

Gasunie response to the Guidelines on State aid for climate, environmental protection and energy 2022

Gasunie is an European energy infrastructure company. We transport natural gas, biomethane and hydrogen and offer a broad range of other energy services including LNG regasification, bunkering and gas storage. Gasunie is involved in numerous hydrogen, heat, biomethane and CCUS projects in the Netherlands and Germany. For more information see www.gasunie.nl.

We welcome the revision of the guidelines on state aid for climate, environmental protection and energy, such as the addition of the hydrogen energy infrastructure category, and the broadening of the gas and CO₂ categories.

In our response, we highlight three main issues, more general comments, followed by specific clarification requests.

1. Clear guidelines in lieu of restrictive rules

The new guidelines should determine the necessary clear general principles to get projects contributing to our energy and climate targets going rather than being prescriptive rules, at least as long as the upcoming gas and hydrogen market rules package has not been finalised.

2. State aid for operational costs of hydrogen pipelines & electrolyzers

The new guidelines should allow state aid for operational costs of hydrogen pipelines, especially in the market ramp-up phase. Support to develop hydrogen infrastructure based upon existing natural gas infrastructure needs to take into account that infrastructure is built for the future market possibly resulting in higher capital and operational costs.

OPEX support for electrolysis should be allowed and it should be seen as an environmentally friendly operation since electrolysis costs can be 80-90% OPEX-related.

3. Definitions for “energy” and “dedicated” infrastructures

The new guidelines should include offshore hydrogen (including repurposed offshore gas pipelines) and offshore CO₂ infrastructures. We expect the potential for these gases, especially offshore hydrogen production and transport via pipelines, to emerge in this decade. The need for a combined CO₂ network at sea (from multiple onshore sources) linked to offshore storage is seen as a prerequisite to reach our greenhouse gas emission reduction targets in hard-to-abate sectors.

Furthermore, in our view, a nuance to the definition of ‘dedicated infrastructure’ is needed. In some cases, it may be inevitable that infrastructure is built (at least initially) for a small group of ex ante identified users, i.e.: First Movers, based on non-discriminatory principles such as third party access.

In general we believe that the goal of combatting climate change and reducing CO₂-emissions will – especially in the next decade – require state intervention. In the last five years we have seen and experienced how important state aid guidelines are to develop suitable national support schemes and tailor made solutions. The solutions needed for the next decade still need to be determined and will probably not be one-size-fits-all schemes. Therefore, we believe it is crucial that the guidelines give enough flexibility to Member States to develop adequate government intervention schemes. General principles which support competition and a well-functioning internal market, should be much more important than detailed and specific prohibitions. We have experienced delays in projects due to lengthy discussions on what kind of support is allowed under the current state aid guidelines for environment and energy. The next decade – under new guidelines – should therefore determine the necessary clear general principles to get projects going. These should contribute to our energy and climate targets rather than being prescriptive rules, at least as long as the upcoming gas and hydrogen market rules package has not been finalised.

Indeed, we are concerned that choices on state aid are being made while the discussions on market design (e.g.: tariff structure) and governance for the hydrogen market are underway. It is important that the rules presented now are fit for purpose for the next decade and avoiding a mismatch with the new package. We would therefore suggest to align the more detailed rules with the new market design once it enters into force.

In general, competitive bidding seems to be the standard in the guidelines, which for hydrogen needs to be adapted to help its development. For instance, it should be possible for the renewable electricity competitive bidding process to go hand in hand with dedicated hydrogen production, incentivising the development of hydrogen capacity with new and dedicated renewable electricity capacity.

The hydrogen value chain will span multiple borders, on the one hand optimising the production of renewable electricity in locations which can harvest sun and wind energy, and the connected hydrogen production, and on the other hand connect this supply with consumption centres elsewhere. The EC should therefore take the opportunity to incentivise the application of cross-border mechanisms to hydrogen projects. We foresee that the hydrogen market needs a cross-border approach. There should therefore be hydrogen cross-border support mechanisms available for hydrogen production or end-use. An explicit mention of such a scheme in the guidelines would be beneficial to the EU's hydrogen economy, and in line with the Green Deal and the EU's Hydrogen Strategy.

At times, hydrogen will also be produced using grid electricity to ensure electrolyser running hours are optimised, otherwise many projects will not be realised. Point 98 includes a footnote referring to the Innovation Fund, which allows for calculating zero emissions from electricity regardless of the national mix. There are ample ways to make sure and prove that the electricity that is used is clean. It is not clear if this calculation is possible for the hydrogen produced from the electricity grid – this also needs to be clarified as a possibility.

Regarding support appropriate to the cost structure of electrolysis, OPEX support should be allowed and it should be seen as an environmentally friendly operation to

comply with the requirement of point 103. Electrolysis costs can be 80-90% OPEX-related, so it should be clear in the guidelines that OPEX support for electrolysis is regarded as resulting in a more environmentally friendly operation, as the alternative would be to produce much less renewable hydrogen since operators would have to solely rely on the cheapest electricity hours, which are relatively few in most Member States.

Also, state aid for operational costs of hydrogen pipelines should be allowed, especially in the market ramp-up phase. Support to develop hydrogen infrastructure based upon existing natural gas infrastructure needs to take into account that infrastructure is built for the future market and higher capital and operational cost can be a result of that. While the operation of natural gas network infrastructure is usually financed via tariffs (no state aid necessary), hydrogen infrastructure development requires a flexible approach as the market state is different. Hydrogen infrastructure projects can be supported by state aid to reduce the required equity financing amounts, thereby reducing transmission tariffs, as the share of the investment now covered will not be reflected in the customer's tariff. State aid will be one way, among others, to help develop the hydrogen infrastructure, and the revised Guidelines should thus allow state aid for operational costs (or a combination of capital and operational cost) of hydrogen pipelines.

The guidelines should be more explicit about overcompensation, in particular how combining support from different sources for different parts of the hydrogen value chain does not constitute overcompensation (e.g. support for hydrogen production from one electricity source, and additional support for methanol synthesis from another), as long as the subsequent support mechanisms only cover additional conversion costs .

For support in the form of reductions from electricity levies for energy-intensive users: in Annex 1 electrolysis does not appear as an activity that can be supported via reduced electricity levies. However, many of the activities covered include hydrogen consumption. This risks ringfencing or fragmenting the electrolysis market, as captive production in sectors listed in Annex 1 would be able to benefit from reduced levies, while standalone electrolysis would not. It is therefore important to include electrolysis in the list.

Definition of 'energy infrastructure':

There is some imbalance between electricity infrastructure and other infrastructure in the definition of energy infrastructure. For example, offshore infrastructure falling under the scope of electricity infrastructure is described in detail, and even specific details on hybrid use are introduced. It is unclear why this is the case and what this means for hydrogen (including repurposed offshore gas pipelines) and CO₂, whose offshore components are left out. We call on the EC to include these into the definition as we expect the potential for these gases, especially offshore hydrogen production and transport via pipelines, to emerge in this decade. For hydrogen, it would be mainly due to its increased benefits in terms of energy system integration, thereby increasing harnessed renewable energy and alleviating the burden on the electricity

system. For CO₂, the need for a combined network at sea (from multiple onshore sources) linked to offshore storage is seen as a prerequisite to reach our greenhouse gas emission reduction targets in hard-to-abate sectors. Finally, the definition for CO₂ should not only include pipelines but also all infrastructure and equipment including ships, railways and trucks, used to transport carbon dioxide from more than one source.

Definition of 'dedicated infrastructure':

It is stated that assets listed under points (a) to (g) which are built for one or a small group of ex ante identified users and tailored to their needs, qualify as 'dedicated infrastructure' and therefore do not qualify as 'energy infrastructure'. In our view, a nuance to the definition of 'dedicated infrastructure' is needed. In some cases, it may be inevitable that infrastructure is built (at least initially) for a small group of ex ante identified users, i.e.: First Movers, based on non-discriminatory principles such as third party access. When the infrastructure is already up-and-running (and/or the market has matured), other parties may also become interested in using this infrastructure at a later stage. The infrastructure should not be considered as dedicated infrastructure (and hence be excluded from funding) solely because the infrastructure at that time is built for a small group of First Movers. Rather, a case-by-case analysis of the infrastructure utilisation should be allowed and flexibility should be given at Member State level to determine whether the infrastructure will indeed not be designed to selectively favour a specific group of users over other users. Also a broader societal/welfare benefit resulting from the creation of this infrastructure must be taken into account (i.e.: energy transition at lowest societal cost).

Specific clarifications

Paragraph 332 (c):

According to this paragraph one of the conditions to qualify as a legal monopoly is that 'the service is not in competition with other services'. In our view, a clarification is required with regards to what (level of) competition is referred to here. There will always be some form of competition at a certain level. At a higher level for instance, different energy sources/carriers are alternatives to each other and thus may compete with each other to a certain extent. Electricity and gas can in some ways be competitors and this also goes for hydrogen versus natural gas.

Paragraph 332 – footnote:

In our view, asking for a 'clear prohibition for any other operator to provide such service (...)' might be too strict. It may also be that in practice the legal monopoly leaves no room for others (even if they were allowed in theory). In our view, a 'clear prohibition' is not always needed for the establishment of a legal monopoly.

Paragraph 333 (b):

It is unclear to us what is meant by 'alternative financing'.

Paragraph 333 (c):

It is unclear to us what qualifies as 'selectively favour a specific undertaking or sector(...)'. Moreover, in our view it might be useful to add guidance on this point for energy infrastructure besides gas and electricity, such as hydrogen, heat and CO₂.

Paragraph 334:

TSOs can construct and operate energy infrastructure. We understand that there is a distinction between CAPEX subsidies (funding provided for the investment of the energy network infrastructure) and OPEX subsidies (funding for the operation of such infrastructure). However, this point should not result in the idea that TSOs can only receive funding for the investment of the energy network infrastructure, and not for the operation of such infrastructure. It could and should also be possible to support both the capital cost and operational cost of building infrastructure for future use. Especially when re-using existing pipelines with a specific capacity: there may be higher OPEX in the first years can be the case. Moreover, it is not clear to us what 'operation' in this context entails (and what it does not entail).

Paragraph 337:

We would like to see a clarification that 'contractual' tariffs (as opposed to regulated tariffs by law) are also considered as 'compulsory' tariffs in this context. It could well be that negotiated third party access will be the standard for hydrogen infrastructure in the first phase of the market development.

Paragraph 338:

It is not clear to us what 'maximum' refers to in the given example 'when the aid is close to the maximum allowed'. In general, we understand (and share the view) that state aid should not be overly generous and should avoid over- and double compensation. However, it is not clear to us when the aid is no longer considered to be proportionate and when there is a risk of 'windfall profits'. Any commercial project contains uncertainty in regard to its future profits owing to the many different risks the project is exposed to: in favourable conditions profits may be higher than expected, while in unfavourable conditions these may be lower. The concept of windfall profits therefore needs to take into account this inherent variation in future profits as a result of investing in risky projects.

Paragraph 339(a):

A clarification is needed of what is meant by 'full' internal market regulation.