

# ABB signs alliance agreement with Bair Energy aiming to develop major green hydrogen complex in Texas

*ABB Joins the Bair Energy Green Hydrogen and Technology Alliance - will provide expertise on turnkey automation, electrification, and digitalization solutions.*

HOUSTON, TEXAS, USA, May 25, 2023

[/EINPresswire.com/](https://www.einpresswire.com/) -- • Bair Energy selects ABB to join its Green Hydrogen and Technology Alliance as automation, electrification and digitalization expert

- Alliance supports development of 1 GW liquified hydrogen facility, set to produce up to 132,000 kg of green hydrogen per day by 2028
- Collaboration aims to achieve low-cost hydrogen production and support sustainable transport with a clean fuel source

ABB has been selected to join the Bair Energy Green Hydrogen and Technology Alliance to provide expertise on turnkey automation, electrification and digitalization solutions that support the optimization of low-cost green hydrogen production at the 1 GW Clear Fork Texas facility.

Phase one of the project will utilize renewable power to produce up to

33,000 kg of green hydrogen per day initially, with daily capacity designed to increase to 132,000



kg by 2028. The green hydrogen, which emits zero carbon when used as an energy source, will be liquefied on site, stored and transported to customers to help establish hydrogen networks in the mobility and transportation industry.

ABB Adaptive Execution™, a project methodology from design through to operations, will be employed to integrate expert teams, new technologies, agile processes and shared learnings. Using a portfolio of ABB products this helps customers reduce capital costs, while delivering projects ahead of schedule (1).

The Memorandum of Understanding between ABB and Bair Energy provides scope to explore deploying digital twin technology enabled by the ABB Ability™ 800xA Simulator and ABB Ability™ Process Power Simulator. These solutions will integrate electrical and process controls with dynamic simulation to provide a virtual representation of how the plant is designed, operated and maintained. This enables a shorter new plant start-up period, helps train operators and tests changes in a realistic but disconnected environment.

With transportation the number one cause of greenhouse gas emissions in the United States (2), the project aims to provide a significant step in the decarbonization of the US transport industry. Due to start operating in 2025, the Clear Fork Texas Project will be one of the largest locally produced green hydrogen facilities.

“We are particularly pleased to be part of this project to support low-cost hydrogen production, and sustainable transport in the US and globally,” said Brandon Spencer, President of ABB Energy Industries. “It is an exciting time for hydrogen in the US following the Inflation Reduction Act incentives passed last year, which coupled with alliance formations such as this, support projections (3) of reducing the cost of green hydrogen production to under \$0/kg by 2030.”

“Our collaboration with ABB, and their expertise in automation, electrification and digitalization solutions, will help us to bring the Clear Fork Texas Project one major step closer to success,” said Nicholas Bair, Chief Executive Officer of Bair Energy. “The deployment of ABB Adaptive Execution™ will also enable us to both reduce our CAPEX by 20 percent and speed up our delivery time of the facility by 10 to 20 percent, which is a game changer for a project of this scale.”

(1) <https://new.abb.com/process-automation/energy-industries/adaptive-execution>

(2) <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

(3) <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/092922-us-green-hydrogen-costs-to-reach-sub-zero-under-ira-longer-term-price-impacts-remain-uncertain>

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ABB's Process Automation business automates, electrifies and digitalizes industrial operations

that address a wide range of essential needs – from supplying energy, water and materials, to producing goods and transporting them to market. With its ~20,000 employees, leading technology and service expertise, ABB Process Automation helps customers in process, hybrid and maritime industries improve performance and safety of operations, enabling a more sustainable and resource-efficient future. [go.abb.com/processautomation](https://go.abb.com/processautomation)

ABB is a technology leader in electrification and automation, enabling a more sustainable and resource-efficient future. The company's solutions connect engineering know-how and software to optimize how things are manufactured, moved, powered and operated. Building on more than 130 years of excellence, ABB's ~105,000 employees are committed to driving innovations that accelerate industrial transformation. [www.abb.com](https://www.abb.com)

Bair Energy is the Managing Partner of the Green Energy and Technology Alliance and serves as a Program Management and Construction Management firm. Bair Energy also manages the technology platform Clean Energy Holdings, which is focused on safe and cost-effective community-driven green hydrogen complexes through the complete operational project lifecycle. [bairenergy.com](https://bairenergy.com)

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