

Developing an internal market in renewable and low-carbon gases

Harmonise suppliers' quotas to remove national barriers for cross-border trade and decarbonise effectively and affordably

Moving towards a European market in renewable and low-carbon gases

Biomethane is a technologically mature, domestically produced, but also globally available, and relatively low-cost decarbonisation solution. As such, it will inevitably contribute to the European energy mix of the future. However, its production presently continues to require some form of support and Member States across the Union are pursuing different, and at times conflicting, market designs to address the challenge.

While this is not required by the Renewable Energy Directive, Member States have been increasingly imposing renewable gas quotas for suppliers to end-consumers¹. In other words, national governments are looking into obliging suppliers to end users to "green" their gas sales portfolio.

Unfortunately, in most of the cases suppliers' quotas are being designed in an uncoordinated manner and introduce selective parameters, such as that the obligations are expected to be fulfilled exclusively with national production. The driver behind this choice is that suppliers' quotas are seen as an alternative to direct subsidies for national production. In addition, suppliers' quotas are being introduced without any degree of harmonisation (e.g. target definition, eligible end-use sectors, target allocation per customers, criteria to demonstrate renewable gas consumption and emission reduction, criteria for target allocation, penalties etc.) This renders them non fungible and/ or comparable, further contributing to market segmentation.

While not advocating for specific measures, this short paper puts together a short checklist highlighting the implications of precise design features to be considered when and if Member States choose to elect blending quota for suppliers to end users of biomethane as support mechanism. Although most of the schemes currently established across the EU relate to biomethane, we identify a similar risk of similar measures deviating from the RED being applied to other renewable and low-carbon gases. Given a set of possible options, the document recommends those solutions that minimise barriers to cross-border

¹ See Annex for a summary of schemes currently being considered.

trading and that make full use of the Internal Energy Market to deliver biomethane to European consumers in the most efficient way possible on the understanding that having access to a large and competitive market both for consumers and producers has proven beneficial in general and specifically in the energy sector.

Energy Traders Europe supports measures aimed at increasing the uptake of renewable and low-carbon gases with a view to achieving the European climate goals in an effective and efficient way. However, we believe that the development of these technologies should be accompanied by the establishment of an integrated internal market where gases can be traded across borders, as is the case with electricity and natural gas.

Design features to shape EU suppliers' quotas

Beyond what is set under EU Law, the level of target ambition set by Member States is ultimately a political decision. On the contrary, the way a compliance mechanism is designed is primarily a technical matter and should be conducted with a view to achieving the most efficient outcome possible, while thoroughly considering the trade-off that each choice comes with.

As Energy Traders Europe we believe that the elements listed below must constitute the key design features that Member States should reflect on when implementing suppliers' quota:

- **Technology neutrality of targets.** It must be possible to achieve a given target through any renewable or low carbon gas technology.
- **Cross-sectoral scope.** Given that RED III is already in place and will have to be nationally transposed by May 2025, any designed quota must be all-encompassing in terms of the sectors within its scope, i.e., not be limited to the transport sector.
- **Targets' units of reference** must be expressed in energy content or rather based on GHG emission reduction level.
- **Value chain segment in scope** for the evaluation of the relevant decarbonisation value must cover part of or the full life cycle of a relevant compliance fuel.
- **Sustainability criteria** for the fuels in scope must be considered.
- **Carbon intensity** calculation methodologies must be implemented.

- **Scope of geographical eligibility of compliance fuels.** Although such schemes are a matter of national decision, they must be open to gases imported from other Member States, and prospectively also from third countries.
- **Penalties for non-compliance and/or buy-out prices,** which are fit for purpose.
- Other conditions related to **consultation with the market, implementation time-lines and competition effects.**

Technology neutrality

The overarching objective of the EU decarbonisation policies is for emissions reduction itself to be achieved in the fastest, most reliable and affordable way possible. Limiting compliance options under a given scheme would be equivalent to picking winners with the risk of closing the door to future technological developments. While we can expect that initially biomethane is likely to be the fuel of choice to comply with suppliers' quota, the mechanism should be open to any equally viable renewable and low-carbon alternative (see below "GHG targets"). This includes options such as electrification, voluntary carbon certificates, and hydrogen. This would allow, inter alia, to consider regional differences and potential constraints of access to a specific solution, both for producers and for consumers.

Scope of targets

Different sectors may face different challenges and costs on their way to decarbonise. Policy makers may therefore choose to stagger the scope of new obligations onto energy suppliers. Quotas can be also imposed directly onto consumers and other agents. The scope of the targets of existing and prospective blending obligations must be such that they can easily be expanded gradually to encompass sectors beyond transport, as more affordable decarbonisation solutions become available.

GHG targets

Setting suppliers' quota as GHG emissions reduction targets (instead of targets for specific technologies) contributes to the commoditisation of renewable and low carbon gases and allows the market to

focus on the decarbonisation value of a given fuel, making it more fungible. The GHG savings achieved through the supply of renewable and low-carbon gases into these obligations should be fully tradeable, ideally with certificates representing tonnes CO₂e which can be traded across Europe. This in turn allows the definition of more transparent pricing solution, which further helps liquidity.

Full life-cycle carbon intensity calculation

To ensure that alternative decarbonisation solutions can compete on an equal footing, there must be no loophole in the calculation of their respective carbon intensity. For this to happen, the full life cycle of the fuel must be considered from its point of origination all the way to its point of consumption, based on objective and harmonised methodologies both globally and across all EU Member States. Where possible, the calculation methodology of the actual emissions could be complemented by default values. The Renewable Energy Directive already provides the market with such methodologies. Therefore, when introducing quota obligation systems, Member States should limit themselves to the use of such methodologies.

Certified sustainability

The value of a market in renewable and low-carbon gases rests on its integrity and reliability which is, in large part, anchored onto the following three principles: the prevention of double counting, the certification of the sustainability characteristics of a given gas by the EU-recognised voluntary schemes, and the verification of mass-balancing, which will soon be handled through the Union Database under article 31a of the recast Renewable Energy Directive. Suppliers' quotas should be no different from any other compliance scheme for renewable fuels already in place and follow the same rules and requirements in this regard.

Renewable gas consignments in the UDB should be the central pillar to demonstrate compliance with the sustainability and emission reduction criteria of those obligated parties bound by the national quota systems. Integration into the UDB of whichever national database is or will be used to monitor these quotas is thus crucial. The same goes for the subsequent integration of national GO registries, as foreseen in the RED III.

Conformity with the single market

Less than 1% of biomethane produced in the EU is presently traded across borders, with the rest being sold and consumed within the country of its production. This is to the detriment of both producers and consumers and renders the market for sustainable gases less transparent, less liquid and, therefore, less efficient. Connecting producers and consumers through the EU interconnected infrastructure and gas market platforms should optimise welfare via cost efficient allocation of renewable and low carbon gases where mostly needed.

Integrating national markets offers consumers at locations with a high biomethane demand the possibility to source biomethane from regions where it can be produced at the lowest possible cost. It also offers producers the opportunity to sell their products to customers across the EU in a market that is virtually as large as today's natural gas market. This will help reduce the risk of investing in new production capacity, thereby increasing investment, reducing production costs and accelerating affordable decarbonisation.

For the above to become a reality, quota obligation systems must be open to the use of certified and mass-balanced biomethane produced anywhere within the EU interconnected gas infrastructure, and, if possible, in third countries, provided framework agreements with the EU are in place and sites and economic operators are voluntary scheme-certified. Yet, it is also important that biomethane is not counted twice by both Member States against their respective national quotas. This also requires ensuring that national support schemes are designed to cope with a potential cumulation of different forms of support, which may distort production and consumption markets. This is an important element of analysis for authorities when assessing national support schemes following State Aid procedures.

Other conditions

National authorities are also encouraged to pay attention to other design elements with the aim of minimising market distortions related to implementation of these mechanisms.

- **Regulatory analysis and public consultation.** As part of a consultative process with market players, the memorandum accompanying the piece of legislation should include comparative analysis with other available market-based support mechanisms and justification for the choice of the quota system.

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- **Implementation timeline.** The period between the approval of a given system of obligations and its entry into force should be compatible with the development of production projects aimed to be incentivised. In this regard, it should also consider the maturity of the production sector, to avoid a situation of artificial shortage due to the learning curve in the execution of projects and/or other missing elements (regulatory, permitting, etc.)
- **Competition effects.** A fair target setting should be targeted to the diverse profile of end-customers, as well as to avoiding undue retail market competition concerns.

Conclusions

Without prejudice to energy and carbon market prices signals, quota obligation systems are among a range of diverse policy tools and support schemes to foster renewable and low carbon gases deployment. Nevertheless, the proliferation of uncoordinated and selective quota systems across Member States, including inappropriate design elements, risks fragmenting the internal market for renewable and low carbon gases as well as to reduce market efficiency and competition. This paper highlights and recommends national and European authorities to have a closer look into the design elements of theirs and other countries. As such schemes emerge across the EU, it is therefore important to take a holistic view and “do things right” from the beginning. This has the potential to make any prospective suppliers’ quota aligned with the creation of a single market for renewable and low-carbon gases.

Contact

Mariana Liakopoulou

Markets and Policy Associate

M.Liakopoulou@energytraderseurope.org

Annex

Proposed suppliers' quotas in the EU

	France	Netherlands	Germany	Portugal	Austria	Ireland
Status	Draft	Draft	Pre-draft	Law, no implementing act	Proposal rejected with a view to being re-introduced	Draft
Unit	TWh	GHG Reduction	GHG Reduction	TWh	TWh	TWh
Fuel	Biomethane	Renewable gases	Renewable & LC gases	Renewable gases	Renewable gases	Biomethane
Target	0,8 TWh of biomethane in 2026, 3,1 TWh in 2027 and 6,5 TWh in 2028	From 0.8 Mton in 2026 to 3.8 Mton CO ₂ chain emission reduction in 2030	0.67 percent in 2026 up to 7,5% by 2030	1% of gas end user portfolio in 2025	Renewable gases as % gas sold to end consumers: Annual increase to reach 9.75pc, but at least 7.5TWh, in 2030 (gradually increasing quota of 0,35% in 2024 up to 9,75% in 2030). Up to 5% of the substitution obligation of a supplier can be met with recycled gas.	Aimed at stimulating production for 1 TWh of biomethane in 2024-25, 2,5 TWh in 2026-30. Initial target of 2% for the first 3 years and 10% from year 4 of the obligation
Certification type	Certificate Production Bio-methane (CPB) issued to producers: 0,8 CPB/MWh for municipal waste and for non-hazardous products/waste digesters older than 15 years; 1 CPB/MWh for non-	Green Gas Units – GGE. Unsubsidised GOs will serve as a basis for receiving tradeable Green Gas Units (GGEs) for an interim period until the Union database is in place	Compliance tool not yet defined but likely to be GOs	Guarantees of origin	Guarantees of Origin or Green Certificates for Gas (for gas that is not injected into the grid), each labelled with a Green Gas Seal	No details available so far

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	hazardous products/waste digesters older less than 15 years					
Obligated parties	Suppliers – NB: the decree formally does not specify further and the definition includes gas traders but the Regulator will specify the obligation will be set as a % of the end users portfolio	Same players in scope of the ETS2 (which differs country to country but covers demand in the transport and building sector)	Suppliers to end users	Gas shippers supplying more than 2,000 GWh/year to final customers	Suppliers (towards end users - "any natural or legal person or registered partnership that purchases natural gas for its own use or as an input for its production processes")	Suppliers of fossil fuel in the heat sector for a % their consumers portfolio
Qualifiable production	Only French production	Only Dutch production	EU production	EU production	Only Austrian production	Only Irish production
Buy out price/penalty	100€/MWh missed. Obligation to deliver compliance volumes remains (as per ETS)	Quota will be granted a 10% flex year on year (surplus or deficit) and a buy-out option will be available to them in alternative to the cancellation of tradable certificates at €500/tCO2	1200€/ton CO2. NB: debate is already pushing for halving this level	Not defined yet	Compensation amounts payable by suppliers not achieving their quota target is currently set at 15c/kWh (though the ministry would have a mandate to increase the amount as required to adapt to the market). Additional administrative penalties of up to 50k in case of infringement of an obligation under the relevant Green Gas Act	No details available so far