

Our position

EU hydrogen and gas market decarbonisation package



AmCham EU speaks for American companies committed to Europe on trade, investment and competitiveness issues. It aims to ensure a growth-orientated business and investment climate in Europe. AmCham EU facilitates the resolution of transatlantic issues that impact business and plays a role in creating better understanding of EU and US positions on business matters. Aggregate US investment in Europe totalled more than €3.4 trillion in 2021, directly supports more than 4.9 million jobs in Europe, and generates billions of euros annually in income, trade and research and development.

Executive summary

The American Chamber of Commerce to the EU (AmCham EU) welcomes the European Commission (Commission) proposal for a recast Gas Directive and Regulation. The proposal reflects the EU's increased ambitions for reform in the gas market to reduce greenhouse gas emissions and for the deployment of sustainable and decarbonised hydrogen, gases and fuels.

In light of Russia's war on Ukraine, the reform of the gas market tabled by the Commission last December will need to be revised and accelerated, as was acknowledged by the Commission in the REPowerEU Communications. Reducing the EU's dependence on Russian natural gas has become one of the EU's main objectives, and the regulatory framework must enable the ever-faster deployment of renewable and low-carbon alternatives to natural gas. At the same time, the Commission must take an objective and rational approach so as to not destroy those areas of the economy where natural gas is still required in the mid- or long-term when combined with carbon capture and storage or used as feedstock.

In this respect, key areas where the Commission's proposal can be improved include:

- Provide, as soon as possible, the methodology and reference point applicable to calculating the greenhouse gas emissions reduction at the core of the definition of the newly introduced notion of 'low-carbon hydrogen, gases, and fuels'. Only then can the market determine what, in practice, can benefit from this status and thereby trigger investment. The definition of low-carbon hydrogen, gases and fuels should be harmonised throughout EU law.
- Treat low-carbon hydrogen, gases and fuels in a non-discriminatory and technology-neutral way compared to renewable fuels and in light of their respective climate benefits.
- Clarify the prohibition of long-term supply contracts for 'unabated fossil gas' on the basis of the ultimate use of the gas, not the product at stake in such contracts. This would ensure supply security for EU regions that will need natural gas for energy purposes beyond 2050 (as long as they use carbon capture and storage technology), or for companies that will use natural gas as a feedstock without greenhouse gas emissions.

Introduction

The EU's increased ambitions of reducing greenhouse gas emissions as part of the Green Deal can encourage a more sustainable and decarbonised gas network and the development of the renewable and low-carbon hydrogen market. The Commission's proposals for a recast Gas Directive and Regulation features significant reforms to further the deployment of renewable and low-carbon hydrogen, gases and fuels. It is a critical instrument to achieve the EU's overall energy objectives.

AmCham EU members represent multiple industries with a keen interest in renewable and low-carbon hydrogen, gases and fuels. They pursue investment in the production, trade and consumption thereof, including via the EU's gas system.

In addition to its humanitarian and economic impact, Russia's war on Ukraine has also affected the current and prospective natural gas market in the EU, as well as the potential future mix of renewable and low-carbon gases – in particular, the types of renewable and low-carbon hydrogen – that can be expected to develop in the short- and mid-term.

EU decisionmakers, especially the Commission, are currently focused on reducing the EU's dependence on Russian natural gas, as was made clear in the Commission REPowerEU Communications of 8 March and 18 May 2022. Against this backdrop, it is more crucial than ever that the regulatory framework enables the ever-faster deployment of renewable and low-carbon alternatives to natural gas, while implementing an objective and rational approach to the regulation of the natural gas market.

There are several key areas where the Commission's proposal can be improved in order to accelerate the use of renewable and low-carbon alternatives to natural gas while protecting those areas of the economy that will require natural gas in the mid- or long-term.

Status of low-carbon hydrogen, gases and fuels

The Commission's legislative proposals recognise and provide a legal status for low-carbon hydrogen, gases and fuels. It also establishes a certification framework for these products by extending the one currently applicable to renewable gases. Moreover, the upcoming EU database for tracking renewable fuels is also extended to low-carbon hydrogen, gases and fuels.

These changes are welcome as the rapid decarbonisation of the economy – in line with the Paris Agreement – will require all available decarbonisation technologies and pathways, including those based on carbon capture and storage and nuclear energy. However, there are several practical and legal issues with the Commission's proposed definitions.

Firstly, the Commission's proposal defines low-carbon hydrogen, gases and fuels by reference to a crucial threshold of '70% greenhouse gas reduction' without providing a reference point for this reduction. Furthermore, the publication of the new methodology for calculating it is delayed until the end of 2024. Yet neither the threshold nor the new definitions have any clear, practical meaning without this reference point or calculation methodology. Thus, it is unclear how demanding or flexible this threshold will be and what type of energy product will qualify as 'low-carbon' in practice. As a result, the private sector cannot realistically plan investments in low-carbon hydrogen, gases or fuels.

To catalyse investment, the market needs certainty from the start. For example, it is currently unclear whether hydrogen produced using existing installations for steam methane reforming (SMR) retrofitted with carbon capture and storage technologies will qualify as 'low-carbon'. However, it is

crucial that this be the case in order to accelerate the phase out of carbon-intensive hydrogen production assets by incentivising producers to invest in carbon capture technologies.

Secondly, the Commission has recently published for consultation – and must still formally adopt – the methodology for calculating greenhouse gas emissions savings from the production of renewable fuels of non-biological origin, including renewable hydrogen, and recycled carbon fuels – a specific type of low-carbon fuel defined under the recast Renewable Energy Directive (RED II). It is unclear why the methodology for the calculation of greenhouse gas savings applicable for low-carbon fuels should be methodologically different from the same calculations for renewable fuels. In fact, to avoid even implicit discriminations and distortions of the hydrogen and decarbonised gas markets, the two methodologies should at least be based on the same methodological principles. Any deviations should be based on solid scientific reasons.

Lastly, the definition for ‘low-carbon fuels’ tabled by the Commission in the proposal for the Gas Directive and Regulation recast is not consistent with the definition of ‘low-carbon fuels’ tabled by the Commission in its proposed reform of the Energy Tax Directive. Although both cover low-carbon hydrogen, gases and hydrogen-based fuels, the definition of the Energy Taxation Directive refers to the threshold outlined in the EU Taxonomy, which requires a 73.4% (not 70%) greenhouse gas reduction threshold for hydrogen and a 70% greenhouse gas reduction for hydrogen-based synthetic fuels but does not require that the hydrogen used as input also be low-carbon. It also does not refer to the same methodology as the one applicable to low-carbon fuels under the proposed Gas Directive and Regulation recast. Therefore, as the Commission’s proposal stands, there would be hydrogen or gases labelled ‘low-carbon’ for network purposes but not qualify as such for taxation purposes. To avoid the legal uncertainty and inconsistency that could significantly hamper market deployment, the two definitions should be harmonised.

Support for low-carbon hydrogen, gases and fuels

The Commission’s Gas Directive and Regulation recast proposals provide for several favourable measures with respect to the handling of both renewable and low-carbon gases, or producers of such gases, by network operators. These include firm capacity provided to renewable and low-carbon gases, discount on capacity-based network tariffs for injection of renewable and low-carbon gases in the gas network, etc.

However, no direct support measures for low-carbon hydrogen, gases and fuels themselves are tabled in the hydrogen and gas market decarbonisation package. In particular, the system of targets and the support framework provided by the RED II for renewable gases and energy is not replicated for low-carbon hydrogen, gases and fuels. Similarly, the support measures in favour of renewable fuels contained in the various proposals tabled by the Commission as part of the Fit for 55 Package (such as under the two ‘FuelEU’ Regulations, the EU ETS, etc.) are not extended to low-carbon fuels.

This is at odds with the stated objective of the Green Deal. Although renewable energy in general – and renewable fuels in particular – can have benefits that go beyond decarbonisation, such

as air quality benefits, they are mainly promoted as part of the EU's climate policy. Yet, under the RED II, the most climate-friendly renewable fuels are only required to achieve greenhouse gas savings of 70% – the exact same level as low-carbon fuels. Biofuels are subject to even less demanding greenhouse gas savings, since their overall requirements are of only 65% in the transport sector.

To ensure both a cost-effective decarbonisation of the EU economy and decreased EU dependence on Russian natural gas as quickly as possible, the Commission must adopt a technology-neutral approach to the promotion of gases and fuels – whether renewable or low-carbon – that have the same level of decarbonisation benefits. This requires that the Commission reviews proposals tabled as part of the Fit for 55 Package in light of the new legal status for low-carbon hydrogen, gases and fuels provided in the hydrogen and gas market decarbonisation package.

In this respect, the EU's efforts to launch a 'green hydrogen' economy – notably with its new REPowerEU targets of 10 million tons of domestic renewable hydrogen production and 10 million tons of renewable hydrogen imports by 2030 – should not jeopardise the decarbonisation potential of low-carbon solutions, including low-carbon hydrogen. There is no one-size-fits-all approach to the decarbonisation of the EU economy. A single-minded focus on the use of renewable hydrogen – such as extremely high consumption targets in the RED II applicable only to renewable hydrogen – would lead to considerable delays in cost-efficient and crucial decarbonisation investments.

Prohibition of long-term natural gas contracts

Under the Commission's proposals, long-term contracts for the 'supply of unabated fossil gas' can no longer extend beyond the end of 2049. The Commission's underlying intent is to align the market for long-term contracts in natural gas supply with the Green Deal's objective of carbon neutrality by 2050. Indeed, if natural gas is still supplied after 2050, it would lead to unacceptable greenhouse gas emissions.

Although the Commission is right to align the market for long-term contracts in natural gas supply with the 2050 carbon neutrality objective, its proposed implementation has several flaws that could easily be corrected.

Firstly, the term 'unabated fossil gas' is undefined in the Commission's proposals, which leads to legal uncertainty. Typically, it is the combustion of natural gas that leads to greenhouse gas emissions, which can be 'abated' or 'unabated'. In that context, 'abated' means either that the combustion activity uses carbon capture and storage technologies or that natural gas is blended with other gases such as hydrogen or biomethane so that the overall greenhouse gas emissions decrease. By contrast, natural ('fossil') gas in itself is a product that cannot be 'abated' or 'unabated'. Based on the Commission's wording, it is unclear what types of long-term supply contracts are specifically forbidden.

Secondly, this ban of all long-term contracts for the supply of 'unabated fossil gas' does not consider alternative uses of natural gas that would not lead to the emission of greenhouse gases. For example,

natural gas can be used as a feedstock in industry as well as in chemical reactions that do not necessarily produce greenhouse gases. This is the case for the pyrolysis process, where natural gas is converted into hydrogen and solid carbon – not carbon dioxide. Under the Commission’s proposals, the ultimate use of the natural gas supplied is not considered, meaning pyrolysis plants cannot enter into long-term contracts for natural gas supply even though there are no emissions of any greenhouse gases.

Thirdly, the Commission’s proposal is not sufficiently flexible in its implementation. Although the EU’s natural gas consumption must decrease significantly between now and 2050, there may be specific regions or industries that will need to use natural gas and carbon capture and storage beyond 2050 to comply with the carbon neutrality objective. Under the Commission’s proposal, they would not be allowed to sign a long-term contract of more than a couple of years beyond 2040, which could threaten their security of supply.

Instead, the Commission should align the market for long-term contracts in natural gas supply with the 2050 carbon neutrality objective by banning not the supply of natural gas itself but natural gas whose ultimate use leads to unabated greenhouse gas emissions. In this way, the Commission would achieve the same objective while also solving these three issues.

An introduction should contextualise and define the issue(s) at hand and why they matter. It should then outline the structure of the paper.

Conclusion

The EU’s Fit for 55 package, the REPower EU legislation and the proposals for a recast Gas Directive and Regulation are all critical components to reform the European gas market, which is jeopardised by the ongoing war in Ukraine, rising energy prices and climate change.

Given these challenges, gas market reform must be accelerated to reduce EU dependence on Russian natural gas. Having a harmonised definition of low-carbon hydrogen, gases and fuels throughout the EU as well as treating low-carbon hydrogen gases and fuels in a non-discriminatory way compared to other fuels is necessary to accelerate the process. Finally, the use of carbon capture and storage technology should be promoted alongside providing additional clarity regarding the prohibition of long-term supply contracts for ‘unabated fossil gas’ based on gas usage to ensure the security of supply for EU regions.