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Morro Pintado: Door-to-Door Green Molecules Value Chain from Brazil to Europe

PROJECT FACTS

Duration:
April/2026 to September/2027

Country:
Brazil

Partners:
Deutsche Bahn E&C, thyssenkrupp Uhde, Green Investors and Brazil Green Energy.

Outputs:

- Pre-feasibility studies for project developers, related to the full H2 value chain, from production to export and offtake.
- Pilot transport of green molecules from Brazil to Europe

Signing of the cooperation agreement between DB ECO, BGE, GI and thyssenkrupp Uhde during the Hannover Messe in April 2026.

PROJECT OVERVIEW

The Morro Pintado PPP project, located in the state of Rio Grande do Norte (RN) in Brazil's Northeast, aims to help structuring an integrated green hydrogen hub and PtX value chain between Brazil and the European Union. By adding ammonia and e-methanol production capacity and an export terminal, Morro Pintado has the potential to advance Brazil's goal to become a global hydrogen hub and reduce fertilizer import dependence.

Engineering and resource assessments for the production and logistics of such products should generate reference knowledge for future Brazilian projects. As shared infrastructure, the terminal could also serve multiple developers, a concept that can be replicated across the Brazil's Northeast, scaling the hydrogen market in line with Brazil's GHG targets.

Morro Pintado aims to create qualified jobs and stimulate local supply chains across construction and operations of hydrogen plants, solar and wind assets, and grid infrastructure. Skills development programs with Brazilian and European educational partners will build a regional talent pipeline, consolidating RN's role as a sustainable energy hub.

The Morro Pintado project is planned to be rolled out in phases, starting with a 500MW electrolyser slated to begin operations in about three to four years, with expansion potential up to 1 GW. The new port infrastructure at Morro Pintado is being conceived as a hub for exporting green ammonia, e-methanol and other products to Europe, supporting a green maritime corridor and contributing to energy security and decarbonization in Germany and the EU.

OBJECTIVES AND EXPECTED RESULTS

- Develop and publicizing PtX pre-feasibility in engineering, technical, economic and environmental reports.
- Conduct a pilot transport of molecules from Brazil to Europe, as demonstration of logistics, assessing barriers and potentialities.

ABOUT H2UPPP

H2Uppp paves the way for companies to develop the global green hydrogen market through project identification and development, technical support, and trade.

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Federal Ministry for Economic Affairs and Energy

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