the search for greater efficiency. For example, an alignment of gas products and deadlines with those of electricity is not desirable; market players must be able to reserve significant capacities over the long term in order to secure natural gas supply and the financing of infrastructures.

Nevertheless, CRE considers that it could be useful to modify the Gas Package in order to remove barriers, if any, on access of renewable and low-carbon gases to the European market, so that they can fully play their role in the decarbonisation of the economy. The definition of European standards for the injection of gas into the networks must also be provided for in order to limit the risk of obstacles to cross-border trade.

The integration of decentralised production is perfectly possible within the current framework. In this respect, the French experience with the 'right to injection' and with the development of biogas production shows that significant progress can be made without calling into question the current market organisation.

Message 2: Legislative changes could be justified if barriers are identified preventing access of renewable and low carbon gases to the market.

In the context of a planned decrease in gas consumption, there is a risk that the use of certain infrastructures will decrease and that stranded costs linked to useless assets will eventually appear. CRE considers that the extent of this risk varies from one Member State to another, depending on national contexts, energy policy guidelines and the regulatory framework in place. Thus, national regulators are best placed to assess this risk and take it into account in the regulatory framework. A homogenised approach at European level is therefore not desirable and would not bring any obvious value.

2. Gas consumers' rights and protections need to be strenghened

The European framework applicable to gas consumers is defined by the 2009 Gas Directive and the 2012 Energy Efficiency Directive. The Electricity Directive of 2019 took over and developed the billing elements of the Energy

Efficiency Directive, in particular to take into account the deployment of smart meters and to better regulate the comparability of offers. Gas consumers are therefore protected by anterior provisions which are different from those applicable to electricity consumers. It is necessary that they benefit from the same rights and protections as electricity consumers. Nevertheless, it is important to take into account the technical specificities related to these two energies, for example, the use of real-time data.

Message 3: It is useful that gas consumers benefit from extended rights and protections, as is the case for electricity consumers since the 2019 Electricity Directive.

However, the technical specificities of these two energies must be taken into account.

3. Coordination between energy carriers must be improved in a pragmatic way

The Third Package acknowledged the central place of networks in European energy policy by introducing the obligation for transmission system operators to prepare ten-year network development plans at national and European levels. Although different, these plans are complementary, as the national plans are intended to have a fine granularity and to represent national public policy choices, which the European plans cannot do.

Message 4: A complete alignment of national infrastructure development plans with European plans is not desirable, but both TSOs and regulators must ensure that they are consistent.

Hydrogen is not, at first glance, intended to be integrated into natural gas plans, but rather to be the subject of specific planning, even if a certain number of gas pipelines could be converted to transport hydrogen.

Long-term scenarios are a key point here as they provide the data used for the evaluation of the different infrastructure projects. They must be developed in a rigorous and objective manner through diversified scenarios in order to reflect the major energy policy orientations, as well as the uncertainties of future developments. In terms of governance, network operators should not have exclusive rights to develop scenarios, but should be supervised, and the oversight of ENTSOs by regulators and ACER should be strengthened at the European level.

Message 5: At the national level, CRE suggests favouring the use of common scenarios over the introduction of a single infrastructure development plan for the various energy carriers, the technical and organisational feasibility of which is not assured.

CRE is in favour of extending the obligation to draw up a development plan to all operators, regardless of their shareholding structure. The DSOs also have a role to play, by sharing information with the TSOs, but also by developing their own plans.

4. Hydrogen: allowing offer and demand to be structured

Decarbonising current industrial uses is a first step but extending the uses of hydrogen requires to think of regulation in such a way as to encourage the joint development of supply and demand. Given the uncertainties regarding the economic model and therefore the location of production and consumption, developing transport must be done on the basis of clearly identified needs. It seems any form of regulation would have to be introduced later on. The development of private hydrogen networks, existing and future, is one of the options to be studied. Their entry into a regulated regime should only be considered if it turns out that the control of these infrastructures by private operators restricts competition in a way that is detrimental to the European economy.

The European Union has adopted an ambitious hydrogen strategy to decarbonise sectors that currently use fossil fuels. It consists of a gradual approach based firstly on decarbonising existing industrial demand, before increasing the use of renewable hydrogen produced by electrolysis and developing dedicated infrastructures as applications develop. The European Commission wishes to legislate on this subject in order to facilitate these developments by establishing today the contours of a target model for a competitive hydrogen market.

Message 6: CRE subscribed to the progressive vision of the development of hydrogen presented in the European strategy. And CRE invites the Commission to approach the question of regulation in a dynamic way, by progressively adapting the framework according to the characteristics of the hydrogen sector without designing too early the regulatory provisions relating to aspects of the development of the sector that still remain uncertain.

It is important to provide sufficient visibility to stakeholders, but this should not hide the considerable challenges in bringing this sector to maturity.

Apart from industrial uses, there is a great deal of uncertainty about the evolution of supply and demand. Faced with European ambitions, there are still complex technical and economic questions concerning the sufficient availability of electricity from renewable sources, the location of electrolysers and the economic competitiveness of green hydrogen, the cost of which is currently about three times higher than that of grey hydrogen. This represents an obstacle to a large-scale development in a highly competitive international context for industrial consumers. Scale effects and technical improvements will need to be significant and complemented by sufficiently intensive use to amortise fixed costs. In any case, access to sufficient, low-cost, decarbonised electricity supply remains a key factor in bringing down production costs while making hydrogen part of the decarbonisation objective. Downstream, industrial consumers sometimes have very specific needs in terms of quality, which could be unfavourable to the mutualisation of transport. A framework for third-party access to the networks is therefore not necessarily relevant in the short term.

Consequently, CRE takes a flexible approach to regulation and recommends, for example, that third-party access to the network should only be introduced where it is deemed appropriate. At present, assessments of long-distance transmission needs are difficult to establish and vary greatly from one study to another¹.

Message 7: The priority is to allow different industrial models to emerge, if necessary in an integrated manner, in order to create the necessary conditions for the financing and development of the hydrogen sector.

CRE recommends a clear separation of the hydrogen and natural gas sectors, even if it appears that the conversion of gas pipelines could be an effective option in a context of decreasing gas consumption.

Message 8: Investment decisions in hydrogen infrastructures must be based on proven needs in order to limit stranded costs. CRE is therefore opposed to cross-subsidies between gas and hydrogen, which would open the door to possibly useless investments.

In the longer term, if hydrogen transport were to take the form of a network monopoly and if access to the network could not be guaranteed, then the introduction of regulated third-party access would have to be considered. CRE has noted that the provisions proposed in the revision of the TEN-E regulation are in line with the regulation of hydrogen transport. However, it considers that it would be premature and possibly counterproductive to establish such prescriptive rules today.

Concerning the other aspects of the value chain, such as hydrogen storage, CRE believes that knowledge of the needs of the sector is a prerequisite for any consideration of regulation, even if it is plausible that the emergence of a green hydrogen sector will result in storage needs to compensate for the intermittence of production. The possibility of injecting hydrogen into gas networks also raises questions in terms of quality, but above all in terms of the economic value of hydrogen. This option may offer a short-term outlet for hydrogen, but degrades both hydrogen and methane. In all likelihood, blending hydrogen and methane can therefore not be a target model.

More generally, it is impossible to anticipate the role hydrogen will play in tomorrow's energy system. Its development must first and foremost be part of a process driven by the economic players. The construction of networks dedicated to the transport of hydrogen must meet a market need, i.e. a development consistent with the actual evolution of production and consumption.

5. The implementation at national level of mechanisms for the access of renewable and low-carbon gases to the market should be encouraged at European level

The transmission pricing system, with an entry-exit tariff, allows for a fair distribution of costs between users in each Member State, and should be maintained as long as most of the gas consumed is imported. Adjustments could be envisaged in the event of a marked shift towards greater decentralisation.

It is essential to provide renewable and low-carbon gases with and access to the natural gas market, including if they are injected at the distribution level. Securing access to the grid is also important, and an initiative at European level should allow progress on this issue across the EU. However, the precise modalities should be decided at Member State level to take into account local specificities and differences in infrastructure development. Arrangements that have already been implemented and have proved their effectiveness – such as in France with the 'right to injection' – must not be destabilised.

With regard to transmission tariffs, certain countries raised questions about the level of tariffs at national borders. While affirming the importance it attaches to European solidarity, CRE stresses that consumers in transit countries must in no way bear alone the costs of the investments associated with the firm capacities necessary for this transit.

¹ No-regret Hydrogen: Charting Early Steps for Hydrogen Infrastructure in Europe. AFRY Management Consulting (February 2021) concludes that the infrastructure requirements are very low, in any case lower than the current natural gas network. On the contrary, the study European Hydrogen Backbone. Guidehouse (April 2021), commissioned by the TSO association Gas for Climate, anticipates a transmission network of almost 40,000 km by 2040.

This aspect must be duly taken into account in any reflection on the evolution of transmission tariffs at interconnections. Moreover, eliminating cross border tariffs would require additional mechanisms, probably at the European level, to set up compensation between TSOs that would be very complex and difficult to audit – and would come to very significant amounts – whereas current tariffs clearly do not prevent price convergence.

Message 9: Revisiting at a pan-European level the way in which gas cross-border transmission is priced is not an appropriate solution to the lack of integration in certain regions of Europe.

The integration of low-carbon or decarbonated gases, such as biomethane or decarbonated hydrogen, will change the relationships between the different links in the value chains, with a new role for distribution networks.

Among the various techniques for producing gas from renewable sources, anaerobic digestion is the only one that is currently mature. However, the connection to the grid of decentralised production units represents a challenge in terms of costs and acceptability of the necessary infrastructure. France has opted for an integration method that aims to optimise costs, via a zoning system that takes into account the characteristics of the existing networks (grid, reception capacity) and the production potential. This system makes it possible to assess the technical and economic relevance of the network reinforcement investments required to implement the 'right to injection' introduced by the law of 30 October 2018.

For CRE, it is essential to accelerate the development of the biogas sector in Europe. However, this issue does not necessarily require legislation at a European scale, particularly with regard to the technical problems of integration into the grid.

Message 10: The access of renewable and low-carbon gases to wholesale markets should be facilitated. For this purpose, ensuring backhaul flows from distribution to transmission is useful, while "virtual" options can also allow full market integration without having to revise the perimeter of the entry-exit zones.

Gas quality standards need to be more transparent and defined in a coordinated manner by actors of the sector

As regards gas quality, biogas and hydrogen injection into gas networks could pose new problems in terms of cross-border interoperability. However, harmonisation efforts must remain proportionate with a fair distribution of responsibilities between the European and national levels. Cross-border coordination must be ensured, but it seems difficult to define strict common standards at European level. Account must be taken of the national specificities of transport infrastructures and LNG terminals on the one hand and of the qualities of gas required to meet the needs expressed by users, on the other hand.

CRE is not in favour of the regulators being given powers in the area of defining gas quality standards. It is up to the players in the sector to coordinate on the basis of technical criteria, with the regulators having the role of dealing with the tariff consequences (investments and cost coverage) and possibly monitoring compliance with the standards.

7. The alignment with the provisions of the CEP must respect the specificities of the gas sector

CRE believes that ENTSOG should be subject to the same degree of transparency and oversight by ACER as ENTSOE since the Clean Energy Package. CRE is therefore in favour of aligning with the CEP provisions in this matter. On the other hand, CRE does not see the need for a general alignment of the CEP provisions as the gas sector is characterized by its own logic and rules, different from the electricity sector.

8. The Security of Supply Regulation is flexible enough to deal with the new challenges of renewable and low-carbon gas

CRE considers that the acceleration of the production of new gases will be accompanied by new issues of security of supply. On the one hand, it is possible that these new gases, produced locally, will mitigate the geopolitical risk. On the other hand, their production is more intermittent and seasonal than natural gas extraction.

Nevertheless, CRE considers that Regulation (EU) 2017/1938 concerning measures to safeguard security of natural gas supply is sufficiently flexible to take these new issues into consideration. A revision of this regulation is not necessary at first glance, but it may be amended if necessary in the years to come if problems arise.