

# Position Paper

## to the public consultation of an EU Hydrogen Strategy

Berlin, 8th of June 2020

FNB Gas representing the German Gas TSOs welcomes the EU Commission's initiative for a dedicated EU Hydrogen Strategy addressing and including the system benefits of hydrogen for the decarbonization of the European Energy sector. We ask the EU Commission to consider our consultation response in combination with the response submitted to the public consultation on the Energy System Integration Strategy.

As a carbon-free energy carrier and raw material hydrogen will be a key element in achieving the climate protection goals in Germany and Europe. The following reasons speak in particular for this:

1. Hydrogen can make a significant contribution to the decarbonization of the industry, mobility and heating sectors, where efficient alternatives to reducing emissions are often lacking;
2. Hydrogen enables short-term as well as seasonal storage of energy, long distance transport and the use of energy from wind and sun irrespective of weather patterns;
3. Several studies (such as the Gas for Climate Study of 2019) have shown clearly that future scenarios with a technology mix of electricity and gas have significant cost-saving potentials compared to electrification scenarios.

FNB Gas is convinced that repurposing the European gas infrastructure for the transport of hydrogen will be the basis and a cost-efficient approach for building up a hydrogen economy in Europe. Having this in mind, we would like to recommend the following considerations and measures to be taken into account in the context of an EU Hydrogen Strategy:

- Firstly, for the development a European Hydrogen Market a coherent and **consistent approach regarding all hydrogen related initiatives, strategies and support schemes of the EU** is indispensable. From FNB Gas' point of view it is crucial that especially the announced Energy System Integration Strategy, the sustainable finance taxonomy with its screening criteria and the revision of the TEN-E regulation will be compatible with an EU Hydrogen Strategy. All initiatives should seek to form a sound and supportive basis for the necessary investments and legislation in a hydrogen market.
- For a functioning hydrogen market to develop it is crucial that the EU Commission adopts policies that **foster the demand for and supply of clean hydrogen** in Europe. The most direct and efficient political tool to achieve this would be a **binding quota** that requires energy suppliers to provide a pre-defined share of renewable and/or decarbonized hydrogen in their energy mix. Not only would such a quota effectively create demand for clean hydrogen, it would also achieve reliable emissions reductions and could thus be a **smart addition to specific hydrogen targets in certain end-use sectors**. Furthermore, to bring costs for renewable hydrogen down, taxes and levies linked to the consumption of electricity should not be charged for electricity used in electrolysis to produce renewable hydrogen.

- The potential for the production of renewable hydrogen via electrolysis varies significantly in Europe, with many coastal and southern regions having the ability to produce much more renewable energy than locally required. Furthermore, clean hydrogen can be imported from outside of the European Union. Potential demand centers for renewable hydrogen (such as industrial regions) on the other hand are spread out on the continent and are often not in those beforementioned regions. **An H2 pipeline system connecting Europe** is therefore required to efficiently transport hydrogen and to enable the development of a competitive market allowing to produce hydrogen where the production costs are lowest. It is clear that such a pipeline system based on repurposed existing natural gas pipelines is significantly cheaper and faster to realize compared to the construction of a new system.
- **The German Gas TSOs have presented their vision of a dedicated hydrogen network** largely based on their well-developed existing infrastructure. This could be a blueprint for the European level and integrated into the Green Deal and an EU hydrogen strategy in order to promote the development and deployment of hydrogen in the EU.

In the framework of the consultation document of the **German Gas network development plan** (2020 – 2030) the TSOs also announced that they plan to invest € 660 million in the refurbishment of their networks to lay the foundations for a hydrogen economy. The document outlines concrete steps for the development of an H2 network. The first converted pipelines, which are expected to be available as early as the end of 2022, will provide the core of a nationwide H2 network gradually evolving until 2030. However, currently the existing legal framework does not allow for a quick development of this H2 network.

More information on the initiative can be found within the consultation document of the National Development Plan of the German TSOs (pages 159 & 160) under the following link:

[https://www.fnb-gas.de/media/2020\\_05\\_03\\_fnb\\_gas\\_2020\\_nep\\_konsultation\\_en.pdf](https://www.fnb-gas.de/media/2020_05_03_fnb_gas_2020_nep_konsultation_en.pdf)

- A hydrogen system connecting supply and demand is very similar in its nature to the natural gas system. An open and non-discriminatory access to the system fosters competition and thereby reduces energy costs for consumers. Regulated transport tariffs furthermore ensure that system users contribute in a cost reflective manner and provide certainty about future cost structures. We therefore believe that applying the **same regulatory principles of the natural gas** system to hydrogen is to the benefit of all market participants. The existing directives and regulations should therefore be

revised to cover the transport of hydrogen in addition, notwithstanding potential deviations or flexibilities on specific provisions that are not helpful or required in the scaling up phase of the hydrogen market, such as balancing rules or capacity allocation mechanisms. Regarding the refurbishment of natural gas grids for H<sub>2</sub> transportation the respective costs for investments should be considered and recognized within the national regulatory framework.

- Furthermore we believe that the planning and development of the H<sub>2</sub> network or even the refurbishment of natural gas grids needs to be aligned with the further development of the existing natural gas grid to avoid sunk costs and investments.
  
- We believe that **financial support mechanisms** for innovative hydrogen projects will help to foster the development of a functioning hydrogen market and will also be of value in the phase of recovery after the Covid-19 pandemic and the economic crisis it brought to Europe. EU investment classification initiatives such as the **taxonomy regulation** and the respective screening criteria should therefore include investments in hydrogen infrastructure (both the retrofitting of existing infrastructure and, where necessary, new construction) and the **transport of hydrogen** as such as sustainable activities. Furthermore, the focus of the existing legislation (especially TEN-E and CEF regulations) should shift towards facilitating sector coupling and renewable gas projects.
  
- Clean hydrogen should be allowed to play its role in all energy sectors on an **equal footing to other energy carriers**. We don't believe that it is reasonable to "pick winners" now based on efficiency factors of individual technologies that do not take into account efficiency gains of new technologies as well as overall cost efficiency of the society in total. In the heating sector for example, the energy demand is at its peak in the winter when renewable electricity generation is usually rather low. To cover this demand, the import of renewable and decarbonized energy in the form of hydrogen from outside of the European Union will be required. Combined with fuel cells technologies at local level, heating processes with hydrogen will be more efficient than a potential electrification approach. This is also to be considered in combination with the fact that renovation quotas are still way too low to realize widespread electrical heating processes in time.
  
- Actions for fostering a European hydrogen economy should be taken as soon as possible **on the basis of technology neutrality** as well as the different starting points and pathways in the member states. As green hydrogen will not be available in sufficient quantities in the short-term, blue hydrogen should be considered as a transition fuel for the development phase of a European hydrogen market that will be dominated by green hydrogen in the long run.

FNB Gas asks the Commission to consider the above-mentioned aspects in the context of the EU hydrogen strategy and the wider framework of the European Green Deal and remains available for any questions that may arise.

### **About FNB Gas**

Vereinigung der Fernleitungsnetzbetreiber Gas e. V. (FNB Gas) is the association of German transmission system operators, i.e. the operators of the major supra-regional and cross-border gas pipelines. The Association was established at the end of 2012 and has operated an office in Berlin since April 2013. One main focus of the Association's activities is the Network Development Plan Gas, which has been drawn up annually by the transmission system operators since 2012. Furthermore, the Association represents its members as a point of contact for politicians, media and the public.