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Call for Evidence

vom 13. Juli 2026 zu

**Horizon Europe – European
Partnerships to be implemented as
joint undertakings**

**DVGW German Technical and Scientific Association
for Gas and Water**

Contact

Dr. Sabine Malzkuhn

DVGW Research Center at Engler-Bunte-Institut
of Karlsruhe Institute of Technology

Engler-Bunte-Ring 1 – 9

76131 Karlsruhe

Tel.: +49 721 608-41281

E-Mail: sabine.malzkuhn@dvgw-ebi.de

Helena Ballreich

DVGW e.V.

Head Quarters

Hannoversche Str. 18

10115 Berlin

Tel.: +49 30 79473673

E-Mail: helena.ballreich@dvgw.de

Joint Undertakings (JUs) provide a unique mechanism among the EU to mobilise public and private investment and accelerate the development of strategic technologies. With this tailor-made instrument at hand, European competitiveness will be fostered in bringing together industrial stakeholders, SMEs, research organisations and Member States. Such an ecosystem is a pre-requisite for targeted coordination, alignment of research and industrial needs, and hence the leveraging of private capital and investment to integrated value-chains.

The Clean Hydrogen Partnership is a great example for an appropriate model to tackle pressing challenges. The European Union pursues the objective of climate neutrality by 2050; therefore, a fast and collectively supported change of the European energy system is needed. The European Commission considers hydrogen not only as a valuable tool for decarbonising the energy system but also sees it as a valuable feedstock. Several EU legislations underpin its importance like the European Green Deal, EU Hydrogen Strategy, Fit for 55 Package, REPowerEU Plan and Net Zero Industry Act.

While the Commission identifies a relatively low level of openness in some Joint Undertakings, DVGW's experience with the Clean Hydrogen Partnership has been largely positive and includes joint projects such as PermittHy¹, THyGA², HyAcademy³ and HIGGS⁴. The Partnership has successfully involved a broad range of stakeholders, including research organisations, SMEs, infrastructure operators, standardisation bodies and technology providers across the hydrogen value chain. Future reforms should build on these strengths while further simplifying access for newcomers.

DVGW supports stronger operational links between future Joint Undertakings, Horizon Europe and the European Competitiveness Fund. JUs can play a unique role in bridging the gap between research and market deployment by generating the technical evidence, standards, interoperability solutions and system validation necessary to prepare technologies for large-scale investment. Future JU activities should place greater emphasis on infrastructure readiness and system integration. Europe's gas and hydrogen infrastructure represents a strategic asset for competitiveness, resilience and decarbonisation. Research and innovation programmes should therefore support not only technology development but also infrastructure adaptation, interoperability, gas quality management, measurement technologies, safety concepts, certification and permitting procedures. DVGW believes that future JU structures should address system-level challenges and ensure better coordination across thematic areas. At the same time, successful and well-functioning partnerships such as the Clean Hydrogen Partnership should be further developed and closely linked to future deployment instruments. In our opinion, a strategic openness in the program's portfolio to other energy sources and bridge technologies such as low carbon fuels, biogas and synthetic fuels to gain a system integrated view would promote the path towards a resilient and decarbonised Europe rather than focusing on isolated subjects as "clean" hydrogen.

From this perspective, the future JU architecture should reflect the complementarity between the "world of electrons" and the "world of molecules". The European Research Institute for Gas and Energy Innovation - ERIG stresses that electricity and molecules are not competing worlds, but complementary parts of the energy transition. DVGW is a founding and very active member of ERIG that participates in numerous Horizon Europe and CHP projects.

Electricity is essential for direct electrification and renewable power generation, while molecules remain necessary for high-temperature processes, large-scale and seasonal storage, long-distance transport, heavy mobility and industrial feedstock. EU R&I programming must therefore avoid creating a structural imbalance where electrification is systematically supported while molecule-based solutions, renewable gases, renewable carbon and gas infrastructure are treated as secondary or residual topics.

¹ PermittHy: [\[Link\]](#), 13.07.2026

² THyGA: [\[Link\]](#), 13.07.2026

³ HyAcademy [\[Link\]](#), 13.07.2026

⁴ HIGGS: [\[Link\]](#), 13.07.2026

DVGW believes that Joint Undertakings should remain a central element of the European research and innovation landscape under the next Multiannual Financial Framework. However, we support a stronger focus on molecule-based energy and feedstock systems in future JUs. Existing (bio)gas, hydrogen and future CO₂ infrastructures should be recognised as strategic assets to strengthen EU's competitiveness, security of supply, system integration and industrial innovation.

DVGW experience:

DVGW is a member of Hydrogen Europe Research since 2016 and experienced both JUs, namely the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU) and the Clean Hydrogen Joint Undertaking. DVGW is contributing for almost a decade to the development of European hydrogen research agendas, collaborative projects and strategic innovation roadmaps.

In 2021, when the Clean Hydrogen Partnership took over, a shift from technology development to industrial deployment took place, showcasing that JUs are important and capable of adapting to the zeitgeist. As mentioned before, the “world of molecules” and the “world of electrons” work complementary and couldn't exist without the other. Therefore, we advocate for keeping a JU for hydrogen, but again broaden its scope from solely clean hydrogen to clean energy carriers. The EU should ask itself: “How can molecules be deployed and integrated into the energy system to decarbonise Europe?”

This will allow for a streamlined programme between Horizon Europe and the JUs programme. Current experience shows that the Horizon programme covers all molecules but hydrogen and the calls from the CHP solely focus on clean hydrogen. Though DVGW believes these energy carriers should be thought of in a holistic manner to achieve the ambitious European objectives, while keeping industrial competitiveness, technological leadership, resilience and economic sovereignty.

Many of Europe's strategic priorities require long-term industrial transformation that extends beyond the duration of standard research projects. Areas such as hydrogen, advanced semiconductors, sustainable aviation, rail transport, biotechnology and digital infrastructure require sustained investment, coordinated technology roadmaps and industrial commitment over many years. JUs provide exactly this framework.

This is further underpinned by the different legislations where hydrogen will be needed to produce other energy vectors (notably e-fuels) in large amounts and competitive costs e.g REFuelEU Aviation, FuelEU Maritime, Clean Industrial Deal. Within this framework, hydrogen and hydrogen derivatives are key energy vectors capable of decarbonising sectors where electrification alone is not technically feasible or economically disadvantageous and thus cannot deliver efficiently the required emissions reductions.

DVGW's experience in both the FCH 2 JU and the Clean Hydrogen Partnership also demonstrates that Joint Undertakings provide a unique platform for bringing together industry, research organisations, infrastructure operators, SMEs and public stakeholders around a common strategic agenda. Contrary to the perception that JUs are difficult to access, the Clean Hydrogen Partnership has created an open and collaborative ecosystem that enables new actors to contribute to European priorities while maintaining the continuity required for long-term industrial transformation.

Future JUs should build on this successful model by strengthening the link between research, demonstration and deployment. In particular, system integration, infrastructure readiness, standardisation, safety, certification and interoperability should receive greater attention, as these are essential prerequisites for bringing innovative energy carriers and technologies from pilot stage to market uptake.