Hydrogen network Project

Expression of Interest for Producers

Co-funded by
the European Union

Why take part in this EOI?

The proposed network aims to offer access to industrial clusters in France and Germany, with a potential extension to Northwestern Switzerland.

Help inform network sizing: submit your project's indicative volumes and injection requirements for consideration in infrastructure studies.

Discuss connection horizons: studies consider an initial France–Germany network targeting 2030/2032 and an extension towards Offenburg/Kehl from 2035;

Participate early: early-stage projects are welcome, with estimates or partial responses where final data are unavailable.

No capacity reservation commitment: responding to this EOI does not commit participants to reserving transport capacity.

These perspectives do not guarantee off-take, network connection or connection dates. Any future connection remains subject to further studies, technical and economic feasibility, approvals and contractual agreements.

Article 1 Infrastructure project description

Background and National Context

France

In 2021–2022, NaTran conducted its first nationwide market consultation on low-carbon and renewable hydrogen to assess market participants' needs for hydrogen transport and storage infrastructure.

Building on the market potential identified through this consultation, NaTran launched an Open Season in 2023, jointly with Badenova Netze and terranets bw, to further assess and formalize market interest in the development of cross-border hydrogen infrastructure.

In 2024–2025, a feasibility study with terranets bw was carried out to further develop the project and refine the proposed route.

Through its "Schémas régionaux d'aménagement, de développement durable et d'égalité des territoires" (SRADDET), the Grand Est Region has set the ambition of becoming a positive-energy, low-carbon region by 2050. While the development of the hydrogen sector has progressed more slowly than initially anticipated, notably due to an evolving regulatory framework, fragmented funding mechanisms and high production and infrastructure costs, significant development opportunities remain.

The Grand Est Region remains committed to supporting pioneering hydrogen projects and has adapted its strategy to focus support on selected sectors, end uses and technology pathways with the greatest decarbonization potential. This strategy seeks to prioritize the use of non-fossil hydrogen for the decarbonization of industrial activities.

In this context, NaTran has identified several emerging hydrogen ecosystems where demand for low-carbon hydrogen is expected to develop. These are primarily located around major industrial clusters facing significant decarbonization challenges, particularly where existing fossil-based hydrogen consumption needs to be replaced by low-carbon alternatives, or where major industrial emitters are considering hydrogen as part of their decarbonization pathways.

This market consultation therefore aims to further assess and consolidate market interest, identify potential hydrogen production and better understand market participants' future hydrogen transport infrastructure requirements.

Germany

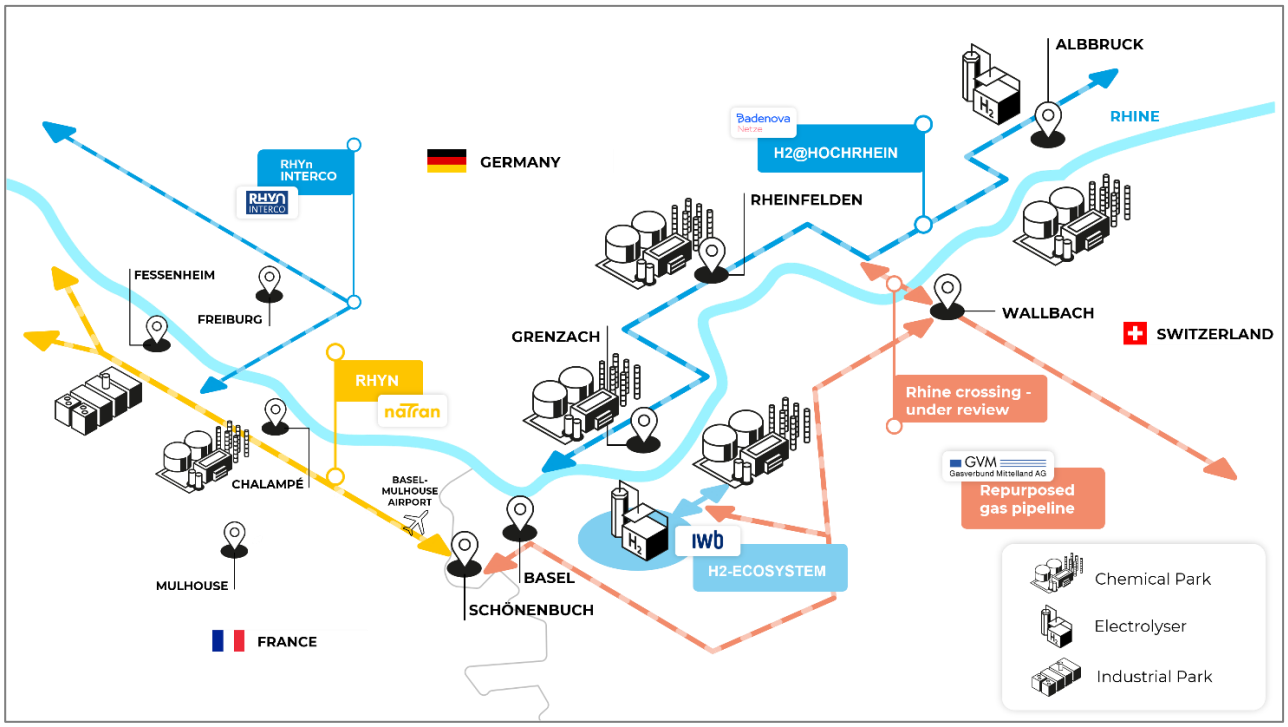
Additionally, to the Open Season with NaTran in 2023 and in preparation of the German Wasserstoff-Kernnetz (hydrogen core network), terranets bw and Badenova Netze identified significant hydrogen demand in the Upper Rhine region, particularly from industrial off-takers seeking to reduce their carbon footprint and transition to low-carbon energy sources, with the Freiburg im Breisgau commercial area representing a first development cluster.

The infrastructure of RHYn Interco is part of the approved German Wasserstoff-Kernnetz (hydrogen core network) since 22.10.2024. By 2032, a 9,000-kilometre hydrogen transport network is to be created that will connect production and consumption hubs. The Kernnetz framework establishes a clear long-term regulatory pathway for hydrogen infrastructure development and creates a high degree of planning certainty for network operators and market participants. It benefits from a dedicated financing and cost recovery mechanism, including an amortization account ("Amortisationskonto"), which significantly reduces infrastructure investment risk during the market ramp-up phase. This framework supports predictable revenue recovery and mitigates the timing mismatch between upfront investment and the gradual development of hydrogen demand.

RHYn Interco is positioned in a region with strong structural hydrogen demand potential, supported by robust regulatory frameworks and the financial backing mechanisms associated with the Wasserstoff-Kernnetz. As a result, the project offers an attractive risk-adjusted opportunity to participate in the early development of the European hydrogen economy. Supported by the "Regionale Wasserstoffstrategie SüdwestBW" (Southwest Baden-Württemberg Regional Hydrogen Strategy), published at the end of 2024, RHYn Interco is emphasized as an early infrastructure connection to international hydrogen corridors, necessary in order to ensure security of supply for energy-intensive companies and to maintain the region's industrial value creation.

Switzerland

The map below illustrates the trinational hydrogen ecosystem, with distinct colours for the indicative French, German and Swiss networks and pictograms showing industrial areas, industrial parks and potential hydrogen production. Reconstructed schematically from Gasverbund Mittelland (GVM)'s October 2026 presentation, it also marks the geographical location of Basel–Mulhouse Airport, without depicting a hydrogen connection to the airport or a connection towards the city of Mulhouse. Routes and potential sites are indicative and remain subject to further studies and approvals.



Hydrogen ecosystem in the tri-border region

To broaden the potential market served by RHYN, NaTran extended its market outreach to Switzerland, where discussions with Gasverbund Mittelland AG (GVM) and Industrielle Werke Basel (IWB) have identified opportunities to decarbonise industrial and commercial activities through renewable and low-carbon hydrogen. Northwestern Switzerland represents a potential additional outlet for renewable hydrogen producers, particularly around Basel and the industrial clusters extending towards Rheinfelden, Wallbach and Kaisten.

RHYN – RHYn Interco network description

Building on this initial feedback, NaTran and terranets bw decided to work together to assess a cross-border hydrogen infrastructure project recognised by the European Union as a Project of Common Interest (PCI).

RHYN

RHYN is a 100% hydrogen pipeline project in the Upper Rhine Trinational Metropolitan Region. Its aim is to connect consumption to the production of renewable and low-carbon hydrogen in order to ensure security of supply for all market players in the territory.

RHYN represents approximately 100 km of pipelines, 25% of which have been converted. Its capacity will be 190,000 tons of hydrogen per year, the equivalent of approximately 1,400 MW of electrolysis. Commissioning is scheduled for 2030.

The gas network operators NaTran, terranets bw and Badenova Netze are working together on the hydrogen interconnection between Southern Alsace and South-West Baden-Württemberg. The RHYn and RHYn Interco (German part of the project) projects are labelled Projects of Common

Interest by the European Commission and are recipients of a grant under the Connecting Europe Facility.

NaTran also wishes to expand its network to Switzerland in collaboration with Gasverbund Mitteland (GVM) and Industrielle Werke Basel (IWB).

RHYn Interco

RHYn Interco is to connect industrial off-takers in Baden-Württemberg with the Grand Est region in France from the year 2030. It is planned for the hydrogen network to then be extended to the Offenburg and Kehl area from the year 2035. The French-German hydrogen project derives its name from this cross-border connection across the Rhine: "RHYn" is an acronym for "Rhine HYdrogen Network" and "Interco" stands for "Interconnection" in the sense of "mutual connection".

The project is planned in two phases. Within the first phase the industrial off-takers of Badenova Netze near Freiburg i. B. will be connected by constructing a new approximately 15 km pipeline to France and repurposing 30 km of existing gas pipelines. This first phase has been incorporated into the German Wasserstoff-Kernnetz. By repurposing an additional 60 km section in the second phase, the hydrogen network can be extended from Freiburg i. B. to the Offenburg area, connecting further industrial off-takers.

Badenova Netze aims to convert the gas infrastructure in Freiburg and Kehl in order to offer potential large-scale off-takers the option of a piped hydrogen supply. A market consultation held in autumn 2023 revealed significant interest in purchasing H_2 from potential large-scale off-takers in these regions.



More information about the project RHYN:

NaTran: https://www.natrangroupe.com/en/our-energy-transition/hydrogen-transport/rhyn

More information about the project RHYn Interco:

terranets bw: www.terranets-bw.de/rhyn-interco
Badenova Netze: www.Badenova Netze.de/ueber-uns/versorgungsnetze/wasserstoffprojekte/rhyn-interco

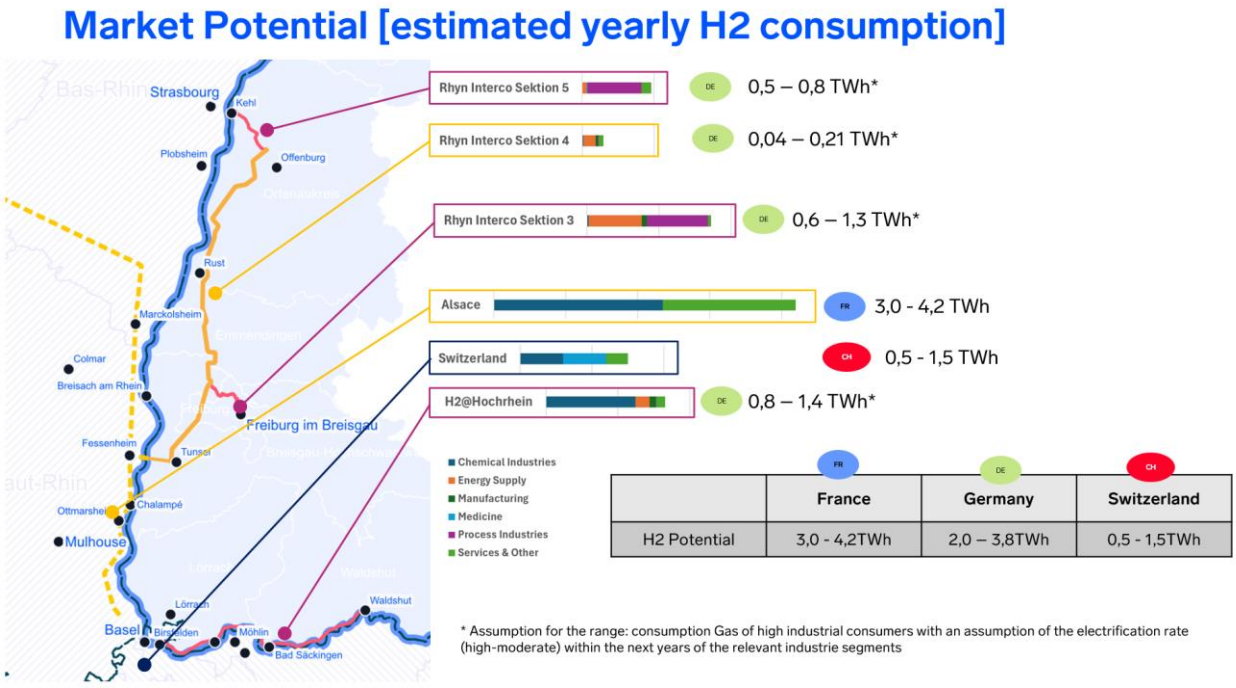
Potential hydrogen demand

The map below illustrates the potential market for renewable or low-carbon hydrogen, based on average annual natural gas consumptions that could be replaced by hydrogen. These volumes and indicative figures are based on the market knowledge of NaTran, terranets bw and Badenova Netze, as well as the demands expressed by key off-takers. They are provided for informational use only and do not represent firm hydrogen demand or binding off-take commitments. Actual uptake and timing will depend on off-takers' conversion plans and technical and economic feasibility.

In their joint Letter of Intent of September 2026, GVM and IWB indicate a **long-term hydrogen demand potential of approximately 0.5–1.5 TWh per year** within their combined supply area, subject to competitive pricing. GVM identifies 0.5–1.0 TWh per year for industrial applications in its distribution area, while IWB identifies 0.15–0.5 TWh per year for industrial customers in Basel-Stadt, Basel-Landschaft and Aargau. These estimates concern the two companies' supply areas rather than the Swiss market as a whole and do not constitute firm off-take commitments.

This prospective demand provides a market opportunity for hydrogen certified as a renewable fuel of non-biological origin (RFNBO). The Letter of Intent specifically links the use of renewable hydrogen under Swiss emissions trading (EHS) and CO_2 reduction obligations to certificates demonstrating that no nuclear electricity was used in its production. RFNBO-certified hydrogen could therefore be well positioned to address the renewable hydrogen requirements described by GVM and IWB, provided that its certification and environmental attributes meet the applicable Swiss recognition requirements. This commercial interest should not be interpreted as a Swiss RFNBO mandate or as automatic recognition of EU certification.

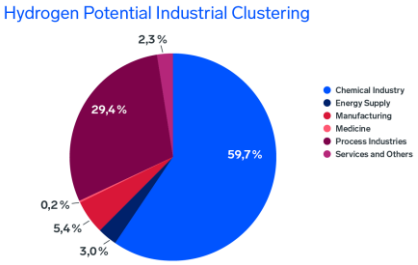
Access to RHYn would connect these prospective Swiss off-takers with producers in the Upper Rhine region, supporting supply reliability, market liquidity and price competitiveness while local electrolysis projects remain at the conceptual stage. According to the Letter of Intent, a feasibility assessment has identified the possibility of repurposing an existing Swiss high-pressure gas pipeline for hydrogen with limited modifications, subject to approvals. GVM and IWB express their intention to become future off-takers supplied via RHYn and to participate financially in the front-end engineering design (FEED) study. These non-binding intentions support further assessment of the Swiss market opportunity, with future cooperation remaining subject to commercial viability, internal approvals, regulatory conditions and contractual agreements.



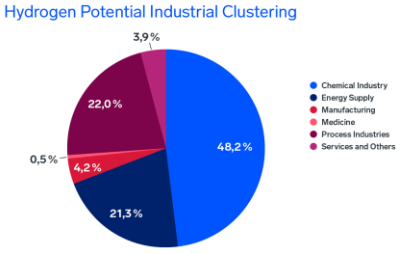
	France	Germany	Switzerland
H2 Potential	3,0 - 4,2TWh	2,0 – 3,8TWh	0,5 - 1,5TWh

Data are not binding and cannot be considered as a firm demand from consumers.

Industry Segmentation - Germany



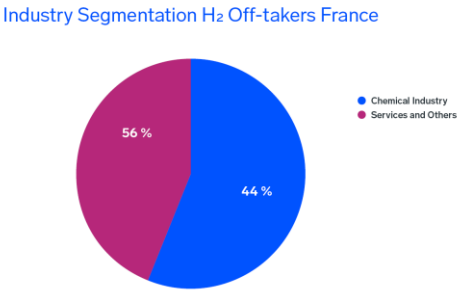
Minimum
(High electrification rate of the industry segments)



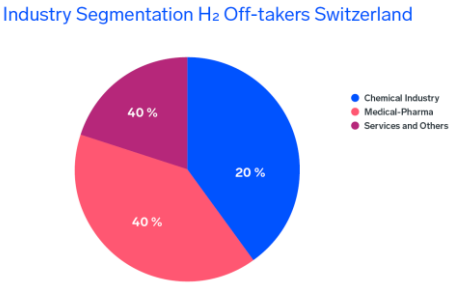
Maximum
(Moderate Impact of Electrification rate on H2 Consumption per industry segment)

Data are not binding and cannot be considered as a firm demand from consumers.

Industry Segmentation – France & Switzerland



France



Switzerland

*Source: Market Intelligence from NaTran and GVM (Gasverbund Mittelland AG)

Data are not binding and cannot be considered as a firm demand from consumers.

Article 2 Call for Expressions of Interest description

EOI process

"While significant potential demand for renewable and low-carbon hydrogen has been identified, the corresponding production projects and supply volumes remain to be further assessed."

Accordingly, NaTran, terranets bw and Badenova Netze have decided to launch a market call for interest, also referred to as a call for Expressions Of Interest (EOI), aimed at confirming the commercial interest of renewable and low-carbon hydrogen producers in cross-border hydrogen pipeline transport infrastructure connecting the Alsace region in France, the German Upper Rhine region in Baden-Württemberg and the Northwestern region of Switzerland.

This EOI is a transparent and non-discriminatory call for expressions of interest, open to all stakeholders wishing to participate.

Stakeholders are invited to express their interest in the **QUESTIONNAIRE** and complete the project information on their production facility, injection requirements, planned commissioning date, site and land details. Estimates are welcome where final data are not yet available. If the project is still at an early stage, it is possible to respond without completing the whole form.

Call for expression of interest calendar :

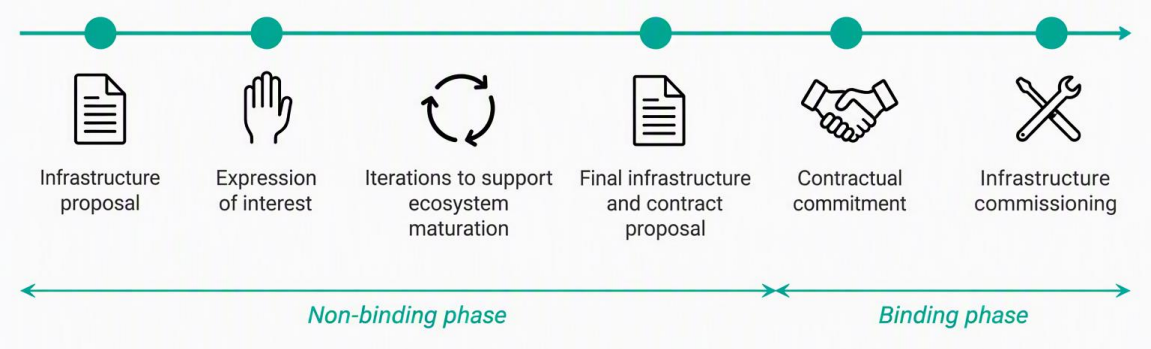
- Period of survey: 16th November 2026 until 15th January 2027
- Regions: Southern Upper Rhine (Germany), Grand Est (France), and Northwestern Switzerland
- Digital information event: 24th November 2026, 3 pm
- Registration link: https://app.appcraft.events/natran.dd/event/WHJ393ogQqpj/registration/forms/formulaire-d-inscription
- Languages: English for document and webinar (French / German could be possible for the digital information event)
- Questionnaire or other questions regarding the call: please send to BLG-GRT-RHYN@natrangroupe.com

Infrastructure Development Process

The development process for this shared transport infrastructure comprises two phases:

- An initial, non-binding phase: this phase enables requirements to be assessed and suitable infrastructure to be identified (sizing, route, operating conditions, specifications, etc.). It includes this Call for Expressions of Interest (EOI) and all engineering studies required to advance and define the project; stakeholders are not committed to book transport capacities yet
- A second, binding phase, involving an iterative and progressive investment approval process, culminating in the signing of contracts.

The main stages are outlined below:



If sufficient interest is expressed and following the collection of requirements during this initial phase, the competent project partner proposes to carry out a basic engineering study to determine the sizing and cost of the infrastructure. **A basic engineering study agreement** will be signed, ensuring the confidentiality of the data exchanged and setting out the parties' respective contractual and financial commitments for the performance of these studies.

This non-binding phase may require **iterations,** depending on the maturity of projects within the hydrogen ecosystem: bilateral or group discussions with participants in this phase will take place to progressively refine the infrastructure design, with a phased implementation achievable by NaTran, terranets bw and Badenova Netze and to propose an associated economic and contractual model for the transport service.

Article 3 Additional Information

Project Partners

About Badenova Netze

As one of the largest utility network operators in Baden-Württemberg, Badenova Netze is responsible for the operation and further development of the electricity, gas, water, and hydrogen infrastructure in its service area. With approximately 900 employees, the company ensures the supply of utilities to 580,000 people in the region. Through targeted investments in modern and sustainable infrastructure, Badenova Netze is actively shaping the energy and heating transition. This includes the development of a high-performance hydrogen infrastructure as a key component in the transformation of the regional energy system.

About NaTran

NaTran (formerly GRTgaz) entered a new chapter in its history in 2025 with a new name and a new corporate strategy, NaTran2030, reflecting its ambition to support the energy transition and contribute to achieving carbon neutrality by 2050. By 2030, NaTran aims to dedicate more than 50% of its annual investments to the energy transition. To achieve this goal, the company is adapting its network and operations to meet environmental, economic, and digital challenges. NaTran develops infrastructure and logistics solutions for the gases that are key to the energy transition, including biomethane, hydrogen (H_2) and CO_2. As the second-largest gas transmission operator in Europe, NaTran Group has two subsidiaries: Elengy, a leading LNG terminal operator in Europe, and NaTran Deutschland, operator of the MEGAL network. NaTran also carries out public service missions to ensure the security and reliability of gas transmission for its customers. NaTran Group key figures: 33,791 km of pipelines | 623 TWh of gas transported | 3,671 employees | €2.5 billion in revenue in 2025.

About NaTran Deutschland GmbH

Headquartered in Berlin, NaTran Deutschland GmbH operates the MEGAL pipeline system, a gas transmission network of 1 169 kilometres connecting Germany with the Czech Republic, Austria and France. As a major transit route between Eastern and Western Europe, MEGAL plays an essential role in securing gas supplies, particularly for southern Germany. A wholly owned subsidiary of NaTran and a certified Independent Transmission Operator (ITO), the company is firmly anchored in the German gas market as a shareholder of Trading Hub Europe and a member of the FNB Gas association. With a view to a climate-neutral future, NaTran Deutschland GmbH is preparing its network for hydrogen transport and actively contributes to the development of the German hydrogen core network (Wasserstoff-Kernnetz).

About terranets bw GmbH

As a transmission system operator, security of supply is a top priority for terranets bw - today and in the future. With a gas grid, which covers 3,000 kilometres, terranets bw ensures a secure supply of heat and electricity from Lower Saxony to Lake Constance. At the same time, terranets bw has its sights set on a climate-neutral future and is already building a high-performance hydrogen network today. As an infrastructure provider, terranets bw not only offers its customers services related to gas technology systems but also provide them with a powerful fibre-optic grid.

H2Global mechanism in France for synthetic aviation fuel

France's draft 2027 budget bill, presented on 1 October, proposes a double-sided auction for synthetic aviation fuel (e-SAF). A state-appointed body would buy up to 160,000 tonnes a year from producers on contracts of up to 15 years. It would resell to fuel suppliers on shorter contracts. The draft bill is now before Parliament, and the scheme would also need EU state aid approval.

H2Global-style double-sided auctions emerge as a mechanism of choice - H2Global

European Hydrogen Bank's IF26 auction

Producers considering supplying the hub can prepare for the European Hydrogen Bank's IF26 auction, planned to open in December 2026 with a proposed EUR 500 million budget for renewable and electrolytic low-carbon hydrogen production, including projects in France and Germany, subject to the final eligibility rules.

https://climate.ec.europa.eu/areas-action/eu-funding-climate-action/innovation-fund/calls-proposals/if26-hydrogen-auction_en

MSP2 (France) and Baden-Württemberg's ELY programme

Recent rounds of France's MSP2 production support mechanism and Baden-Württemberg's ELY programme also demonstrate continued public support for hydrogen production on both sides of the Rhine, although their 2026 application windows are closed. These are potential funding routes for producers, not a funding commitment.

https://agirpourlatransition.ademe.fr/entreprises/aides-financieres/catalogue/aap/soutien-la-production-dhydrogene-electrolytique-renouvelable-ou-bas-carbone-2026-phase-de-selection-des-candidatures

https://um.baden-wuerttemberg.de/de/presse-service/foerderprogramme/energie/foerderprogramm-elektrolyseure