

What's next for hydrogen?

According to information contained on the website of the Government Legislation Centre, in a letter dated 10 September 2024, the Ministry of Climate and Environment requested that the draft Law on Amendments to the Law - Energy Law and Certain Other Laws (List No.: UD36) be forwarded to the Law Commission for consideration. The Act is intended to introduce a legal framework for the operation of the hydrogen market. However, before the draft was agreed upon with the Council of Ministers, many entities (more than 30) submitted extensive comments on its content at the public consultation and opinion stage.

One of the most important comments concerned the lack of a legal definition of hydrogen while singling it out as a separate fuel type alongside gaseous fuel. According to the Energy Regulatory Authority: "[t]he above change and the lack of a definition of hydrogen (...) means that hydrogen is not a gaseous fuel even when "it is supplied via a gas grid", because it is a separate fuel - hydrogen (...). This means that in a situation where, for example, natural gas (gaseous fuel) is mixed with hydrogen (a separate fuel) in the grid, there will be a conflict between the regulations governing issues related to gaseous fuel and the regulations governing issues related to hydrogen, for example regulations governing concessions, operatorship or tariff calculations" [On page 27]. However, it is not clear from both the wording of the UD36 project and its justification which regulations should be applied to such a mixture of two separate fuels.

Similar comments were presented in this regard by the Institute of Power Engineering - National Research Institute. The Institute, referring to examples from the legislation of other European Union member states, pointed to the potential possibility of introducing a legal definition of hydrogen, developed, for example, on the basis of a model using a proportional determination of the proportion of hydrogen in a given product.

Despite the comments made, the authors of the project remained adamant, consistently pointing out that "hydrogen is a well-known concept, and its quality criteria will be defined in the system regulation, which will distinguish the concepts of gas grid and hydrogen grid, as well as the hydrogen sector in general from the gas sector", and independently remains in line with the intentions of the EU legislature, which - as part of the gas-hydrogen package - also distinguishes hydrogen from other gaseous fuels. However, it has been assured that the definition of "gaseous fuels" will be clarified in such a way that, based on it, it is possible to admix hydrogen to gaseous fuel in the amount specified in the gas system regulation, which is reflected in the proposed addition of the additional phrase "or natural gas containing an admixture of hydrogen" in the text of the draft.

Following the comments, the authors of the project agreed to make significant changes to the definition of "low-carbon hydrogen," expressed: first, in setting the emission reduction threshold at 70%, which is lower than the original threshold of 73.4%; second, in clarifying that the emission reduction relates to greenhouse gases; and third, in adding a reference to the methodology of Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying the methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels (OJ L 157, 20.6.2023, p. 20).

One of the most important changes introduced as a result of comments submitted by a total of as many as 15 entities was the clarification of "energy storage" definition. The definition was divided in a way that distinguishes between three types of energy storage. Noteworthy, it was clarified that in the case of energy storage involving the conversion of electricity, it requires that after the electricity is converted,

it is stored and then used as an energy carrier, which raised some doubts at the consultation and opinion stage. Finally, in an effort to take into account the possibility of storing electricity also in fuels other than hydrogen, it was stopped at indicating that the conversion of electricity can take place into the form of a "fuel," without pointing to hydrogen, for example.

As a result of numerous demands, fundamental changes have also been made to the definitions of hydrogen transmission grids and hydrogen distribution grids. The criteria distinguishing the two types of grids have been made explicit in the form of the type of system operator responsible for the grid, the direct connection to the hydrogen storage facility, and the location to which the hydrogen transported by each grid is transmitted, respectively. Geographically limited hydrogen grids (including pipelines intended for direct hydrogen transportation) were excluded from the definition to avoid doubts about the applicability of regulations applicable to hydrogen transmission grids or hydrogen distribution grids.

While the changes to the concepts cited above seemed somewhat expected, the complete abandonment of the introduction of the institution of a combined gas-hydrogen system operator comes as a surprise. After all, both the wording of the original draft and its explanatory memorandum devoted a great deal of attention to this solution.

However, this approach can be considered justified. Despite the understandable intentions, which include striving to create a better basis for the development of the Polish hydrogen economy, already at the stage of consultations and opinions, the aforementioned institution gave rise to many interpretation difficulties. The decision to stop with the introduction of amendments to the previously proposed provisions on the designation of operators, including clarification of the provision on the designation of the gas transmission system operator as the hydrogen transmission system operator until the date of implementation of Directive 2024/1788, i.e. 4 August 2026, is all the more expedient.

Finally, it should be pointed out that many of the comments made concerned the lack of a viable support system for hydrogen production in Poland.

In response to such demands, the project's authors pointed out that work is currently underway on a national support system for various types of hydrogen in the form of a contract for difference.

Stakeholders eagerly await the outcome of the work on both the aforementioned support solutions and the hydrogen law itself.

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