

PUBLIC CONSULTATION ON THE REVISED CLIMATE, ENERGY AND ENVIRONMENTAL AID GUIDELINES (CEEAG)

ASSOGASLIQUIDI/FEDERCHIMICA POSITION PAPER

Referring to the documents made available by the European Commission, Assogasliquidi – the Italian national Association of Federchimica representing the companies operating in the liquefied gases sector (LPG and LNG) – wishes to bring to your attention some considerations.

Competition policy and State aid have an important role to play in enabling and supporting the Union in fulfilling its Green Deal policy objectives. State aid rules, in particular, are an important instrument for facilitating a just, sustainable and technologically neutral transition toward decarbonisation of energy sectors.

Notwithstanding the importance of setting rules able to guarantee a fair and sustainable transition process toward climate neutrality, the communication from the Commission regarding “Guidelines on State aid for climate, environmental protection and energy 2022” lacks in consistency with the objectives.

In detail, we refer to the position the Commission has adopted toward gaseous technologies, specifically referring to LPG, CNG and LNG. It is widely proven that gaseous fuels can immediately contribute to the reduction of CO₂ emissions, being at the same time able to tackle the issue related to air quality, reducing pollutant emissions. The maturity of gaseous technologies makes its use beneficial in several sectors: from road transport, both light duty (LPG and CNG) and heavy duty (LNG), to maritime transport (LNG, but also LPG for small crafts), from residential heating (LPG and CNG) to industrial applications and hard to abate sectors (LNG).

Getting in detail of mobility, we would like to address some considerations to some specific clauses of Commission’s communication, considering that gaseous fuels (LPG, CNG, LNG) represent a mature and widely used technology - being LPG the most widely used alternative fuel in Europe¹ - that are already contributing at the decarbonisation of transport sector:

- **Clause 161**: Gaseous fuels are recognised as alternative fuels in Directive 2014/94/EU (AFID), and due to their environmental performances, contrary to

¹According to the European Alternative Fuels Observatory <https://www.eafo.eu/>

what is stated by the European Commission in its communication, aid for the acquisition of these clean vehicles would not result in a distortion of the competition within the internal market. What would rather unduly distort competition is restricting aid to only a limited set of options, the so-called “zero emissions” solutions, moreover if the impacts are measured tailpipe and not in a broader perspective, like Well To Wheel. State aids should instead guarantee a level-playing field among all existing solutions to decarbonise transport, including natural gas fuelled vehicles (both in gaseous and liquefied form) and the associated refuelling infrastructure. Given the increasing volumes of bio product (bioCNG and bioLNG), we firmly oppose to the statement that any investment in natural gas chains will introduce negative environmental externalities in the longer run, being renewable and bio product totally compatible with the existing infrastructure and vehicles.

- **Clause 163:** contrary to the statement reported in this clause, it's worth noticing the potential of LPG vehicles in the transition process of transport sector, being able to enhance, in an environmental performance profile, both new vehicles and existing fleet.

For new vehicles, LPG is able to drastically reduce emissions if compared to traditional fuels: considering the Emissions Inventory presented by the Italian Institute for environment protection (ISPRA), is it possible to compare LPG performances to those of petrol and Diesel engines, evaluating emission reductions that can be summarized as follow²:

- CO₂: -23,4% compared to petrol, -3,3% compared to diesel;
- NO_x: -62,4% compared to petrol, -95,1% compared to diesel;
- PM_{exhaust}: -92,3% compared to petrol, -92,9% compared to diesel;
- PM_{2.5}: -4,9% compared to petrol, -5,4% compared to diesel.

Additionally, gas technology is able to produce beneficial effects on existing vehicles as well: for example, by converting vehicles to LPG it is possible to achieve relevant results on CO₂ reduction, up to -10%, PM up to -99% and NO_x up to -90%. The recent study made by Innovhub Stazione Sperimentale per I Combustibili on 5 LPG Euro 6 cars tested in RDE conditions clearly shows the following results:

- Significant decrease of PN emission with LPG, according to previous research

² <http://www.sinanet.isprambiente.it/it/sia-ispra/fetransp/>, for the comparison emission factors of Euro 6 vehicles of medium segment have been considered

- Very low NO_x emissions for both fuels
- Significant decrease in CO₂ emission with LPG feeding for all cycles (around - 10%)
- Very low differences on CO, HC emissions comparing gasoline vs LPG feeding → low importance of cold start phase in RDE tests

Therefore, given the proven evidences of the benefits from the use of LPG in transport, both in terms of CO₂ and pollutant emissions reduction, LPG industry opposes from the definition of LPG as one of the most polluting fuels as defined in entry 163 of the Draft Communication and asks for a revision of the text to confirm LPG in the list of sustainable alternative fuels (as currently stated in AFID).

Indeed, LPG is not only a clean alternative for transport but is also a ready solution and the most available on the market; the relevant number of LPG stations in Europe made this fuel the most available alternative for the users, able to take the advantage of travelling without any issue on availability. Additionally, the increasing volumes of bioLPG and renewableLPG available in the market make LPG far from being locked in fossil-based technologies, as instead stated in the same entry of the document (163). At this regard, it's worth noticing that the chemical equivalence of the conventional product with the one produced from bio and renewable pathways make bioLPG and renewableLPG drop in solutions, that can be directly implemented both in the existing distributing infrastructure that in the running fleet. This characteristic gives any investment in the actual logistic of LPG a double dimension, that can be enhanced with time with the growing availability of bio and renewable volumes.