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## **Position Paper**

# **on the Public Consultation on the Hydrogen and Gas Mar- ket Decarbonisation Package of the European Commission**

Accompanying document to the Public Consultation questionnaire

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The German Association of Energy and Water Industries (BDEW) and its regional organisations represent over 1,900 companies. The membership comprises both privately and publicly owned companies at the local, regional and national level. They account for around 90 percent of the electricity production, over 60 percent of local and district heating supply, 90 percent of natural gas, over 90 percent of energy networks and 80 percent of drinking water extraction as well as around a third of wastewater disposal in Germany.

**BDEW key messages on the EU legislative framework for gas and hydrogen:**

- › BDEW supports the goal of EU climate neutrality by 2050 and the Commission's proposal for a net GHG reduction target for 2030 of at least 55 %. The EU climate targets can only be achieved if all available decarbonisation options can be used in all sectors.
- › The revision of the EU regulatory framework for gas must create the necessary framework conditions for the ramp-up of climate-neutral gases, including hydrogen, in all sectors. In particular, the potential of renewable and decarbonised hydrogen in heating must also be taken into account as well as blending of hydrogen into the gas grid. To facilitate blending, an EU-wide, initially low technical limit up to which the feed-in and transport of hydrogen is permitted, should be defined. Moreover, an incremental path to increase the technical limit shall be defined to allow network operators efficient and long-term network planning.
- › A harmonised legal framework for the European hydrogen market must be established without delay. The extension of established gas rules and regulations to hydrogen leads to planning security and reliability for all market participants. At the same time, a dynamic regulation should offer the greatest possible investment security.
- › The legal framework for the development and operation of hydrogen networks should be integrated into the Gas Directive and Regulation and designed in such a way that the transformation is open to all gas network customers. In principle, hydrogen networks for the supply of the general public should be subject to the same legal and regulatory rules as gas networks in order to create long-term and reliable framework conditions.
- › A systemic approach to the development of hydrogen grids while transforming the existing gas grids is essential in order to achieve the climate targets in a cost-efficient, socially acceptable manner and as quickly as possible. This includes also a perspective for distribution networks for decarbonization through the integration of hydrogen. Investment and planning security are required for the necessary conversions.
- › To support the development of a competitive EU market for renewable and decarbonized gases, the introduction of tradable guarantees of origin is necessary, based on a uniform terminology linked to the life-cycle GHG emissions of the different gases.
- › For tapping the potential of biomethane a significantly improved market is essential. There is an urgent need for harmonised rules for cross-border trade. Biomethane from the grid should be recognized for RES targets in the building sector.
- › With regard to fluctuations in gas quality, it is important to develop a strategy that is viable for all stakeholders. This requires European coordination and a uniform approach that takes into account national and regional circumstances, e.g. outlining also a roadmap for an increased H<sub>2</sub>-readiness of gas infrastructure and appliances.

## Detailed comments on multiple-choice questions

### II. Consumer's choice and renewable and low-carbon gases

- › **Q10-13: Modification of Gas Directive to ensure consumer protection and empowerment?**

The Electricity Directive has introduced new provisions aiming to ensure a higher level of consumer protection. It is important to guarantee the same level of consumer protection in both electricity and gas, except if technically not feasible or not relevant for gas. To ensure efficient processes in companies, it is also important to prevent different sets of rules for suppliers of electricity and gas for similar activities. Therefore, a straightforward alignment should be applied.

### III. Integrated infrastructure planning

- › **Q23 - What is your position on establishing a single national network development plan for all energy carriers?**

The overwhelming complexity of combining all energy carriers in a single national network plan needs to be taken into account and introduces a major process and feasibility risk. Therefore, gas and hydrogen should be combined in a national network development plan especially considering the repurposing of gas infrastructure/pipelines for the transport of hydrogen. If those were to be kept separated it could lead to inefficiencies, unnecessary interfaces and higher degrees of effort. Regarding interdependencies between gas/hydrogen and electricity, maintaining separate network plans based on a joint scenario can reap a most benefits of a single plan while having the advantage of substantially mitigating administrative and feasibility risks.

- › **Q25: What role should distribution system operators have in relation to network planning?**

As foreseen in the revised Electricity Directive, the need for DSOs to prepare their own network plan should not per se apply to the entire distribution network and thus to the large number of small DSOs in Germany due to the risk of high administrative burden for DSOs and the NRA which will not outweigh the benefits. Therefore, a similar possibility for Member States to exempt DSOs which serve less than 100 000 connected customers, or which serve small isolated systems is also appropriate for gas and hydrogen.

#### IV. Hydrogen infrastructure and a hydrogen market

- › **Q33/35 - What regulatory model at EU level do you consider suitable to foster the emergence of a well-functioning and competitive hydrogen market and hydrogen infrastructure? Although further development of hydrogen markets along the value chain seems highly likely, significant uncertainties remain. How should this uncertainty be taken account of in designing a ‘fit for purpose’ regulatory framework?**

On Q33, while BDEW has opted for Option 3 in the questionnaire, a mix of Option 3 and 4 would have been more desirable. It is of utmost importance that clarity is provided about the technical rules that could be implemented stepwise. The overall approach should be to define the regulatory toolbox from the outset – to provide investors with essential certainty – but choose a stepwise implementation. Based on the experience in the gas sector and the respective Network Codes, designing the technical rules for hydrogen will take several years.

With a view to the rapid development of a competitive hydrogen market that delivers the necessary volumes to contribute to the achievement of the EU climate targets, general principles for the development of technical rules of network access (balancing, capacities, etc.) with a clear mandate should, therefore, be set in the revised Directive and Regulation. The market development will vary in the Member States, but a EU legislative framework only catering for large industrial clusters connected to few hydrogen producers will not facilitate the development of a liquid and broad market. In addition, equal standards and a regulatory framework that envisage a merger on national level of small isolated hydrogen networks towards a future market area can avoid inconsistencies, integration problems and fragmentation from the outset.

- › **Q37 – How important would you consider to define the following regulatory roles and principles early in order to facilitate the development of a dedicated hydrogen network and market framework towards 2030?**  
A hydrogen network will primarily develop by repurposing existing gas grids. A gas network operator should therefore be allowed to own and operate hydrogen network infrastructure.
- › **Q 41/47: Which vertical unbundling principle should apply to hydrogen networks? Distinction between a transmission and distribution level?**  
The current unbundling rules for gas should be transferred to hydrogen (vertical unbundling). For a consistent regulatory framework, there should also be a distinction between transmission and distribution level and the application of the “De minimis” rule also to hydrogen distribution networks. The current level of unbundling is also appropriate for hydrogen and does not need to be strengthened. As there will be hydrogen customers in all sizes in the short- to mid-term, it is important that all grid related rules are in place early on to avoid fragmented national rules.

**Q42: Should (regulated) network operators (e.g. gas, electricity or hydrogen TSOs /DSOs) have a role in Power-to-gas installations (i.e. electrolyzers)?**

As a fundamental rule, PtG installations must compete and prevail in the market. Deviations from this in a parallel ramp-up and experimental phase should only be allowed in the firm confidence of a narrow limitation. The clear objective in such a phase must be to gain system experience for grid-serving operation through the flexibility of large-scale PtG installations. After this phase and an appropriate transitional period, the transfer of ownership to a market participant should be ensured via a market test which should be repeated regularly in case of a negative result. In principle, the realisation of grid-serving pilot installations in the regulated area cannot be a substitute for a functioning market-based provision of PtG capacities. The goal must remain to create the framework conditions for corresponding flexibility markets as quickly as possible.

The provisions on power-to-gas installations in the revised Gas Directive should be without prejudice to the provisions of the Electricity Directive on electricity storage systems.

**› Q44: Gas network tariffs / cross-subsidies**

BDEW does not share the view that joint financing of hydrogen and gas network infrastructures is not allowed under EU law. Provided that natural gas is prospectively replaced by renewable and decarbonised gases (including hydrogen), an integrated market approach and joint financing with simultaneous use of the hydrogen and gas grid infrastructures can benefit both hydrogen consumers and gas consumers alike.

**› Q53 / 54: Consumer rights for users of pure hydrogen**

The revision of the EU regulatory framework for gas must create the necessary framework conditions for the ramp-up of climate-neutral gases, including hydrogen, in all sectors. The application should not be limited from the outset to what is called “typical end-users” in Q53. Therefore, it is important to fully align the rights of hydrogen customers to those of methane and electricity (see chapter II), even though some of the provisions on consumer rights might not be applicable right away, depending on the H2 market development.

**› Q55: In your view, at what level should such binding hydrogen quality (purity) standard be established?**

With regard to cross-border flows, binding hydrogen quality standards should be set at EU-level. This has the advantage that cross-border trading across Europe should be less complex and does not necessarily mean that there can be no range for hydrogen qualities along the value chain.

## V. Access of renewable and low carbon gases to the existing methane gas networks and markets, including LNG terminals and gas storages

- › **Q67: Main regulatory barriers to the deployment of biomethane and synthetic methane / How do you rate the measures below?**

*“Improve the coordination between transmission and distribution system operators to facilitate the process of decarbonisation of gas.”*: In Germany the coordination between TSOs and DSOs works well and it is clear that coordination is important for the decarbonisation process in general.

*“Reducing network tariffs for injection of renewable gases to the grid”*: BDEW rates the statement important but wants to acknowledge the fact that it should be extended to ‘decarbonised’ gases and not limited to renewable gases.

- › **Q76: The blending of hydrogen and other renewable or low carbon gases into the existing methane gas grid requires a consideration of its contribution to the decarbonisation of the energy system as well as its economic and technical implications (see specific questions on technical implications in section on gas quality).**

Blending is an important factor to decarbonize the energy system in a cost-efficient and fast way and has multiple advantages. For instance, it allows for building-up hydrogen production capacity and developing economies of scale that will foster a positive business case for the transition to a hydrogen system. Using gas-hydrogen blends in the short and medium term achieves a larger GHG reduction at a lower systemic cost than by using only new dedicated infrastructure to deliver hydrogen. It can be an especially cost-effective transitional option in those European regions without parallel or duplicated networks, or without (potentially) available gas infrastructure capacity, which can be easily repurposed to hydrogen in the short-term.

## VI. Gas Quality

- › **Q79 In your view, the harmonised application of the CEN standard across EU Member States would be best achieved by:**

*Harmonising the gas quality standard across the EU based on a standard taking fully into account renewable and low-carbon gases, developed by an independent technical expert group.:*

The work on the H-gas quality standard is well advanced in the EU. CEN TC 234 and the CEN Sector forum gas have developed concrete proposals for the Wobbe Index ranges, the report is in a final stage. To understand the implications of the proposal of the Wobbe index ranges but also in addition the impact of the injection of hydrogen an expert group called the “Prime

Movers” has been set up in January 2021 to concentrate on the more practical challenges and potential mitigation measures. The Prime Movers Group should be considered as the independent technical expert group, that should accompany the work in parallel to CEN for the time being. This is not a network code process, but it will lay the ground for it.

### **Additional comment on the role of the NRAs: Legal issues concerning the implementation of the Gas Directive into national law**

The Gas Directive is, amongst other EU legislation (e.g. Network Codes), the basis for the regulatory system of the gas sector of the Member States. The Member States have procedural autonomy in implementing European provisions in their national regulatory systems as provided in Article 291 subsection 1 AEUV. This must not be undermined, e.g. by amending Article 39 Gas Directive. The competence of Member States to decide on the general structure of their regulatory system is reflected for instance in the variety provided for in Article 41 Gas Directive and their right to determine tariffs or methodologies concerning tariff-calculation. In order to achieve the Directive’s objectives, tasks and targets, Member States must be given the possibility and the right to define normative requirements themselves when implementing its provisions. This may include more detailed legal specifications to ensure appropriate conditions for the effective and reliable operation of gas networks, considering, in particular, the Directive’s long-term objectives.

The powers granted in the Gas Directive and the discretion of the national regulatory authorities must not be unduly restricted by pre-structuring European stipulations extensively. National parliaments as the main legislators at national level must be able to decide on essential components of a subject matter without exception, including key questions of energy regulation. EU legislation cannot substitute these national legislative acts. This essential national legislation as well as the implementation of EU provisions are necessary in order to legally justify decisions by the national regulatory authorities (NRAs). The NRAs are not addressed by EU legislation but the Member States are.

Therefore, the activities of the NRAs must be subject to full review by national courts. The more NRAs act independently, the more comprehensively judicial review of NRA’s activities must be. This is already indicated in Article 41 subsection 17 Gas Directive as well as in the Arcor Decision C 55 / 06 as of 24/04/2008.

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