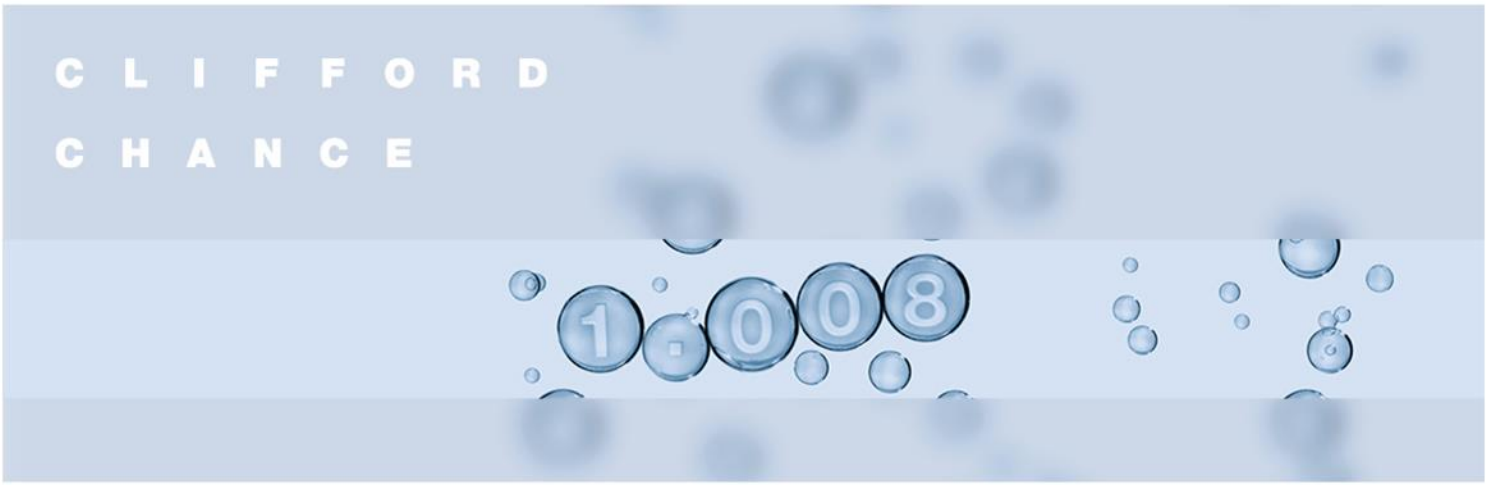


# FOCUS ON HYDROGEN: RECENT ENERGY REGULATORY DEVELOPMENTS IN GERMANY

Germany and the European Commission as well as almost all major European economies published roadmaps for the development of a hydrogen economy over the summer of 2020. Since then, Germany has taken the first steps to implement its National Hydrogen Strategy with various amendments to the German Renewable Energy Act (EEG 2021) which we highlight below.

**Key points to note:**

- Market consultation by the Federal Network Agency (BNetzA) completed in September 2020
- Proposal by the German Federal Council (Bundesrat) in November 2020 to amend legal framework to cater for hydrogen regulation
- BMWi position paper in December 2020 foreseeing separate grid tariffs for hydrogen and separate grid development planning
- Amendment of the German Renewable Energy Act (EEG 2021) as of January 2021, including a reduction of the EEG levy of up to 85% for the production of hydrogen, and complete reduction for the production of green hydrogen
- German draft legislation on hydrogen transportation expected in Q1 2021
- European Commission's proposal for a regulatory framework for hydrogen expected to follow in Q2 2021

## Market consultation by the Federal Network Agency (BNetzA)

Shortly after the German government had announced its National Hydrogen Strategy in June 2020, the German Federal Network Agency (**BNetzA**) issued a status quo report with an overview of the applicable legislation on hydrogen transportation and on existing projects, together with its proposed adjustments of the regulatory framework for a hydrogen transportation network system.

Based on that report, the BNetzA conducted a market consultation from July to September 2020 with a comprehensive questionnaire covering the use of hydrogen, regulation of hydrogen networks with respect to blending with natural gas, connection and access to hydrogen transportation networks as well as their development and network tariffs.

The feedback received by the BNetzA from stakeholders was published in November 2020 and can briefly be summarised as follows:

- With regard to the **blending of hydrogen** with natural gas, many stakeholders favoured such a solution due to lower costs whereas others pointed out that the share of hydrogen in such blending would be limited to max. 20% and raised concerns with regard to purity requirements of end consumers.
- With regard to the **regulation of pure hydrogen networks**, the majority of stakeholders favoured a stepwise regulation of the hydrogen grid connection and access regime based on the existing regulatory framework for natural gas, however, with hydrogen specific adjustments.
- **Prioritised grid access entitlement for generators of green hydrogen** was not favoured by many stakeholders. However, most of the stakeholders agree that in the long term such prioritised grid access would be necessary to meet Germany's energy transition targets.

- Gas TSOs and other stakeholders favour a **common grid tariff** for both hydrogen and natural gas, based on the existing regulatory framework for natural gas.

## Proposed amendments of the legal framework by the German Federal Council (*Bundesrat*)

In October and November 2020, the German Federal Council (*Bundesrat*) picked-up on the market consultation of the BNetzA by proposing marginal amendments to the existing regulatory framework for gas grids in order to pave the way for a regulatory framework for the transportation of hydrogen (BR-Drucks. 570/1/20 and 647/20). In essence, these proposed amendments included adjustments of definitions in the German Energy Act (e.g. the extension of the term "natural gas"), the grid operator's right to refuse blending of hydrogen with natural gas if it might negatively affect other grid users, and extending the right of way for gas pipelines to hydrogen pipelines.

## Position paper of the Federal Ministry for Economic Affairs and Energy (BMWi)

In December 2020, the Federal Ministry for Economic Affairs and Energy (**BMWi**) presented its position paper for a transitional regulatory regime for hydrogen transportation which shall apply until 2025. The position paper outlines the following key points of the upcoming draft regulation which is expected to be issued in Q1 2021:

- ***No extension of the term "natural gas"***: Some stakeholders who favoured the application of the gas grid regulation to hydrogen grids had proposed to extend the definition of the term "natural gas" under the German Energy Act so that it would also comprise hydrogen. The position paper, however, dismisses such approach as being inappropriate. In particular, it would not be in accordance with EU law to refinance gas and hydrogen grids by one common grid fee.
- ***Safety requirements***: Hydrogen grids shall also have to observe the safety requirements as set out by the DVGW (German association for gas and water) or by a preliminary regulation.
- ***Right of way***: The new regulation shall cater for the application of existing rights of way for natural gas pipelines to hydrogen pipelines, in particular, in case of the repurposing of natural gas pipelines.
- ***Scope of application***: Hydrogen grid operators shall be free to decide whether they want to submit themselves to the (gas) grid regulation during the transition phase (**opt-in**). Thus, private hydrogen grid systems (which currently basically exist on local level) would not require grandfathering provisions. Furthermore, such transitional regulation would, for the beginning, **not distinguish between transmission and distribution grid systems**.
- ***Grid tariffs***: In contrast to some gas grid operators' position (see section on the market consultation above), the transitional regulation would foresee **separate grid tariffs** for natural gas and hydrogen due to EU law related concerns. In doing so, the German government follows a causation-based approach where, primarily, the actual grid users finance the use and development of the hydrogen grid. However, in order to avoid

prohibitive effects due to high tariffs, hydrogen grid operators shall receive **public support**.

- ***Unbundling***: The unbundling requirements currently applicable in the electricity and gas sector shall apply to hydrogen, i.e. activities concerning the generation and storage of hydrogen shall be separated from hydrogen transportation activities.
- ***Third party access***: At the present stage, the German government does not see the need for a comprehensive regulation of grid access as it deems the relevant stakeholders to be in equal positions for negotiating fair terms of access and connection to the hydrogen transportation grid.
- ***Grid development***: As of 2024, hydrogen grid operators shall propose separate development plans for hydrogen transportation grid systems. During the initial phase, however, grid development plans for natural gas shall identify pipelines which might be subject to refurbishment and no longer be required for the transportation of natural gas.

During the presentation, representatives of the BMWi underlined that the position paper has been drafted in close coordination with the European Commission. Thus, it can be expected that the position paper will serve as a preview for the European Commission's proposals for a regulatory regime for hydrogen at the EU level in Q2 2021.

As regards the development of a cross-border hydrogen grid, the European Commission published a proposal for an amendment of the TEN-E guidelines on 15 December 2020 (COM(2020) 824 final) stating that the "natural gas infrastructure no longer needs support through the TEN-E policy". Instead, the TEN-E guideline proposal emphasises the development of hydrogen transmission infrastructure and storage as well as the development of electrolysers.

## Amendment of the German Renewable Energy Act (EEG 2021)

Also in December 2020, the amendments to the German Renewable Energy Act (EEG 2021) applying as of 1 January 2021 passed the German parliament and the German Federal Council.

**Renewable generation and net zero targets**

With a view to the European Commission's Green Deal, the EEG 2021 sets out ambitious targets, in particular a **65% share of renewables in electricity generation by 2030** and net zero electricity generation by 2050. Furthermore, the EEG 2021 provides for new capacity targets for renewable energy generation to be installed by 2030 as follows:

- Onshore wind: 71 GW
- Offshore wind (under the German Offshore Wind Energy Act): 20 GW
- Solar: 100 GW
- Biomass: 8,400 MW

Against this background, the EEG 2021 provides for both new mechanisms and adjustments of the existing framework to support investments in renewable energy generation.

**Support for hydrogen production – EEG levy**

The EEG 2021 introduces a reduction of the EEG levy for hydrogen producers, distinguishing between a technology neutral production of hydrogen and the production of green hydrogen.

- ***Technology neutral hydrogen***: Energy intense undertakings (i.e. where the electricity costs for the production of hydrogen form the greatest part of the respective undertaking's gross value added) producing technology neutral hydrogen may benefit from a **reduction of the EEG levy by up to 85%**, but not to less than 0.1 ct. per kWh.
- ***Green hydrogen***: Undertakings producing green hydrogen may benefit from a **complete exemption from paying the EEG levy**. In order to provide for sufficient incentives during the market offtake of hydrogen, the reduction is only granted for electrolysers which are commissioned before 1 January 2030.

The eligibility criteria for the exemption from the obligation of paying the EEG levy shall be further specified by the German government, foreseeing the exclusion of electricity which has been generated under the support schemes of the EEG.

As a consequence, green hydrogen producers will have to conclude corresponding (corporate) **power purchase agreements** which also cater for a sufficient number of **green certificates of origin**. To this end, the EEG 2021 creates an opportunity for renewable power plants whose support under the EEG's support schemes is phasing out in the coming years.

It is to be noted though, final effectiveness of these privileges for hydrogen generation is subject to the European Commission's state aid approval (Sec. 105 para. 2 EEG 2021) which is expected to be granted in the course of 2021.

**Other key aspects of EEG 2021**

In addition to the above, the EEG 2021 provides for the following amendments:

- Increasing the acceptance for onshore wind energy projects by enabling municipalities to financially participate with 0.2 ct. per kWh in the revenues of the respective wind turbine generator.
- Major rooftop PV projects may participate in the auction procedures in order to receive EEG support.
- Incentives for certain plant technology, with particular regard to remote curtailment and system integration.
- Reduction of the market premium to 0 when the spot market price for electricity is negative for at least four hours (four-hour-rule; previously six-hour-rule).

## Outlook

In light of the first steps taken in Germany after issuance of the National Hydrogen Strategy, it appears safe to assume that 2021 will be the year of detailed regulatory discussions and the first legislative actions at both a national and hopefully also European level, paving the way for a regulatory framework for hydrogen.

European and German legislation on hydrogen will be decisive for the market offtake in Germany, in particular, on the midstream level. To this end, it is crucial to provide stakeholders with sufficient legal certainty for their investments in hydrogen infrastructure and other hydrogen projects. The timing of both legislative procedures will play a significant role in achieving the ambitious hydrogen targets set out in Germany's National Hydrogen Strategy and the European Commission's roadmap for a hydrogen economy.

**ABOUT**

Focus on Hydrogen is a Clifford Chance briefing series covering hydrogen-related developments globally. 1.008 is the standard atomic mass of hydrogen.

For other hydrogen publications, please see our thought leadership page here.

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