



IPHE Country Update Nov 2025 – April 2026:

Germany

Name	Eva Ackermann
Contact Information	Eva.Ackermann@bmv.bund.de
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1. New Initiatives, Programs, and Policies on Hydrogen and Fuel Cells

In February, the federal government outlined key points for a [Building Modernization Act](#) that shall replace the Building Energy Act of the former government. Oil and gas heaters shall continue to be permitted if they use stepwise increasing shares of climate-neutral fuels from 2029. Additionally, a green gas and green heating oil quota for energy suppliers is planned to blend biomethane, synthetic gases or hydrogen.

In January, the Federal Ministry for Economic Affairs and Energy (BMWE) reached a general agreement with the European Commission on the key points of the (new) [Power Plant Strategy](#). Twelve gigawatts of new dispatchable capacity shall be tendered in 2026, followed by further tenders in 2027 and 2029/30. All power plants built under the umbrella of this strategy must be hydrogen-ready and fully decarbonized by 2045 at the latest, with two gigawatts converted to hydrogen by 2040 and another two gigawatts by 2043.

The Federal Ministry of Transport (BMV) intends to support the market uptake of eSAF with up to 2 billion euros (~ 2.16 billion USD) through a double-sided auction mechanism involving an intermediary; the scheme is currently undergoing notification with the European Commission.

2. Hydrogen and Fuel Cell R&D Update

In March, the H2Giga flagship project published the [“Technology and Innovation Roadmap for Electrolysis”](#) study, summarizing five years of collaboration between science and industry on Germany's electrolysis research and scale-up. With around 130 partners, it developed technologies for serial and automated production of



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electrolysers and components, established research infrastructure for industrial scalability, and provided industrial policy and technical recommendations. The roadmap outlines necessary steps for the expansion of mass production to meet gigawatt-scale hydrogen production targets by 2030.

In February, the southern location of the [Innovation and Research Centre for Hydrogen Technologies \(ITZ-H2\) in Pfaffenhausen](#) received its funding letters from the Minister of Transport totalling over 54 million euros (~ USD 58.3 million). The centre will focus on amongst other things onboard liquid hydrogen storage and hydrogen combustion for heavy duty vehicles and urban air mobility applications, featuring an on-site green hydrogen liquification facility.

Within the [TransHyDE](#) flagship project, research institutions, network operators, and companies examined how a future hydrogen transportation network could be designed in Germany and Europe. The project's [final report](#), funded by the Federal Ministry of Education and Research, was published in November 2025.

3. Demonstration, Deployments, and Workforce Development Update

As of April, Germany's hydrogen refuelling infrastructure consists of 58 stations in operation. Of these, 52 offer refuelling for 700-bar light-duty vehicles, and 48 provide 350-bar refuelling for heavy-duty vehicles. An additional 18 stations are currently under construction, 13 of which will include 700-bar and 17 will include 350-bar refuelling options.

At a closing event in late March, the Federal Minister of Transport highlighted the [H2Sky consortium project](#) as an important milestone towards hydrogen-based aviation. Under the leadership of Aerostack GmbH, the project successfully developed a fuel cell stack specifically designed for aviation applications. H2Sky received approximately 26.5 million euros (~ USD 28.6 million) in funding under the National Innovation Programme for Hydrogen and Fuel Cell Technology (NIP), provided by BMV. The project aimed to develop a fuel cell stack that meets stringent aviation requirements, particularly in terms of power density, efficiency, reliability, and lifetime.

In March, BMV [awarded 30 million euros](#) (~ USD 32.4 million) in funding dedicated to expanding regional hydrogen infrastructure as part of the [HyPerformer](#) II funding call. This significant investment reflects continued public commitment to scaling up the



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supply side of hydrogen mobility, targeting the development of production, distribution, and fueling capacity at a regional level. The funding is expected to accelerate the rollout of infrastructure in the regions of Erfurt, Stralsund and the Rhein Ruhr Metropolitan area. The HyPerformer HyBayern project reached a key operational milestone with the commencement of [hydrogen deliveries](#) from its facility in Pfeffenhausen. This development marks the activation of a regional hydrogen supply chain, moving the project from infrastructure build-out into active distribution.

In late January, the MB Energy Group opened a [new hydrogen filling station for heavy-duty vehicles](#) in Lübeck, Northern Germany. Developed by project developer Hypion, the facility has a daily capacity of up to 2,000 kilograms of hydrogen, which is sufficient to refuel around 50 trucks. The filling station was funded by the BMV with a total of 5.1 million euros (~ USD 5.51 million) as part of the funding programme to support commercial vehicles with alternative, climate-friendly drives and the associated refuelling and charging infrastructure (KsNI – Förderung von Nutzfahrzeugen mit alternativen, klimaschonenden Antrieben und dazugehöriger Tank- und Ladeinfrastruktur).

In January, [Daimler Truck introduced the NextGenH2](#), a new generation of fuel cell trucks. Using liquid hydrogen, these trucks can achieve a range of over 1,000 km on a single tank. Initially, around 100 tractor units will be built and tested in real-world customer operations. The project is funded by BMV as part of the EU's IPCEI Hydrogen Programme (Important Project of Common European Interest).

Since the start of the year, Germany's electrolyser capacity is gaining momentum after slower growth in recent years, with [dena reporting](#) 185 megawatts operational and 1.1 gigawatts under construction, while [EWI estimates](#) 181 megawatts operational and 1.3 gigawatt with final investment decision or in construction, projecting around 1.5 gigawatts operational by the end of 2027. Capacity has nearly increased fivefold since the release of the 2020 National Hydrogen Strategy. However, both analyses concur that the original 10-gigawatt target by 2030 will likely be missed.

In December, GASCADE successfully [converted approximately 400 kilometers of natural gas pipelines](#) from the Baltic coast southwards for hydrogen transport under the Flow – Making Hydrogen Happen project. The pipeline creates a North-South axis from the Baltic region to Saxony-Anhalt and constitutes a central section of Germany's future



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hydrogen core network. Additional pipelines are planned to Poland, Czechia, Bavaria, and Austria.

In December, RWE begun commissioning the first 100-megawatt phase of its so called “green” hydrogen project in Lingen. The 300-megawatt [GET H2 Nukleus](#) project at RWE's Lingen gas power plant will use 200-megawatt PEM electrolyzers from ITM Power and 100-megawatt alkaline systems from Sunfire. Commissioning started ahead of the planned commercial operation in 2026, with hydrogen production expected to begin in 2027. In March, ITM Power announced that the last electrolyzers for RWE's 200-megawatt-order have been shipped to the project site in Lingen.

In December 2025, a [new public hydrogen refuelling station](#) in Ludwigshafen has been put into operation, supplying eight fuel cell range extender buses with green hydrogen. The station, which also serves other vehicle types at 350 and 700 bar, is part of the H2Rivers project under the [HyLand](#) programme of the BMV. The project supports the development of hydrogen mobility in the Rhine-Neckar region and is funded with up to 20 million euros (~ USD 21.6 million) under NIP. The operators have launched a cooperation with the mobility company Hylane to provide hydrogen at eight euros (~ USD 8.64) per kilogram to selected offtakers.

The district of Friesland and Weser-Ems-Bus, a subsidiary of DB (Deutsche Bahn) Regio AG, in December 2025 presented [six hydrogen buses](#) being in service in the district. Initially, they will be refuelled at a mobile hydrogen filling station at the Weser-Ems-Bus depot in Jever. In 2026, the operator Score plans to open a public hydrogen filling station. During November and April, a total of 67 hydrogen fuel cell buses were introduced into operation across Germany.

In November, the German energy supplier [EWE begun construction](#) of one of Europe's largest electrolyzers in Emden. The plant will have a capacity of 320 megawatts and could produce around 26,000 tonnes of so called “green” hydrogen annually. The plant will use a 290-megawatt PEM electrolyser from Siemens. Mechanical completion is planned for 2027. The project receives subsidies totaling 500 million euros (~ USD 540 million), partially funded by the federal government as well as the states of Lower Saxony and Bremen.



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4. Events and Solicitations

The [Hannover Messe](#) took place in late April. It featured the Hydrogen + Fuel Cells EUROPE special exhibition as a key hydrogen focus, showcasing technologies for industrial integration, emission reduction, fuel cells, and sustainable production methods.

5. Investments: Government and Collaborative Hydrogen and Fuel Cell Funding

In February, the Federal Government of Germany [announced](#) an increase of 322 million euros (~ USD 347.8 million) in funding for Salzgitter's transition from coal-based blast furnaces to green hydrogen-based steel production, following EU approval of the additional state aid. The three-billion-euros (~ USD 3.24 billion) project had already received one billion euros (~ USD 1.08 billion) in state aid, with 70 percent provided by BMW and 30 percent by the State of Lower Saxony.

As of January, the BMV is funding the establishment of an initial [network of hydrogen refuelling stations for commercial heavy-duty vehicles](#) and the procurement of commercial vehicles with hydrogen drives. BMV is allocating a total of 220 million euros (~ USD 237.6 million) for this measure. Hydrogen refuelling stations must fulfil the requirements of the European AFIR regulation; up to 50 per cent of eligible expenses are eligible for funding. New N2 and N3 class vehicles with hydrogen-based drives (fuel cells or combustion engines) can be subsidised with up to 80 per cent of eligible additional investment costs against comparable diesel vehicles. Applications may be submitted by late June.

In January it was announced that BMW and the State of Brandenburg are supporting the implementation of the Concrete Chemicals project at the PCK industrial park in Schwedt with a [total of 349 million euros](#) (~ USD 376.9 million) [245 million euros (~ USD 264.6 million) from the federal government and 104 million euros (~ USD 112.3 million) from the State of Brandenburg]. The project, developed by Enertrag and Zaffra, aims to produce around 30,000 tonnes of e-kerosene per year using so called "green" hydrogen and captured carbon dioxide. The total project cost is estimated at 494 million euros (~ USD 533.5 million).



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In December, Germany [participated in the EU's "Auctions-as-a-Service"](#) (AaaS) mechanism for the IF25 auction of the European Hydrogen Bank with 1.3 billion euros (~ USD 1.40 billion). The goal is to efficiently supply renewable hydrogen to consumers connected to Germany's core network while creating incentives for cross-border hydrogen pipeline infrastructure construction. The funds target EEA producers injecting RFNBO-compliant hydrogen into the Danish pipeline between Esbjerg and Ellund (part of the PCI project DK Hydrogen Pipeline West), which is set to be operational by end of 2030 to deliver hydrogen to German offtakers.

In December, Germany's Federal Funding for Industry and Climate Protection (BIK) program [selected 38 projects](#) in its 2025 competition, including three hydrogen-related initiatives (sidestream2hydrogen with 49,210 euros [~ USD 53,100], LeunaPower2MeOH with around 41 million euros [~ USD 44.3 million], Heat2NextHydroGEN with 6.43 million euros [~ USD 6.94 million]) across sectors like cement, chemicals, steel, and automotive – totalling 476 million euros (~ USD 514.1 million) in funding.

The Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN) launched the [ninth funding round](#) of the Export Initiative Environmental Protection (EXI) in late November 2025. Priority is given to projects in key areas of public services, including green hydrogen and fuel cell technologies in decentralised energy supply, for example as a substitute for diesel generators. The goal is to establish sustainable technologies “made in Germany” globally and to boost international environmental protection. Companies, research institutions, associations and federations were able to submit their project outlines by mid-February.

As of November, BMV is strengthening the [development of climate-friendly fuels](#) and supporting the German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt [DLR]) with an additional 157 million euros (~169,6 Millionen USD). The new funding notification secures the operational phase of the Power-to-Liquid Fuels technology platform (TPP) in Leuna until 2035. The facility optimises electricity-based fuels and develops technologies and processes for their production on an industrial scale.

In November, [BMW has been awarded 273 million euros](#) in government funding (191 million euros (~ USD 206.3 million) from BMV and 82 million euros (~ USD 88.6 million) from the State of Bavaria to develop and industrialize an innovative hydrogen fuel cell



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electric powertrain for passenger cars under the HyPowerDrive project (selected as an IPCEI in 2021 with European Commission financing approval in 2024). The funding will support the development of a fuel cell variant of the iX5, enabling production of hydrogen-powered vehicles on the same lines as battery electric vehicles to reduce manufacturing costs, with the first series-production model available for purchase likely from 2028.

6. Regulations, Codes & Standards, and Safety Update

In March, the Coordination Office for Integrated Network Development Planning for Gas and Hydrogen (KO.NEP) published the first [draft of the Gas and Hydrogen Network Development Plan](#) (NEP) 2025 for public consultation.

In February, the German parliament [passed the Hydrogen Acceleration Act](#) (WassBG). The law designates projects along the entire hydrogen value chain (including electrolyzers and hydrogen refuelling stations) as being of “overriding public interest”, aiming to make permitting processes more digital and faster, shorten deadlines, and accelerate court procedures. A key novelty is that the special status now applies not only to green hydrogen but also to blue hydrogen.

In December, the German parliament approved the draft law titled “[Act to Accelerate the Expansion of Geothermal Plants, Heat Pumps and Heat Storage Facilities, and to Amend Other Legal Frameworks for the Climate-Neutral Expansion of Heat Supply](#)” (21/1928). In addition to regulations concerning these technologies, the law also implements an EU directive into German law that requires permits for hydrogen storage facilities to be granted within two years.

In December, the Federal Network Agency (BNetzA) published a decision on differentiated tariff structures within the hydrogen core network. The ruling, titled “[Determination of Provisions for Reflecting the Costs of Certain Transport Services in the Hydrogen Core Network and for the Corresponding Modification of Network Tariffs](#)” (KOSMO), introduces a capacity-based system and market design for hydrogen networks. Under KOSMO, core network fees will be reduced for users willing to accept interruptions in their hydrogen supply, addressing the current rule that only allows firm, uninterrupted transport contracts. The framework also includes multipliers for sub-annual capacities and hydrogen withdrawals used to fill storage facilities.



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In November, BNetzA finalized and published its regulatory decisions on the [“WaKandA”](#) and [“WasABi”](#) procedures concerning hydrogen network regulation. The WaKandA model establishes the fundamental regulatory framework for capacity access and allocation in hydrogen networks and sets common rules for the calculation, contracting, and use of capacities within an entry-exit system, which will become binding as of January 1, 2028. The WasABi model defines the balancing and settlement framework for the national hydrogen market, including the rules, monitoring, and accounting of imbalances, and will likewise enter into force on January 1, 2028.

In December, the German federal cabinet [adopted a draft law](#) to reform the transport greenhouse gas reduction quota (THG-Quote), with the aim of advancing the use of so called “green” hydrogen and its derivatives as part of the implementation of the updated EU Renewable Energy Directive (RED III). The draft law proposes a dedicated RFNBO sub-quota for transport fuels, starting at 0.1 percent in 2026 and rising gradually from 2028 to reach 8 percent by 2040. Fuel suppliers that fail to meet the RFNBO targets could face a penalty of 120 euros per gigajoule, equivalent to about 14 euros per kilogram of hydrogen. The existing triple counting of RFNBOs towards the THG-quota shall remain in place up to and including 2036. From 2031, electrolytic, low-carbon hydrogen used in refineries may also be credited towards the THG-quota, but not towards the RFNBO sub-quota.

The [Hydrogen Standardisation Roadmap 2025](#) has been finalized and was published in December. It identifies the current state of the standardization landscape along the whole hydrogen value chain, including gaps, and gives recommendations for action as well as funding for pre-normative research. It gives clear guidance and timelines for each branch of hydrogen industry as well as for mobility applications.

In November, BMWI launched a public consultation on proposed amendments to the Energy Industry Act (EnWG) to fully integrate hydrogen into Germany’s national energy plans. As part of the country’s effort to transpose the core provisions of the EU Gas and Hydrogen Market Package into national law, BMWI drafted a set of regulatory proposals and revisions to the EnWG to create a legal framework for future investments in the hydrogen-based distribution and long-distance transport network. This includes the addition of the words “and hydrogen” to the EnWG’s official title, currently “Act on the Supply of Electricity and Gas.”