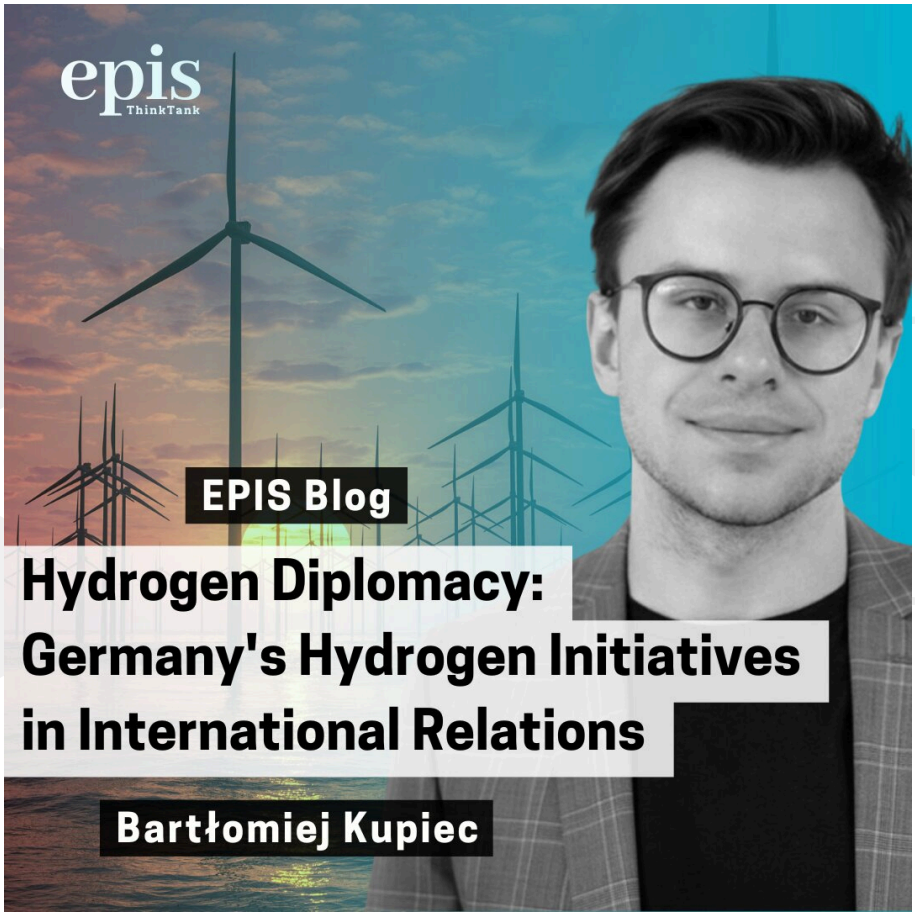
Hydrogen Diplomacy

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Bartlomiej Kupiec



In the "National Hydrogen Strategy" (Nationale Wasserstoffstrategie) adopted by Germany in 2020, a roadmap was delineated for the expansion of the hydrogen economy. Germany's ambitious goal is to supplant traditional liquid and gaseous fuels with green hydrogen, widely acknowledged as an environmentally friendly solution. By 2030, the Federal Republic of Germany plans to escalate electrolyzer capacity to 5 GW and further to 10 GW by 2040.

Germany recognizes that its domestic production capabilities will not meet the country's energy needs, leading to the necessity for additional hydrogen imports. Principal import partners are expected to be Africa, the Netherlands, and importantly, Norway. This reliance on securing hydrogen

supplies from foreign partners places Germany's green energy initiative within the context of its broader foreign relations, giving rise to the novel concept of 'Hydrogen Diplomacy'.

A cornerstone of Germany's hydrogen strategy is to establish regulatory and economic foundations for a national hydrogen market by 2023. To achieve this, there's a need to develop both offshore and onshore wind energy as well as photovoltaic power installations, further emphasizing Germany's commitment to renewable energy resources.

In addition to domestic initiatives, Germany's strategy involves the modernization of the current natural gas infrastructure to adapt it for hydrogen transport. This initiative can set a precedent for other countries within the European Union, consolidating Germany's position as a leader in green energy transition. Furthermore, the country aims to establish certification standards for hydrogen production, enhancing its competitive advantage in the burgeoning hydrogen market.

While Germany is still in the early stages of creating a comprehensive legal framework for the hydrogen industry, specific regulations have been introduced. Although scattered and incomplete, these initiatives, such as the exemption from the EEG levy (financing renewable energy) for energy used in green hydrogen production, indicate the country's commitment to promote green hydrogen competitiveness.

Turning the focus to Norway, Germany's hydrogen diplomacy strategy envisages a strong partnership. Norway, a traditional energy partner to Germany, possesses extensive expertise in renewable energy, especially in harnessing wind and hydropower. In addition, Norway's abundant renewable energy resources, its commitment to decarbonization, and its favorable geographic position make it an attractive partner for Germany in the context of green hydrogen production and export.

The close collaboration between Germany and Norway in the field of green hydrogen production could lead to the creation of a 'green energy corridor,' benefiting not only these two nations but also promoting sustainable energy within the wider European context. Norway, with its long coastline and windy conditions, is perfectly suited for the production of green hydrogen through offshore wind farms. The produced green hydrogen could then be transported to Germany, aiding in the transition to cleaner energy and reducing carbon emissions.

Importantly, this bilateral partnership is mutually beneficial. While Germany secures a stable supply of green hydrogen, Norway can diversify its energy exports and strengthen its position as a significant player in the green energy sector. This cooperative model showcases the potential of hydrogen diplomacy, as it encourages international collaboration and contributes to global decarbonization goals.

However, it's important to note that such ambitious plans necessitate significant investment and infrastructural development. The retrofitting of existing natural gas pipelines for hydrogen transport, the construction of

offshore wind farms, and the development of efficient hydrogen production methods require substantial financial resources and technological innovation.

Despite these challenges, Germany's hydrogen diplomacy, particularly in relation to Norway, represents a significant step towards a greener future. Through this approach, Germany is not only reshaping its international relations but is also leading the charge in the global shift towards sustainable energy solutions. By integrating green energy ambitions with foreign policy, Germany is laying the groundwork for a new form of diplomacy centered around sustainability and international collaboration in the face of global climate challenges.

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