

Joint Impulse Paper

A European Hydrogen Alliance

June 2025

Initial situation

Hydrogen and its derivatives (especially ammonia, methanol, methane, LOHC or Liquid Organic Hydrogen Carriers, e-fuels) are an indispensable building block for achieving climate neutrality. The development of a hydrogen economy has the potential to make an important contribution **to increasing the EU's competitiveness**, to **Europe's global innovation capacity and technological leadership** as well as to **resilience** and **energy and technological sovereignty**.

Investments and innovations in the hydrogen sector can contribute to more growth and a more modern economy. 75 years after the Schuman Declaration establishing the European Coal and Steel Community, it is now time to rethink our key industries and energy supply.

However, **there is no group or alliance of states** within the Council of the EU **that routinely works together** and coordinates closely in order to drive forward the European H₂ ramp-up. Against the background of existing and successfully operating alliances such as the **Nuclear Alliance** and the **Friends of Renewables Group**, there is a **gap** in the area of hydrogen that can be **filled in a promising way.** BDEW has therefore joined forces with thirteen other German and European trade associations - DVGW, DWV, en2X, figawa, FNB GAS, Die Gas- und Wasserstoffwirtschaft, Hydrogen Europe, VCI, VDA, VDMA, VIK, VKU, Wirtschaftsvereinigung Stahl - to advocate for the inclusion of a hydrogen alliance at EU member state level in the coalition agreement of the new German government.

It is to be welcomed that it has now **been agreed upon** in the **coalition agreement** that **Germany** should play a **leading role in a European hydrogen initiative**. The task now is to make this **agreement a success**.

The specific **objective** should be to **establish a hydrogen alliance at member state level.** This should be **done in close dialogue with associations** and **companies** in order to address the actual needs and weaknesses in practice.

Potential of the hydrogen economy

The potential of hydrogen and its derivatives in Germany's future economic and energy system is high. This applies to both industrial use and transport, as well as in the electricity system to secure electricity generation from the volatile production of renewable energies. As an energy source with great storage potential, hydrogen plays a key role in **sector coupling**, particularly with power generation, heat, industry and transport, which is of central importance for the intelligent and (cost-)efficient implementation of the energy transition.

In view of the **current geopolitical and geo-economic shifts, Europe** must **become even more internationally connected and diversified**, including its **trade and energy partnerships**. The hydrogen sector is very well suited for this. In addition to countries that are geographically relatively close and can be connected to the EU via pipeline corridors, derivatives that are well suited to shipping are also an option for trade with more distant countries. **The contribution of the hydrogen sector to resilience** results, among other things, from a **large number of possible import countries worldwide**, especially in comparison to gas and LNG, in combination with **domestic production potential**.

In addition to the hydrogen supply via the planned core network and distribution networks that must be connected to it, **regional hydrogen clusters and hubs** can make an important contribution not only to the hydrogen ramp-up, but also to the **development of regional value chains**, including expertise, innovations and jobs.

The potential of the hydrogen economy can be seen in European and domestic projects that have

either already been successfully launched or for which a final investment decision has been made. In Germany, these include, for example, the GET H2 Nukleus project, which spans several federal states, the Bad Lauchstädt energy park and the large-scale electrolyser in Lubmin operated by Deutsche ReGas, which recently became the first German company to receive funding approval from the European Hydrogen Bank.

However, in view of difficult or unclear regulatory conditions, delays in infrastructure projects, high costs and the resulting hesitant development of demand on the customer side, increasing uncertainty or even withdrawal from project plans can also be observed. Climate-friendly hydrogen will also not be competitive in the foreseeable future as a result of European regulation. The demand side is not receiving sufficient support to offset the high procurement costs.

Major European infrastructure projects such as the Delta-Rhine Corridor, H₂MED, BalticSeaH₂ or SouthCorridorH₂, as well as cross-border projects such as mosaHYc with France and Luxembourg or the border connection between Germany and Belgium, have developed pioneering visions. These first cross-border projects, with their experience and integrated approaches, should serve as points of reference for a closer hydrogen alliance. With the right framework at the EU level (in addition to the national level) focussing on cost efficiency, pragmatism and openness to technology, stronger European coordination and targeted funding mechanisms, the hydrogen ramp-up can become a European success story.

The main focus areas of a European hydrogen alliance

A large part of the regulatory framework relevant to the hydrogen sector is set at EU level. An ambitious, but at the same time pragmatically orientated European H_2 policy that focuses on openness to technology, feasibility, affordability and competitiveness of hydrogen is crucial for the success of the ramp-up across the EU and in Germany. The innovation potential of hydrogen technologies and utilisation is huge.

A European hydrogen alliance should be equally **open to all production options for renewable, lowcarbon** and, in future, possibly also geogenic **hydrogen** in order to enable the ramp-up efficiently, at internationally competitive prices and on a broad scale. The focus should be less on the colour of hydrogen and more on reducing CO_2 emissions by at least 70% in accordance with EU legislation.

The **overarching objectives** of the European Hydrogen Alliance should be: **Firstly**, as an association of member states that want to accelerate and advance the ramp-up, to **advocate** an **ambitious**, **innovation- and implementation-orientated H**₂ **policy in the Council of the EU and vis-à-vis the European Commission and the European Parliament.** More so, the dialogue between these member states will be just as important.

Secondly, the alliance should serve to build even closer bridges with important non-EU partners in the hydrogen sector, including the United Kingdom, Norway and countries bordering the Mediterranean, in order to make progress with the import corridors to the EU. Among other things, the aim here is to develop import sources for the procurement of low-carbon hydrogen. Cooperation with other potential importing countries should also be expanded.

Concrete projects of the H₂ Alliance should include:

Revision of the EU regulatory framework for the production and import of hydrogen, in particular with a view to reducing production costs, adapting the electricity purchase criteria for RFNBOcompliant hydrogen in Delegated Act 2023/1184 and a practicable design of the Delegated Act for the assessment of greenhouse gas savings from low-carbon fuels.

- Cooperation for a standardised, globally compatible H₂ certification system, establishment of a viable trading system and cooperation on standards for H₂ qualities at EU level.
- Accelerate the expansion of the European H₂ backbone and connecting corridors outside the EU. This requires cross-border financing mechanisms. The construction of import infrastructures is also a key aspect. This includes the construction of holistic systems that include ammonia crackers and a corresponding storage infrastructure in addition to efficient import terminals and FSIUs (Floating Storage and Injection Units). A secure and efficient supply of hydrogen and derivatives can only be guaranteed through the harmonised interaction of these elements.
- Advancing offshore electrolysis and strengthening the focus on maritime areas.
- Further strengthening of the European Hydrogen Bank as envisaged in the Clean Industrial Deal and other funding instruments with the aim of establishing the competitiveness of climate-friendly hydrogen. A coherent support framework is needed on the demand and production side to compensate for the cost disadvantages. Necessary are also hedging instruments for hydrogen supply contracts, for example through bank guarantees or guarantee schemes for customers and suppliers, and for midstreamers, who organise the trade and distribution chain between production and use and thus play an indispensable role in the market.
- Expansion of an innovative H₂ economy and technology leadership in the H₂ sector in order to strengthen European competitiveness. This also includes the promotion of European research and development networks in order to drive innovation.

Possible partners

In view of the various projects that should be tackled within the framework of a European hydrogen alliance and the different constellations of interests among EU Member States with regard to the various dossiers, a two-pronged approach is advisable. In principle, the aim should be to **bring together a broad alliance of EU Member States that are in favour of the fastest and most ambitious ramp-up possible**. At the same time, however, there could be **topic-specific, in-depth cooperation** between individual states within the alliance. This could be the case, for example, when it comes to cooperation with regard to individual import corridors or cross-border hydrogen regions (valleys, hubs).

Regarding partnerships for the hydrogen alliance, an open approach should be pursued, i.e. the alliance should in principle be open to all interested partners. Obvious partners would be countries that, like Germany, have renewable energies at the centre of their energy system and regard molecules as partners.

The **Netherlands** and **Belgium** in particular appear to be natural partners, also due to complementary interests in the import of H_2 derivatives in particular via ports: the import hubs being developed in Rotterdam and Antwerp/Zeebrugge can play a central role in the onward transport of hydrogen and its derivatives to customers in Germany due to the existing infrastructure and geographical proximity.

The **new start in energy policy cooperation between Germany and France** under the new German government should be used to involve France in the European hydrogen alliance. A **Franco-German alliance** would be **of great value for the assertiveness of the hydrogen alliance** at European level and for the global technology leadership of the EU. **A Franco-German balance of interests** should **be sought** for pragmatic solutions to the hydrogen ramp-up.

In any case, the Hydrogen Alliance should **avoid perpetuating antagonisms between opponents and supporters of nuclear energy in the EU**, be open to the participation of countries that are in favour of nuclear energy and try to bridge differences between the respective points of view.

Among the Nordic countries, **Denmark** and **Finland**, which claim a leading role in the H₂ economy, as well as the southern European countries (**Spain**, **Portugal**, **Italy** and also **Greece**) with high local production potential, appear to be the main candidates for the alliance. **Austria** is another obvious partner with a similar focus on renewable energies in its energy system and similar interests. The **Baltic states** should also be included with a view to offshore electrolysis and maritime areas. **Poland**, as an important neighbour and the largest country in Central Europe, should be addressed as part of the alliance, even if it has not yet played an active role with regard to green and renewable hydrogen.

A **joint communiqué from the participating member states** and **subsequent regular meetings** would be conceivable as concrete initial milestones for the materialisation of a European hydrogen alliance.

The **relevant umbrella organisations at EU level** as well as **national associations and companies** can flank and support the hydrogen alliance on the basis of their practical experience.