

H2Uppp *Info*

Project Identification
Project Development
Project Support & Trade

The news bulletin of the International Hydrogen Ramp-up Programme (H2Uppp)

H2Uppp is a programme by the German Federal Ministry for Economic Affairs and Energy that aims to support the ramp-up of hydrogen in the Global South.

May 2026 / Newsletter #4

Dear Hydrogen Enthusiast,

Hydrogen projects are moving from ambition to implementation. The market continues to advance – driven by companies that combine strong technological capabilities with clear investment strategies and long-term commitment. H2Uppp supports these efforts.

In this newsletter, we highlight a selection of current initiatives: in South Africa, the Mine2Ammonia study explores how decommissioned mining facilities can be repurposed for green ammonia production; in India, collaboration with thyssenkrupp nucera focuses on advancing the electrolyser market; and in Brazil, a project with Tünkers Maschinenbau examines the use of hydrogen in automotive paint booth drying processes.

At the same time, Deutsche Bahn, thyssenkrupp Uhde, Green Investors, and Brazil Green Energy are developing a Brazilian-German green hydrogen and Power-to-X value chain – strengthening Brazil's role as a global hub and supporting Deutsche Bahn's path to a net-zero fleet by 2040, including initial exports to Germany.

We will continue to support this transition and keep you informed.

Yours sincerely,

Regine Dietz
H2Uppp Programme Manager

Hannover Fair 2026

Hannover Messe: H2Uppp Partners and Projects in the Spotlight



H2Uppp showed a strong presence at the Hannover Messe, featuring:

- A panel on Brazil-Europe green shipping corridors and the role of ports in accelerating the ramp-up of GH2
- A workshop with Siemens and Cocal on sustainable fuels and Brazil's strategic role as a partner for Europe's energy diversification
- A networking event connecting companies from Brazil and North Rhine-Westphalia, and leading PtX experts.
- The signing of cooperation agreements with Tünkers and a consortium lead by Deutsche Bahn.

[Read on.](#)

Brazil / New PPP

Decarbonising Freight Rail and Advancing Brazil's H₂ Ambitions



A partnership between GIZ, Deutsche Bahn, thyssenkrupp Uhde, Green Investors and Brazil Green Energy was launched at Hannover Messe to develop a Brazilian-German value chain for the production of green hydrogen and PtX – supporting Brazil's role as a global hydrogen hub and Deutsche Bahn's path to a net-zero fleet by 2040. The cooperation will also pilot a physical transport of molecules from Brazil to Germany to test and strengthen the logistics for future green corridors between Brazil and Europe.

[Read on.](#)

Brazil / New PPP

Green Hydrogen for Automotive Coating



At the Hannover Messe, Tünkers Maschinenbau and GIZ signed a cooperation agreement under H2Uppp to explore the use of green hydrogen in Brazil's automotive sector. The project focuses on how green hydrogen can be used for industrial applications – specifically in automotive coating. Replacing fossil fuels used in paint booth drying processes, green hydrogen will be tested using an existing facility with an LPG-fired burner as the reference case. The aim is to generate practical insights into the technical requirements for a safe and efficient transition. The findings are expected to help define pathways for substituting conventional fuels with green hydrogen in industrial heat processes, supporting new demand in Brazil's manufacturing sector.

European Union

EU Co-finance increases impact of H2Uppp in Brazil and Uruguay

H2Uppp has a track-record of successful support to the hydrogen market. This has convinced the European Union to provide the programme with an additional €4.3 million to enhance its project development and project support in Brazil and Uruguay. The funding will be part of the Global Gateway Initiative to support hydrogen and Power-to-X projects in the two countries. Through H2Uppp, GIZ supports, among other activities, the development of large-scale green hydrogen infrastructure projects. The programme aims to mobilise investment, strengthen local value creation, and enhance the positioning of German and European technologies in key markets across the Global South. At the same time, it seeks to unlock export potential for green energy carriers to Europe, contributing to progress towards the energy transition and climate neutrality.

Colombia / High Level Roundtable

Addressing Environmental Impacts Associated with GH2



The H2Uppp team in Colombia has convened a series of high-level roundtables on the environmental impacts of green hydrogen. These discussions examined impacts across the entire green hydrogen value chain and its derivatives, while assessing technological, socio-economic, regulatory, and environmental risks. International regulatory frameworks were reviewed and compared with the Colombian context, resulting in recommendations for the development of a tailored environmental regulatory framework in Colombia. These findings represent an important step towards strengthening environmental management of hydrogen and PtX projects from the outset, while also helping to reduce regulatory uncertainty. [Read on.](#)

Colombia & Uruguay / New PPP

Local Community Strategies for Large-scale H2/PtX Projects

To ensure meaningful local community engagement, GIZ, ENERTRAG SE and Colombia's Colibri Energy have launched a public-private partnership under H2Uppp to develop and test strategies for the inclusion of local communities during the planning processes of large-scale hydrogen and Power-to-X projects. The aim is to reduce social and permitting risks during the planning, construction and operation phases by integrating robust participation mechanisms from the outset. [Read on.](#)

Colombia / Green Hydrogen Technical Roundtable

Debating Demand & Consumption Alternatives

In February, H2Uppp and the German-Colombian Chamber of Industry and Commerce held the [11th session of the Green Hydrogen Technical Roundtable](#). On the occasion, representatives from the public, private and academic sectors met to analyse alternatives for the consumption of green hydrogen in the country and to learn about:

- German demand for green hydrogen and its derivatives
- The use of green hydrogen in oxy-fuel steel cutting processes
- Demand projections from the Atlántico-Bolívar and Valle del Cauca hubs

The session has been essential to build a shared and realistic vision of the role of demand as a market driver, identify practical barriers, and move towards implementation.

India / New PPP with thyssenkrupp Nucera

Advancing India's GH2 & PtX Market



At India Energy Week in Goa, GIZ and thyssenkrupp nucera launched a cooperation under H2Uppp to advance green hydrogen and Power-to-X markets in India. The partners aim to develop a market strategy for German electrolyser manufacturers in India's green hydrogen sector, integrating market intelligence, techno-economic analysis, financing perspectives, and project insights aligned with India's regulatory framework and supply chain environment.

[Read on.](#)

India / Strategic Partnership

Hydrogen Cluster Partnership Between HZwo and HVIC Pune

The German hydrogen industry network [HZwo](#) and Indian company [Pune Hydrogen Valley \(HVIC\)](#) are engaging in a strategic partnership to foster private sector collaboration, innovation, and market development as part of Indo-German Collaboration on Green Hydrogen. The establishment of the cluster partnership was supported by H2uppp. [Read on.](#)

India/ Hydrogen Market Overview

Feeding the Indo-German Hydrogen Directory

The Indo-German Chamber of Commerce (IGCC), in collaboration with H2uppp, invites organisations to participate in the upcoming edition of the Green Hydrogen Directory. Companies active in India or exploring collaboration opportunities in the Indian green hydrogen market are encouraged to join the growing network of organisations shaping Indo-German cooperation in green hydrogen. Entries into the directories can be made [online.](#)

India / Market Development Webinar

Introducing the GH2 Hubs Tool for India



A webinar on mapping India's green hydrogen production and demand clusters in March brought together over 300 participants, including policymakers, industry experts, and stakeholders to attend the launch of a new version of the [green hydrogen hubs tool](#). The tool is providing German and Indian private sector players with an overview of market developments, ongoing projects and infrastructure development, and policy frameworks to support informed investment decisions. [Read on.](#)

South Africa / New PPP

Mine2Ammonia: Green Ammonia from Decommissioned Mines



A new public-private partnership under H2Uppp is exploring how decommissioned mines in South Africa could be repurposed for green ammonia production. The *Mine2Ammonia* study assesses the technical, economic, and environmental feasibility of using existing mining infrastructure and resources to enable Power-to-X development. The initiative aims to support South Africa's Just Transition by unlocking new industrial value in former mining regions while advancing clean energy production through innovative reuse of mine sites. The partnership comprises GIZ, d-fine GmbH and South Africa-based Enicron. [Read on.](#)

H2Uppp Expert Talk

Unravelling the Relevance of Different GHG Emissions Methodology



In a roundtable discussion, project developers and representatives from H2Uppp and the [Perspectives Climate Group](#) analysed different GHG emissions methodologies and revealed some interesting trends:

- Participants regard the EU RNFBO/RED III, EU CBAM and the IMO regulations as most relevant international standards.
- 70% of the projects aim for multi-standard compliance.
- One-third of the projects began examining GHG accounting methodologies during the conceptual design stage, the feasibility study, or the pre-FEED phase.
- Data verification, public data access and monitoring are big challenges.

3 Questions to the Expert

"Thailand is becoming Southeast Asia's GH2 testbed"

Thailand is not an obvious hydrogen heavyweight. There is limited land for vast renewable parks and no pipeline routes to Europe. Yet the country is quietly becoming one of Southeast Asia's most interesting testing grounds for green hydrogen, partly due to H2Uppp's strategy that builds on practical, small-scale projects rather than large-scale, capital-intensive plants, argues Tim Nees, H2Uppp Project Manager in Thailand.

Why are you focusing on small hydrogen projects in Thailand?

Tim Nees: When we launched H2Uppp in Thailand in 2022, the starting conditions were challenging. Many industrial players had limited knowledge of hydrogen, key stakeholders rarely coordinated, and clear political targets and economic incentives were largely absent. Our approach was to start with realistic pilot projects that companies and institutions could implement. This strategy is proving effective. Smaller projects generate practical operational experience, foster collaboration, and gradually build confidence among policymakers and industry. In a market without obvious natural advantages for hydrogen, this pragmatic approach has helped to create momentum.



Tim Nees is H2Uppp-Project Manager in Thailand and a dedicated economics and energy professional with international experience.

Which projects have been particularly influential so far?

Nees: There is, for once, the Green Hydrogen Training Hub at Chiang Mai University established through a public-private partnership (PPP), involving German industry. The centre demonstrates technology to train engineers and energy professionals from Thai companies. Although the PPP has ended, the hub continues to operate independently. What started as a funded initiative has become a lasting competence centre, helping embed hydrogen expertise across Thai industry.

In another project we explored supplying electricity to remote islands using solar power combined with hydrogen storage. Surplus solar energy is converted into hydrogen and later transformed back into electricity when needed. The feasibility study is now the basis for a possible demonstration plant, while Thailand's energy authorities are considering similar solutions for further islands.

Why should European companies pay attention to Thailand's hydrogen journey?

Nees: For international companies, especially those with advanced energy technology, Thailand offers a valuable test environment: projects move quickly, real applications are prioritised, and partnerships can develop rapidly. In that sense, Thailand is becoming a practical laboratory for the energy transition in Southeast Asia, showing that transformation can start small and still make a significant impact.

Upcoming Events

20 May 2026

World Hydrogen Summit:

3rd EU-India Green Hydrogen Business Forum

The Forum aims to deepen collaboration on green hydrogen deployment, industrial decarbonisation, and sustainable trade linkages. It will convene key stakeholders to accelerate project implementation, partnerships, and investment across the green hydrogen value chain. **14:00 - 17:00 CET, Port 4, Ahoy Rotterdam, Netherlands. Registration [Link](#).**

21 May 2026

**World Hydrogen Summit / H2Uppp Workshop:
India's Green Hydrogen Supply Chain - Pathways & Opportunities for Indo-EU
Cooperation**

The H2Uppp workshop aims to strengthen Indo-EU cooperation and foster partnerships along the hydrogen value chain. **Contact: divya.joshi@giz.de**

21 May 2026

**World Hydrogen Summit / H2Uppp Workshop:
A Strategic Roadmap for Mutual Acceptance of GH2 Component Testing
between India and Germany, with EU Scalability**

The H2Uppp workshop aims to define clear, standardised procedures and regulatory steps necessary to achieve mutual acceptance of test results and certifications. **Contact: divya.joshi@giz.de**

18-22 May 2026

Energy Trade Mission to Ukraine

AHK Ukraine offers a trade mission on **decentralized energy supply for energy safety and resilience** to Lwiw. Apply at [German Energy Solutions](#).

8-12 June 20236

Energy Trade Mission to Ecuador

AHK Ecuador offers a trade mission on decentralized energy supply and storage solutions for industrial and commercial applications in Ecuador. Apply at [German Energy Solutions](#).

15-18 June 2026

Energy Trade Mission to Ethiopia and Kenya

AHK Eastern Africa offers a trade mission to Kenya and Ethiopia on regional grid integration and expansion of a resilient grid infrastructure. Apply at [German Energy Solutions](#).

H2 Uppp

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Registered offices:

Bonn and Eschborn, Germany
Friedrich-Ebert-Allee 32,36
51133 Bonn, Germany

T +49 228 44 60-0
F +49 228 44 60 – 115
E h2uppp@giz.de

www.giz.de/en
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Author: Detlev Tenzer, Friedrich-Ebert-Allee 32,36, 51133 Bonn, Germany

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