

# Green Hydrogen in Brazil: current situation

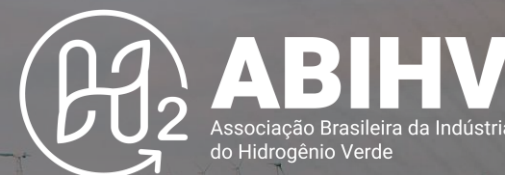
Prepared for:

Belgium Economic Mission



**KINGDOM OF BELGIUM**  
Federal Public Service  
**Foreign Affairs,  
Foreign Trade and  
Development Cooperation**

November, 2024





## Our Mission

Encourage the establishment of conditions for Green Hydrogen to be produced and marketed in the most competitive and widespread way in Brazil, promoting the energy transition and a more sustainable future for all



# Our Goals



## DISSEMINATION

Organize events to discuss and present suggestions for the utilization of energy resources derived from Green Hydrogen.



## LEADERSHIP

Actively contribute to the development of the necessary conditions for the production of H<sub>2</sub>V and its derivatives, in a competitive manner in Brazil, promoting the sustainable economic development of the country.



## COMPETITIVENESS

Influence the formulation of public policies for the sector through the legitimate representation of interests before Executive and Legislative Power bodies, as well as Regulatory Agencies.



## SUSTAINABILITY

Encourage the inclusion and participation of Green Hydrogen in the Brazilian energy matrix.



## COMMITMENT TO SOCIETY

Recognize the contribution of H<sub>2</sub>V to Brazilian society through incomes, technology, and job creation, guided by diverse, inclusive, and socially responsible actions acknowledged by the community.





# World green hydrogen demand

## GLOBAL MARKET POTENTIAL

The global demand for hydrogen (2021) occurred in the following applications:

- 41 megatons for refining
- 32 megatons in ammonia production
- 16 megatons in methanol production
- 5 megatons in the steel industry

Source: CNI 2024

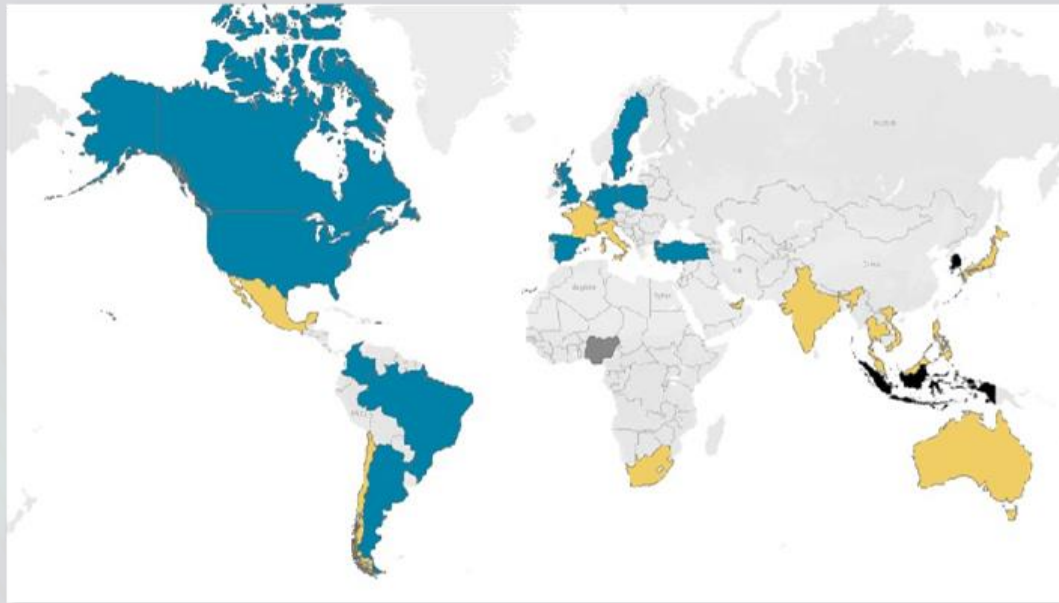


**More than 40 projects of H<sub>2</sub>V  
announced and in study**

# Brazilian competitiveness in electricity generation – 90% renewable grid

Brazil may become leader, but other countries are responding with incentives (US, Europe, Japan)

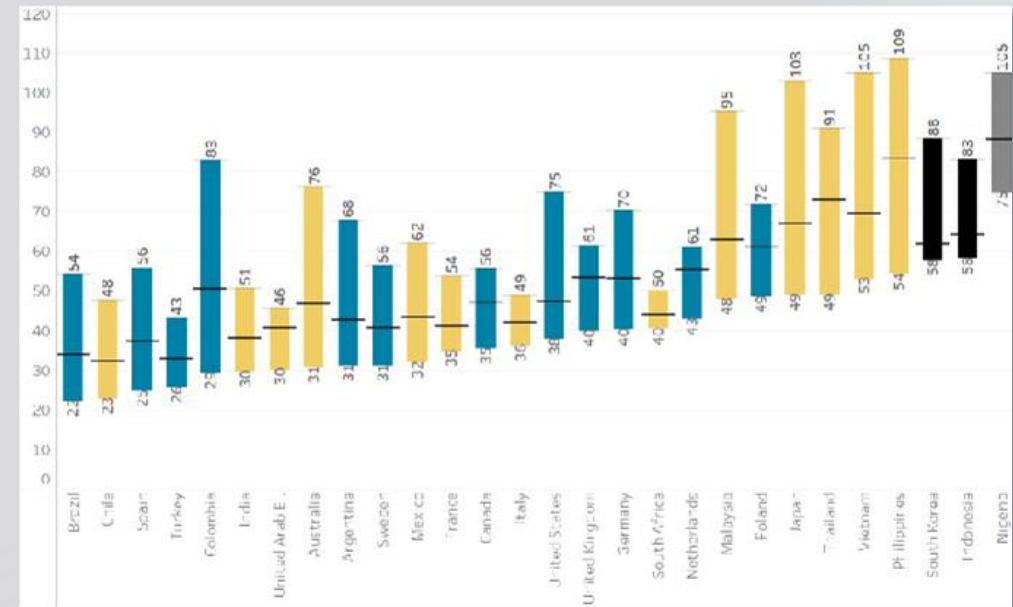
Cheapest source of new electricity generation, 2023



■ Coal

■ Combined Cycle Thermal

Brazil's relative position in LCOE  
Renewable generation cost (USD/kWh)



■ Solar

■ Wind



# Brazilian Low-Carbon Hydrogen Legal Framework



In 2024, Brazil took its first step to face this international competition with the approval of laws No. **14,948** and **14,990**.

The **Low-Carbon Hydrogen Legal Framework** (law No. 14,948) defined the different types of hydrogen, regulatory competencies, certification system, and the special regime for producers (Rehidro).

Under Law No. 14,990, Brazil established the Low-Carbon Hydrogen Development Program, an incentive mechanism that will provide up to **BRL 18.3 billion** in credits to the hydrogen industry.



Brazil is in an advantageous position to lead the sector globally, with over 90% of its energy matrix coming from clean sources, experience with public decarbonization policies, and an interconnected national energy system.



# Projects and Investments

If Brazil meets 4% of the global demand for green hydrogen in 2050...



Each **BRL 1.00** of incentive will generate:



Up to **BRL 10.56** in total revenue (in all government levels)



Up to **BRL 37.72** increase in GDP



Up to **BRL 22** of private investments

Announced investments for green hydrogen from renewable sources in Brazil already total BRL 188.7 billion, according to a National Industry Confederation study.

## Member companies and projects by states

**ArcelorMittal:** ES

**Atlas Agro:** MG

**Casa dos Ventos:** CE

**EDF:** CE

**Eletrobras:** CE, MG, GO, MA, PI

**Engie:** CE, PR

**European Energy:** PE

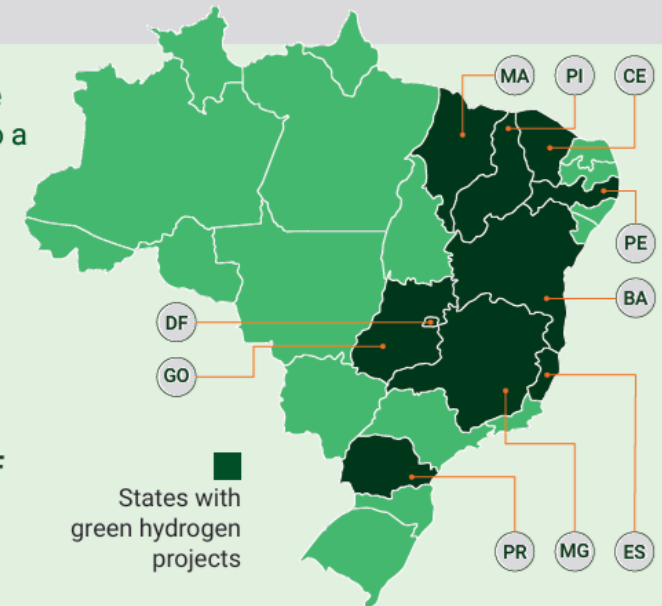
**Fortescue:** CE

**FRV:** CE

**Neoenergia:** BA, PE, DF

**Qair:** CE

**Voltalia:** CE





# Coming Projects

## Fortescue.

**Location:**  
Pecém Complex, Ceará

**Product:**  
green hydrogen

**Investment:**  
BRL 20 billion

**Production volume:**  
175.000 tons/year

**Employment:**  
5.000 (construction)

**Final investment decision:**  
2025



## ATLAS AGRO

**Location:**  
Uberaba, Minas Gerais

**Product:**  
nitrogen fertilizers

**Investment:**  
BRL 5 billion

**Production volume:**  
530.000 tons/year

**Employment:**  
2.000 (construction)

**Final investment decision:**  
2025



## casadosventos associada a TotalEnergies

**Location:**  
Pecém Complex, Ceará

**Product:**  
green ammonia

**Investment:**  
BRL 12 billion

**Production volume:**  
900.000 tons/year

**Employment:**  
4.000 (construction)

**Final investment decision:**  
2025



## EUROPEAN ENERGY

**Location:**  
Suape, Pernambuco

**Product:**  
methanol

**Investment:**  
BRL 2 billion

**Production volume:**  
100.000 tons/year

**Employment:**  
250 (construction)

**Final investment decision:**  
2025



# Member companies

ABIHV plays a key part in the national Green Hydrogen industry, with its actions being essential in fostering this emerging market.



# Thank you!



**ABIHV**

Associação Brasileira da Indústria  
do Hidrogênio Verde

 [abihv\\_br](#)

 [abihv\\_br](#)

 [contato@abihv.org.br](mailto:contato@abihv.org.br)

 <https://abihv.org.br>