

Contribution to public consultation on GBER

Air Liquide welcomes the targeted review of the General Block Exemption Regulation (GBER) on State aid, and the opportunity given to stakeholders to contribute to its update. Air Liquide welcomes the draft GBER as significant investment will be required to deliver the EU climate and energy objectives. In this regard, it will also be key to maintain a level-playing-field for outsourcing the manufacturing of industrial gases. We welcome the high emphasis on hydrogen that is set out through the GBER. Indeed, the scope of the GBER has been extended to a wide range of activities that are relevant to further develop the hydrogen economy.

In this paper, we want to provide the European Commission with some feedback, notably on definitions, Aid for for hydrogen related activities, Carbon Capture and Storage and projects with emission avoidance in the longer term.

Benefits of the Industrial Gas sector

The industrial gas manufacturing sector is supporting the EU Green Deal ambitions by providing the most energy efficient products and expertise to Europe's economy. Industrial gases (oxygen, hydrogen, nitrogen and argon) are outsourced by industrial (manufacturing) sectors and are often central components of their long-term decarbonisation strategies. Industrial gases have been playing an essential role in making Europe's industries more (energy) efficient and are indispensable for several manufacturing processes.

Definitions

Air Liquide wants to point out several comments to the definitions:

- In order to ensure a level-playing field between low-carbon and renewable hydrogen, the CO₂ footprint of renewable hydrogen must take into account the complete Life Cycle Assessment. Regarding the definition of low-carbon hydrogen (Art 2 (102e)), it needs to be ensured that this definition is in line with the approach taken by the EU Hydrogen Strategy. As a consequence, we favor the idea of a "threshold trajectory" as articulated in the 'CertifHy' scheme (with a trajectory from 10.92 kgCO₂/kgH₂ to 4.37 kgCO₂/kgH₂) to allow for technology deployment and incentivize further innovation in low-carbon and renewable hydrogen production. Alternatively, we could support a definition of low-carbon hydrogen as "hydrogen produced from non-renewable energy sources and meeting a 70% emission reduction criterion, compared to a fossil fuel comparator"
- We would also like to note that it is detrimental to include that *the carbon content of electricity-based hydrogen shall be determined by the marginal generation unit*. As, quite often, the marginal generation units would refer to a fossil-based unit (mainly natural gas power plant), it would never represent the correct average carbon content of, for example, hydrogen produced through electrolysis fed with low-carbon electricity. Air Liquide is convinced that the existence of a PPA with a renewable power asset before the start of operation date of this renewable power asset should be considered as sufficient proof of renewability of hydrogen.
- The definition of renewable hydrogen (Art 2 (102c)), should be based on technology neutrality. As a consequence, biogas as a renewable source of energy should be recognized, considering the positive role that it plays notably at local level.
- The definition of 'transmission and distribution pipelines' (Art 2 (130b)) should also include in its definition 'low-carbon gaseous fuels of non-biological origin'.
- In order to ensure decarbonization, point out that 'carbon capture and utilisation' or 'CCU' (Art 2 (131b)) should only refer to CO₂ usage where the CO₂ is permanently chemically bound, thereby reducing CO₂ emissions.

Aid for for hydrogen related activities

The GBER decides on aid intensity for hydrogen related activities based on production technologies. However, Air Liquide believes that aid intensity should be technology-neutral, based on CO₂ emissions, bearing in mind that carbon content of electricity-based hydrogen should not be determined by the marginal generation unit. The existence of a PPA with a renewable power asset should be considered as sufficient proof of renewability of hydrogen. Indeed, through this approach, both level-playing field and highest possible contribution to reaching the climate ambitions would be ensured.

Moreover, we favor for the aid intensity to reach up to 100% of the funding gap. Art 46.5 (investment aid for energy efficient district heating and cooling) already foresees this flexibility, which should be broadened to different forms of aid in the GBER.

In order to further ensure technology-neutrality and quick decarbonization, the operating aid for the promotion of energy from renewable sources and renewable hydrogen in small scale installations and for the promotion of renewable energy communities (Art 43) should also include low-carbon hydrogen in its scope.

Moreover, in order to ensure the most efficient use of public funds, the operating aid should not be limited to small projects, also in order to maximize the decarbonization potential of such projects. Indeed, larger scale projects can heavily contribute to the EU's climate ambitions and should also be eligible for operating aid under the GBER. Only considering small scale operating aid under the GBER risks introducing significant market distortions where more efficient large scale hydrogen production is displaced by subsidized small scale production. The high cost of production and use of renewable and low-carbon hydrogen compared to fossil-based hydrogen remains a key issue also for larger scale installations.

Carbon Capture and Storage and CO₂ transportation

In order to fully benefit from the immediate decarbonization potential of Carbon Capture and Storage, transportation of Carbon Dioxide for the purposes of CCS by ships, trucks, pipelines, etc. should be recognized by the GBER.

Moreover, we feel that the aid intensity for investments relating to CCUS (Art 36 (6a)), should be able to exceed 20%. Indeed, the proposed aid intensities can result in the contradictory situation where investments resulting in zero emissions benefit from 50% and CCUS with (potentially) negative emissions receive only 20%. As a consequence, aid intensity should be based on the decarbonization potential of such projects. Carbon Contracts for Difference would as a consequence be useless, given the volatile ETS price.

Projects with emission avoidance in the longer term

Also, we want to raise the point that the GBER could also consider projects that will facilitate decarbonization and the energy transition in the long-term, but that might not have immediate emission avoidance effects. The positive effects of such projects could be measured through the accumulated effect of the initiatives over a longer period of time. For example, when assessing the case of e-boilers: considering the grid mix, there might not be an immediate emission avoidance, but looking over the lifetime of the asset there would be.

As a world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 78 countries with approximately 64,500 employees and serves more than 3.8 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.