ABIHV at COP31

ABIHV
Associação Brasileira da Indústria do Hidrogênio Verde

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COP31 TÜRKİYE ANTALYA

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ABIHV key message for COP31

The Brazilian Association of the Green Hydrogen Industry (ABIHV) comes to COP31 with a central message: green hydrogen[1] and its derivatives (ammonia, methanol, fertilisers and synthetic fuels) must be treated as instruments for implementing climate targets, particularly in sectors where direct electrification is not technically or economically viable.

In fertilisers, steelmaking, refining, chemicals and shipping, green hydrogen is one of the main pathways for making this transition a reality.

The challenge has shifted from recognising the potential to delivering implementation. Around the world, the viability of announced projects is being threatened by high costs, uncertain demand, complex regulation and inadequate infrastructure. Turning announcements into final investment decisions is therefore central to COP31.

1. Hydrogen produced through water electrolysis using renewable sources such as wind, solar and hydropower. Law No. 14,948/2024 defines low-emissions hydrogen using an initial threshold of up to 7 $kgCO_2eq/kgH_2$ on a life-cycle basis. Article 22 of Decree No. 13,096/2026 sets the boundary at the point of consumption and allows accounting up to the production gate until 31 December 2030. The applicable boundary and methodology must be made explicit.

Brazil arrives in Antalya with a legal framework for low-emissions hydrogen that is being implemented. It comprises the Legal Framework for Low-Emissions Hydrogen (Law No. 14,948/2024), the Low-Emissions Hydrogen Development Programme (PHBC), established by Law No. 14,990/2024, and Decree No. 13,096/2026, which implements these laws. The PHBC provides for aggregate tax-credit ceilings totalling up to BRL 18.3 billion for 2030–2034, subject to budgetary provision and project selection through a competitive process. Effective implementation of this framework will be decisive in providing predictability for investors and international partners and supporting long-term decisions.

This agenda aligns with the **priorities of the COP31 Presidency**, particularly:

- ✓ Clean Energy Transition and Electrification;
- ✓ Green Industrialization;
- ✓ Food Security;
- ✓ Oceans;
- ✓ Climate Implementation Bridge (BRIDGE).

ABIHV's agenda also connects with the Transitioning Away from Fossil Fuels Roadmap led by the Brazilian COP30 Presidency.

In this document, ABIHV presents concrete proposals to the Parties, the COP31 Presidency, financial institutions and the Brazilian government. It stands ready to bring together companies, governments and financiers to turn Brazil's potential into operating projects and actual emissions reductions.

Executive summary

The Brazilian Association of the Green Hydrogen Industry (ABIHV) advocates recognition of green hydrogen and its derivatives as instruments for implementing climate targets, particularly in sectors where direct electrification faces technical or economic constraints. Ammonia, methanol, low-emissions fertilisers and synthetic fuels can support the decarbonisation of industry, agriculture and shipping.

Opportunity and challenge.

The sector's challenge is no longer to demonstrate its potential, but to turn announced projects into investment and operations. High costs, uncertain demand, complex rules and inadequate infrastructure continue to hinder this transition. Brazil combines renewable resources, industrial potential and a regulatory framework under implementation. Regulatory predictability, reliable certification, finance, infrastructure and the development of offtake markets are essential if this framework is to deliver projects.

Agenda for COP31.

The Presidency's priorities, including clean energy transition, green industrialisation, food security and oceans, create opportunities to integrate green hydrogen into decarbonisation and industrial development solutions. The Climate Implementation Bridge can help structure bankable projects by connecting renewable power generation, electrolysis, infrastructure and industrial consumers.

Priorities proposed by ABIHV

1. **Create predictable demand:** preserve and implement binding targets for renewable fuels of non-biological origin (RFNBOs), including beyond 2030, and expand long-term offtake instruments for certified green hydrogen and derivatives, with market-access conditions for Brazilian supply.

2. **Enable the first projects:** combine long-term offtake agreements, guarantees, concessional finance and instruments to narrow the cost gap, with clear rules on risk allocation and the cumulation of support mechanisms and subsidies, including across jurisdictions, subject to the applicable rules.

3. **Implement Brazil's framework:** ensure the effectiveness and continuity of the instruments provided for in law, particularly access to Rehidro throughout its statutory period, and adopt the measures needed to ensure its continuation through 2030; complete the operational implementation of the PHBC and provide predictable project selection, subject to legal and budgetary conditions. In implementing the Tax Reform, preserve neutrality for projects, adequate time to adapt and effective tax relief for exports, with timely recovery of tax credits.

4. **Ensure integrity and market access:** align certification schemes and emissions-accounting methodologies, recognising the actual performance of Brazilian projects and preventing double counting.

5. **Integrate energy and industry:** plan grid access, electricity costs and shared infrastructure by connecting renewable power generation, electrolysis and use in nitrogen fertiliser production, steelmaking, chemicals and sustainable fuels.

ABIHV stands ready to bring together companies, governments, financial institutions and international partners, helping turn Brazil's potential into operating projects, competitive value chains and actual emissions reductions.

Introduction

The Brazilian Association of the Green Hydrogen Industry (ABIHV) represents companies across the green hydrogen and derivatives value chain, including renewable power generators, producers, industrial consumers, and equipment and technology suppliers. This diversity underpins the Association's work to establish the conditions for competitive projects and the decarbonisation of Brazilian industry.

In water electrolysis, direct emissions at the point of production must be distinguished from emissions intensity calculated on a life-cycle basis under the applicable certification methodology. The performance of green hydrogen depends on the source of electricity and the accounting boundaries used; any claim of zero emissions requires these assumptions to be made explicit[1].

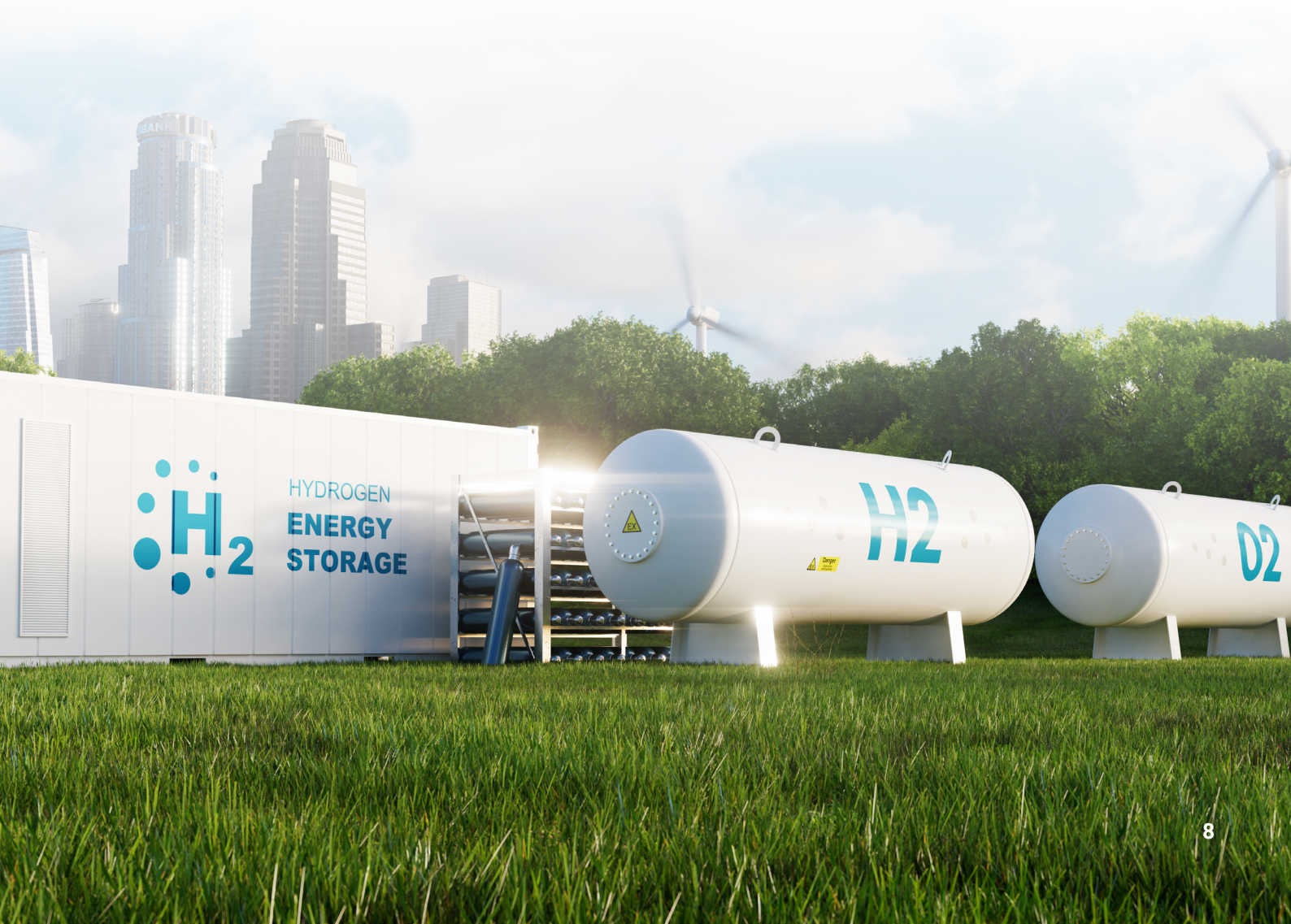
As the global energy transition advances, ABIHV actively advocates a regulatory, technological and market environment that enables large-scale decarbonisation. We recognise that the climate crisis requires a profound transformation of production systems and that green hydrogen, ammonia, methanol and fertilisers have a strategic role in this process, particularly in hard-to-abate sectors.

For green hydrogen to fulfil its strategic role, we therefore advocate robust public policies, economic incentives and clear regulatory frameworks that enable production at scale, improve competitiveness against fossil fuels, and encourage international cooperation in research, innovation and infrastructure.

1. IEA. Global Hydrogen Review 2024. GHG emissions of hydrogen and its derivatives. Paris: IEA, 2024. Available at: https://www.iea.org/reports/global-hydrogen-review-2024/ghg-emissions-of-hydrogen-and-its-derivatives. Accessed: 29 October 2026.

Hydrogen production today remains predominantly fossil-based and highly emissions-intensive. The different technological pathways for low-emissions hydrogen, particularly electrolysis, therefore form part of a strategic set of energy solutions with substantial potential for mitigation and structural transformation of the global economy. This is already reflected in international climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), which in recent years have increasingly recognised the central role of green hydrogen in the energy transition and in reducing greenhouse gas emissions.

This document sets out ABIHV's vision for COP31 and the evolving climate agenda, highlighting the crucial role of green hydrogen.





Green hydrogen and Brazil's regulatory framework

One of the first regulatory milestones for green hydrogen was the creation of the National Hydrogen Programme (PNH2) through Resolution No. 6 of 23 June 2022 of the National Energy Policy Council (CNPE). The programme establishes guidelines for strengthening Brazil's hydrogen economy, covering technological development, workforce training, energy planning, improvements to the legal and regulatory framework, market expansion and international cooperation[1].

Two years after the creation of the PNH2, the Legal Framework for Low-Emissions Hydrogen was established by Law No. 14,948 of 2 August 2024[2] to set out principles, concepts, objectives and guidelines for the sector's development. In addition to defining the applicable criteria, the law introduced the Special Incentive Regime for Low-Emissions Hydrogen Production (Rehidro) and the Brazilian Hydrogen Certification System (SBCH2).

1. BRAZIL. National Energy Policy Council. Resolution No. 6 of 23 June 2022. Establishes the National Hydrogen Programme and its Management Committee, and provides for related matters. Available at: https://www.gov.br/mme/pt-br/assuntos/conselhos-e-comites/cnpe/resolucoes-do-cnpe/2022/Res62022.pdf

2. BRAZIL. Chamber of Deputies. Law No. 14,948 of 2 August 2024. Establishes the legal framework for low-emissions hydrogen; provides for the National Low-Emissions Hydrogen Policy; establishes incentives for the low-emissions hydrogen industry; establishes Rehidro and creates the PHBC; and amends Laws No. 9,427 of 26 December 1996 and No. 9,478 of 6 August 1997. Brasília: Chamber of Deputies, August 2024. Available at: https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2024/lei/l14948.htm

To develop the domestic market and provide tax credits to stimulate the commercialisation of low-emissions hydrogen, Law No. 14,990 of 27 September 2024 established the Low-Emissions Hydrogen Development Programme (PHBC), providing for up to BRL 18.3 billion in tax credits between 2030 and 2034. Law No. 15,103 of 22 January 2025, which established the Energy Transition Acceleration Programme (Paten), included low-emissions hydrogen projects among the activities eligible for support under the programme[1,2].

In 2026, regulation advanced with the publication of Decree No. 13,096 of 12 August 2026[3], which implements Laws No. 14,948/2024 and No. 14,990/2024 and sets out rules for Rehidro, the PHBC, certification under the SBCH2 and natural hydrogen exploration. The decree also requires the call for proposals for the PHBC competitive selection process to undergo prior public consultation (Article 53, paragraph 5).

On 29 October 2026, the Brazilian National Agency for Petroleum, Natural Gas and Biofuels (ANP) approved bringing forward the regulation of the certification system into its 2025–2026 Regulatory Agenda and updated its Manual for Authorisation Applications. The published timetable envisages work beginning in November 2026 and concluding in October 2027, reinforcing the need to complete regulation and make the support instruments operational[4].

1. BRAZIL. Law No. 14,990 of 27 September 2024, as amended by Article 19 of Law No. 15,269 of 24 November 2025. Articles 4, paragraph 1, and 6: 2030–2034 period. Available at: https://www2.camara.leg.br/legin/fed/lei/2024/lei-14990-27-setembro-2024-796410-normaatualizada-pl.html. Accessed: 29 October 2026.

2. BRAZIL. Chamber of Deputies. Law No. 15,103 of 22 January 2025. Establishes the Energy Transition Acceleration Programme (Paten); and amends Laws No. 13,988 of 14 April 2020, No. 11,484 of 31 May 2007, No. 9,991 of 24 July 2000 and No. 9,478 of 6 August 1997. Brasília: Chamber of Deputies, January 2025. https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2025/lei/l15103.htm

3. BRAZIL. Presidency of the Republic. Decree No. 13,096 of 12 August 2026. Implements Laws No. 14,948/2024 and No. 14,990/2024. Available at: https://www.gov.br/mme/pt-br/acesso-a-informacao/legislacao/decretos/2026/decreto-n-13-096-2026.pdf/view. Accessed: 29 October 2026.

4. ANP. ANP brings forward regulation of low-emissions hydrogen certification. 29 October 2026. Available at: https://www.gov.br/anp/pt-br/canais_atendimento/imprensa/noticias-comunicados/anp-antecipa-regulamentacao-da-certificacao-de-hidrogenio-de-baixa-emissao-de-carbono. Accessed: 30 October 2026.

For this framework to translate into investment, ABIHV advocates ensuring the effectiveness and continuity of the instruments provided for in law, particularly Rehidro. Its implementing regulations must enable effective access to the regime throughout its statutory period, overcoming the current limitation on access to benefits through 2026, and the necessary legislative and regulatory measures must be adopted to ensure its continuation through 2030. Implementation of the Tax Reform must preserve neutrality for projects, allow adequate time to adapt to the new rules and ensure effective tax relief for exports, including timely recovery of tax credits[1].

Green hydrogen is already part of the energy transition and is essential to it. In Brazil, the legal framework seeks to turn competitive advantages into a structured value chain capable of meeting both domestic and international demand, while contributing to lower greenhouse gas emissions.

1. BRAZIL. Law No. 14,948/2024, Articles 26, paragraph 3, and 27; and Decree No. 13,096/2026, Articles 29 and 30. The law provides for five years from 1 January 2025; the decree limits the referenced tax suspension to contracts entered into by 31 December 2026. Continuation through 2030 is advocated in this document as a policy request, subject to the necessary legislative and regulatory measures. Available at: https://www.gov.br/mme/pt-br/acesso-a-informacao/legislacao/leis/lei-n-14-948-2024.pdf and https://www2.camara.leg.br/legin/fed/decret/2026/decreto-13096-12-agosto-2026-799772-publicacaooriginal-180833-pe.html. Accessed: 30 October 2026.



Green hydrogen in international climate negotiations

Hydrogen has been used as an industrial feedstock for decades, particularly in oil refining, fertilisers and chemicals. Its growing relevance in international climate negotiations, especially at COPs, stems from the development of technologies capable of producing it with lower greenhouse gas emissions intensity.

Its potential lies in replacing fossil-based feedstocks and fuels in hard-to-abate activities, while also enabling the production of derivatives such as ammonia and methanol and fuels with lower carbon intensity.

As international climate commitments have strengthened, particularly since the signing of the Paris Agreement, low-emissions hydrogen has become part of national energy and climate strategies, industrial policies and international cooperation initiatives.

Economies such as the European Union, Japan and South Korea have developed strategies and incentive mechanisms to stimulate hydrogen production and use, pursuing energy security, industrial competitiveness and emissions reductions. Alongside this progress, financing instruments, certification systems, consumption targets and initiatives to develop markets and international trade corridors are increasingly emerging[1].

1. IEA. Global Hydrogen Review 2026. Paris: IEA, 2026. Available at: https://www.iea.org/reports/global-hydrogen-review-2026. Accessed: 30 October 2026.

Recognising the positive momentum generated by the outcomes of COP28 and meetings of the Group of Seven (G7) and Group of Twenty (G20), the COP29 Presidency launched the Hydrogen Declaration as an Action Agenda initiative open to endorsement by governments and other stakeholders. The declaration sets out voluntary commitments to cooperate in expanding the production and use of renewable and low-emissions hydrogen and their derivatives[1].

This milestone established a collective commitment by governments, international organisations, the private sector and civil society to accelerate the development and adoption of low-emissions hydrogen, recognising it as a key component of renewable energy integration and the decarbonisation of hard-to-abate sectors.

The priority actions set out in the Hydrogen Declaration include:



Figure 1 Priority actions under the Hydrogen Declaration. Source: COP29 Presidency.

1. AZERBAIJAN. COP29 Hydrogen Declaration. Baku: COP29 Presidency, 2024. Available at: https://cop29.az/en/pages/cop29-hydrogen-declaration.

Green hydrogen has consequently moved beyond being viewed simply as an alternative technology and is increasingly recognised as a strategic driver of economic and industrial transformation, with substantial potential to contribute to climate targets.

COP30[1] advanced the mobilisation of concrete initiatives to expand the production and use of low-emissions hydrogen and its derivatives. Key Action Agenda outcomes include[2]:

1. **Belém 4X Pledge on Sustainable Fuels**, aimed at quadrupling the use of sustainable fuels by 2035;
2. **Mobilisation of international resources** for clean hydrogen projects in emerging economies;
3. **Stronger public–private initiatives** to develop markets for industrial products made with low-emissions hydrogen.

These advances reinforce the importance of combining international cooperation, finance, certification and demand-side measures to turn hydrogen's potential into concrete decarbonisation outcomes.

1. UNFCCC. Global Climate Action Agenda at COP30: Outcomes Report, 2025. Available at: https://unfccc.int/sites/default/files/resource/COP30%20Action%20Agenda_Final%20Report.docx.pdf

2. GLOBAL PROGRAMME FOR HYDROGEN IN INDUSTRY. UNIDO Engagement at COP30, 2025. Available at: https://hydrogen.unido.org/events/unido-engagement-cop30.





Roadmap for transitioning away from fossil fuels

On November 3, 2026, the Brazilian Presidency of COP30 presented the Roadmap for the transition away from fossil fuels in energy systems in a just, orderly, and equitable manner, anchored in paragraph 28(d) of the decision on the first Global Stocktake[1].

The Roadmap addresses low-emission hydrogen in applications such as refining, maritime transport, and industry. ABIHV advocates for its implementation to prioritize green hydrogen and its derivatives in hard-to-abate sectors, addressing the economic, technological, and regulatory barriers that limit their adoption.

1. COP30 PRESIDENCY. Transitioning Away from Fossil Fuels Roadmap. Document presented on November 3, 2026. Available at: https://cop30.br/en/2026-priorities/transitioning-away-from-fossil-fuels-roadmap. Accessed on November 5, 2026.

Article 6 of the Paris Agreement

In carbon markets, internationally transferred mitigation outcomes (ITMOs) under Article 6.2 of the Paris Agreement may provide an additional source of revenue for eligible projects. This possibility depends on the applicable methodologies and requirements, authorisation by participating Parties and corresponding adjustments to avoid double counting. ABIHV advocates access to these instruments for green hydrogen and derivatives projects that meet the relevant environmental integrity and accounting requirements. Potential revenue must be assessed case by case, according to project eligibility and the applicable authorisation framework.[1].

1. UNFCCC. Article 6.2 Reference Manual: Accounting, reporting and review of cooperative approaches. Available at: https://unfccc.int/sites/default/files/resource/Article_6.2_Reference_Manual.pdf. Accessed: 29 October 2026.



EU Carbon Border Adjustment Mechanism

In trade, the Carbon Border Adjustment Mechanism (CBAM) entered its definitive regime in 2026, covering imports of selected products in sectors including hydrogen, fertilisers, iron and steel. By pricing embedded emissions, the mechanism can improve the relative competitiveness of products with lower carbon intensity. For Brazilian exporters, its effects depend on the applicable calculation, verification and reporting rules and on recognition of actual production emissions. Interoperability between certification schemes can facilitate demonstration of environmental attributes, but does not replace compliance with CBAM-specific requirements[1].

1. EUROPEAN COMMISSION. Carbon Border Adjustment Mechanism. Available at: https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en. Accessed: 29 October 2026.





International demand and regulatory stability

Moving projects towards final investment decisions depends on a predictable consumption outlook and commercial commitments capable of supporting financing. Consumption targets, demand aggregation and long-term offtake agreements can reduce uncertainty and connect green hydrogen and derivatives supply with consuming sectors[1].

ABIHV advocates preserving and implementing binding RFNBO targets in European industry and transport, including beyond 2030. It also advocates stable rules and market-access conditions for imported green hydrogen and derivatives that meet the applicable criteria, providing predictability for offtake agreements and Brazilian investment contributing to global decarbonisation[2].

In this context, stable regulatory frameworks, transparent criteria and mechanisms that connect producers and consumers are particularly important. The international agenda also reinforces the importance of advancing implementation of Brazil's framework.

1. IEA. Global Hydrogen Review 2026. Executive summary. Paris: IEA, 2026. Available at: https://www.iea.org/reports/global-hydrogen-review-2026/executive-summary. Accessed: 29 October 2026.

2. EUROPEAN COMMISSION. Guidance on RFNBO consumption targets in industry and transport, Communication C/2025/2983; Directive (EU) 2023/2413. Preserving post-2030 targets and access for Brazilian supply are institutional policy requests. Available at: https://eur-lex.europa.eu/eli/C/2025/2983/oj/eng/pdf. Accessed: 30 October 2026.

COP31 and green hydrogen in the Presidency's priorities

COP31 takes place in Antalya, Türkiye, from 9 to 20 November 2026. Under a shared leadership arrangement, Türkiye hosts the conference and leads the Action Agenda, while Australia leads the negotiations.

The Presidency's third letter, dated 24 August 2026, set out **ten priority themes**[1]:

- ✓ **Clean Energy Transition and Electrification;**
- ✓ **Zero Waste and Methane Reduction;**
- ✓ **Climate-Resilient Cities;**
- ✓ **Green Industrialization;**
- ✓ **Youth and Education;**
- ✓ **Food Security;**
- ✓ **Oceans and Seas;**
- ✓ **Dynamic and Resilient Health Systems;**
- ✓ **Rio Synergies (climate, biodiversity and desertification); and**
- ✓ **Climate Implementation Bridge.**

Finance, technology and capacity-building are treated as cross-cutting enablers intended to support both the Presidency's priorities and implementation of nationally determined contributions (NDCs) with a 2035 time horizon.

1. COP31 PRESIDENCY. Third Letter from the COP31 President-Designate to Parties. UNFCCC record dated 24 August 2026: https://unfccc.int/documents/660142. Text: https://unfccc.int/sites/default/files/resource/COP31_3rd%20Presidency%20Letter_Final.pdf . Accessed: 30 October 2026.

In this context, COP31 seeks to strengthen the shift from climate commitments to practical implementation by mobilising investment, partnerships and solutions that can deliver measurable results.

For the low-emissions hydrogen industry, the COP31 Action Agenda directly relates to the priorities of clean energy transition and electrification, green industrialisation, food security, oceans and seas, and the Climate Implementation Bridge.

The priorities of zero waste and methane reduction and climate-resilient cities relate to green hydrogen primarily through the decarbonisation of industrial processes and the logistics systems that supply urban centres.

1. Clean Energy Transition and Electrification

The initiative seeks to reduce dependence on fossil fuels, expand renewable energy use and strengthen energy security, recognising electrification as one of the main drivers of emissions reductions.

Green hydrogen is part of this transformation because it enables renewable energy to be stored and converted into an energy carrier for specific industrial and energy applications. Its contribution is particularly relevant in sectors where direct electrification faces technical or economic constraints, such as certain chemical processes, ammonia production, steelmaking, and some heavy-duty transport and shipping applications.

Electricity is a key determinant of green hydrogen production costs. Its share varies with electricity prices and procurement arrangements, electrolyser utilisation and the circumstances of each project. Electrolysers can provide flexibility and help utilise renewable electricity that would otherwise be curtailed, provided that technical conditions, grid location, storage and supply commitments permit such operation. These benefits should be assessed in system planning using verifiable technical and economic criteria[1].

ABIHV advocates integrated planning of renewable energy expansion and green hydrogen market development, with predictable grid access, charges that reflect actual grid use and load flexibility, clear rules for using electricity that would otherwise be wasted, and certification criteria that do not impose stricter additionality requirements than those of destination markets. Internationally, ABIHV supports the Presidency's electrification agenda and advocates recognition of green hydrogen as a complement to direct electrification in applications that direct electrification cannot serve.

1. IEA. Levelised cost of hydrogen production and electrolyser CAPEX by cost component in the European Union and China, 2024. Paris: IEA, 2026. Available at: https://www.iea.org/data-and-statistics/charts/levelised-cost-of-hydrogen-production-and-electrolyser-capex-by-cost-component-in-the-european-union-and-china-2024. Accessed: 29 October 2026.



2. Green Industrialization

The COP31 Presidency seeks to accelerate low-carbon industrial production in hard-to-abate sectors.

International organisations such as the International Energy Agency (IEA) recognise renewable hydrogen and its derivatives as strategic instruments for decarbonising hard-to-abate sectors, including steelmaking, chemicals, petrochemicals, shipping and aviation[1].

Green hydrogen can replace fossil-based feedstocks in certain industrial processes and enable the production of inputs and materials with lower emissions intensity. Relevant applications include ammonia and nitrogen fertiliser production, the chemical industry, and steelmaking pathways that use green hydrogen as a reducing agent.

Developing these applications can create new value chains, stimulate investment in equipment and infrastructure, and expand the supply of low-emissions industrial products. Green hydrogen can also improve the competitiveness of producers able to demonstrate their products' environmental performance through verifiable methodologies.

The transition to low-emissions hydrogen can therefore prepare industry for global decarbonisation requirements and reduce the risk of emissions-intensive products losing competitiveness. It can also strengthen energy security: the IEA notes that the impacts of the conflict in the Middle East create uncertainty over the short-term outlook for existing hydrogen applications, particularly fertiliser production and trade, highlighting the importance of diversifying energy sources and suppliers.

ABIHV advocates creating the conditions for competitive green hydrogen and derivatives projects, focusing on legal certainty, regulatory predictability, certification, infrastructure and finance. It also advocates the development of markets for low-emissions industrial products.

1. IEA. Global Hydrogen Review 2026. Demand. Paris: IEA, 2026. Available at: https://www.iea.org/reports/global-hydrogen-review-2026/demand. Accessed: 30 October 2026.

2. IEA. Global Hydrogen Review 2026. Demand. Paris: IEA, 2026. Available at: https://www.iea.org/reports/global-hydrogen-review-2026/demand. Accessed: 30 October 2026.

3. Food Security

Food security is directly linked to the availability, affordability and stability of supplies of essential agricultural inputs. These include nitrogen fertilisers, whose value chain depends on ammonia. Ammonia production currently remains predominantly reliant on fossil fuels.

In this context, green hydrogen can play a strategic role by replacing fossil-based hydrogen in ammonia production. Ammonia produced with green hydrogen can be used to manufacture nitrogen fertilisers, with emissions reductions to be demonstrated under the applicable life-cycle methodology. This pathway can reduce emissions across the fertiliser value chain and dependence on natural gas.

Expanding ammonia and fertiliser production across different regions can also make supply more secure and less vulnerable to external shocks. For countries with competitive renewable resources, such as Brazil, this diversification also creates opportunities to develop domestic industry.

For ABIHV, this agenda offers an opportunity to advocate green hydrogen as a complementary instrument for strengthening food security, with an emphasis on decarbonising nitrogen fertilisers and creating the conditions for competitive investment. The Association helps connect the energy, industry and agriculture sectors and promotes policies that stimulate demand for low-emissions products supported by reliable sustainability criteria.

4. Oceans and Seas

The priority established by the Presidency recognises the importance of oceans for climate stability, biodiversity, coastal economies and the livelihoods of communities that depend on them.

Under certain conditions, electricity generated by offshore wind farms can supply electrolysis facilities onshore or integrated into coastal industrial complexes. The resulting green hydrogen can then be used directly or converted into derivatives, such as low-emissions ammonia and methanol, with potential applications in shipping and industry.

The International Maritime Organization (IMO) is negotiating the Net-Zero Framework to reduce emissions from maritime transport. The resumption of the extraordinary session is scheduled for December 4, 2026, subject to confirmation by the IMO's Marine Environment Protection Committee (MEPC 85). If adopted, the framework could signal growing demand for low-emission marine fuels, such as ammonia and methanol produced from green hydrogen, provided they meet lifecycle emissions criteria.

ABIHV advocates integrating green hydrogen, offshore wind energy, ports and shipping, with green shipping corridors between Brazil and consumer markets. Brazil's legal framework for offshore wind was established by Law No. 15,097/2025. ABIHV also supports the adoption, within the International Maritime Organization (IMO), of global life-cycle emissions-intensity standards for marine fuels and economic mechanisms that narrow the cost gap between fossil-based and low-emissions fuels[1].

1. BRAZIL. Law No. 15,097/2025, the legal framework for harnessing offshore energy resources. MME: https://www.gov.br/mme/pt-br/assuntos/secretarias/sntep/dte/cgebc/gt-eolicas-offshore/legislacao/legislacao/. IMO. MEPC 84th session: adoption of the Net-Zero Framework remains under discussion, with the extraordinary session expected to resume in December 2026. https://www.imo.org/en/mediacentre/meetingsummaries/pages/temporary-mepc-84th-session.aspx. Official calendar: https://www.imo.org/en/mediacentre/meetingsummaries. Frequently asked questions: https://www.imo.org/en/mediacentre/hottopics/pages/faqs-the-imo-net-zero-framework.aspx. Accessed: 30 October 2026.

5. Climate Implementation Bridge (BRIDGE)

The Climate Implementation Bridge aims to help governments turn national priorities and climate commitments, including NDCs and long-term strategies, into structured, investment-ready project portfolios connected to sources of finance. BRIDGE is not a new financing fund: its function is to facilitate connections between priorities, projects and sources of capital[1].

Many projects depend on substantial upfront investment, long development lead times, shared infrastructure and commercial conditions capable of sustaining operations over time. Even where renewable generation potential and industrial demand exist, the absence of technically well-developed projects, offtake agreements, permits, finance and predictable rules can prevent initiatives from moving into implementation.

1. COP31 PRESIDENCY. Climate Implementation Bridge (BRIDGE). Available at: https://cop31.tr/action-plan/caim. Accessed: 30 October 2026.



The BRIDGE approach can help identify green hydrogen projects aligned with national decarbonisation and industrial development strategies and help organise feasibility studies, business models, infrastructure requirements, regulatory risks and financing options. It can also encourage integrated projects in which renewable generation, electrolysis, storage, transport and industrial consumption are planned together.

For Brazil, this approach is relevant to connecting green hydrogen projects with national priorities for the energy transition, industrial development and security of supply. The objective should extend beyond increasing the number of announced projects to creating conditions for environmentally sound and economically viable initiatives to secure the finance, contracts and infrastructure they need to operate.

ABIHV stands ready to act as an interlocutor between companies, government, financial institutions and international partners, helping identify barriers to project implementation and discuss solutions. Potential areas of work include sharing existing information on projects and their constraints, dialogue on long-term contracting and certification, and connecting green hydrogen producers with consuming sectors.



Actions and recommendations

Green hydrogen should be treated as an instrument for implementing the energy transition and low-carbon industrialisation, supported by a broad market base, finance, infrastructure and sustainability criteria that can turn Brazil's potential into investment and actual emissions reductions.

To the Parties and the COP31 Presidency

1. Promote demand-side instruments for green hydrogen and low-emissions industrial products, with predictable targets and long-term contracting mechanisms. In consuming jurisdictions, preserve stable rules and binding RFNBO targets, ensuring market-access conditions for imported hydrogen and derivatives that meet the applicable criteria.

2. Expand access to finance by strengthening cooperation between companies, governments, financial institutions and investors to identify viable and scalable projects.

3. Establish clear rules allowing the cumulation of support mechanisms and subsidies, including across instruments from different jurisdictions, to improve project viability and competitiveness. This includes the possibility of combining incentives granted outside the European Union with EU support mechanisms, subject to the eligibility criteria, support ceilings and other rules applicable to each instrument.

To the Parties and the COP31 Presidency (continuation)

4. Promote regulatory predictability and transparency in the certification of green hydrogen and low-emissions derivatives. This requires clear rules for production and commercialisation, transparent emissions-accounting methodologies and certification mechanisms compatible with international market requirements. Such compatibility can facilitate trade and avoid additional national requirements, such as additionality criteria that are stricter than those of destination markets.

5. Integrate green hydrogen into low-carbon industrialisation and food security by encouraging the decarbonisation of ammonia and nitrogen fertiliser production and connecting the energy, industry and agriculture sectors.

6. Promote integration between green hydrogen, the blue economy and maritime decarbonisation by encouraging cooperation between green hydrogen producers, offshore renewable energy developers, ports and shipping companies.

7. Strengthen international cooperation through dialogue with governments, business associations, multilateral organisations and financial institutions to share experience.

8. Promote, within the implementation of the Roadmap for the transition away from fossil fuels presented by the COP30 Presidency, the role of green hydrogen and its derivatives as a concrete pathway for hard-to-abate sectors.

9. Enable eligible green hydrogen projects to access the mechanisms under Article 6 of the Paris Agreement, using robust methodologies and complying with the applicable authorisation and accounting requirements, including corresponding adjustments for internationally transferred mitigation outcomes.

10. Promote international recognition of the characteristics of Brazil's electricity mix and negotiate market access not only for hydrogen, but also for ammonia, fertilisers, steel, methanol and synthetic fuels produced in Brazil.

To financial institutions and development banks

1. Expand de-risking instruments (guarantees, concessional finance and blended finance) for the first green hydrogen projects in emerging economies, reducing the cost of capital, which disproportionately affects capital-intensive projects.

2. Explore cooperation with the Climate Implementation Bridge, where appropriate and subject to participation criteria, to structure integrated project portfolios encompassing renewable generation, electrolysis, port infrastructure and industrial consumption, without assuming automatic access to finance.

To the Brazilian government

1. Strengthen green hydrogen as a central driver of Brazil's industrial and climate policies, with a direct impact on skilled job creation, technological innovation and the country's full integration into global value chains.

2. Consolidate Brazil's position as a competitive exporter of green hydrogen and derivatives (ammonia, methanol and green fertilisers), strengthening its role in global value chains.

3. Develop new domestic value chains, including green steel, low-carbon chemicals and sustainable fuels for aviation and shipping.

4. Ensure the effectiveness and continuity of the support instruments already provided for in law, particularly Rehidro, with implementing regulations that allow access throughout its statutory period. Overcome the current limitation on access to benefits through 2026 and adopt the necessary legislative and regulatory measures to ensure the regime's continuation through 2030, with clear operating conditions for projects.

To the Brazilian government (continuation)

5. Complete the regulation of domestic low-emissions hydrogen production through a single timetable with defined deadlines; provide predictability on selection criteria and the annual allocation of PHBC tax credits, with equal treatment for projects serving the domestic and export markets; and preserve the conditions taken into account in investment decisions, such as the self-generation regime, Export Processing Zones and incentives granted by the Superintendency for the Development of the Northeast (Sudene).

6. Implement the Tax Reform in a way that preserves neutrality for green hydrogen and derivatives projects and allows taxpayers adequate time to adapt to the new rules. Ensure that tax relief for exports is effective in practice, including through timely recovery of tax credits.

7. Prepare the electricity sector for new loads: incorporate electrolysis demand into energy and transmission planning, assess electrolyser flexibility according to each project's circumstances, provide predictable charges and establish clear rules for utilising renewable electricity subject to generation curtailment.

8. Develop demand and reduce risk for the first projects through sector-specific instruments, including progressively increasing targets, auctions, contracts for difference and public procurement; implementation of the Brazilian Emissions Trading System (SBCE); and mobilisation of public banks, climate funds and guarantees.

9. Align the SBCH2 with the main international certification systems, avoiding duplicate procedures and disproportionate costs while preserving environmental integrity and traceability.





Conclusion

ABIHV calls on COP31 to recognise green hydrogen as a strategic driver of the global energy transition and low-carbon industrialisation. Brazil is well positioned to contribute to this transformation, combining abundant renewable resources, industrial potential and the capacity to develop competitive green hydrogen and derivatives value chains.

ABIHV reaffirms its commitment to bringing together companies, governments and society, contributing to public policy development, legal certainty, predictable regulatory frameworks and financing mechanisms that enable investment, stimulate offtake markets and consolidate green hydrogen as an instrument of the energy transition and sustainable neo-industrialisation.

At COP31, implementation of climate commitments and the mobilisation of investment offer an opportunity to turn Brazil's potential into concrete projects, in line with the Presidency's priorities, particularly clean energy transition, green industrialisation and the Climate Implementation Bridge.

ABIHV advocates green hydrogen's contribution to a competitive, resilient and environmentally responsible low-carbon economy and reiterates its readiness to work actively to translate this transformation into tangible results. With its legal framework being implemented, Brazil is ready for this next stage.



November 2026

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