

HFI Energy Systems Announces Exclusive Agreement to Develop 500 MW Green Hydrogen Energy Park - Whitehall, Montana USA

HFI Energy Systems US to Develop 500 MW Energy Park in Whitehall Montana producing Green Hydrogen from Gold Mine tailings wastewater

WHITEHALL, MT, UNITED STATES, February 11, 2025 /EINPresswire.com/ -- <u>HFI Energy Systems US Inc</u> Announces Exclusive Agreement to Develop 500 MW Clean Energy Park

Utilizing Wind / Battery / Green Hydrogen Sources in Whitehall, Montana

• HFI Announces 500 MW clean energy park in Whitehall, Montana, USA

- Pioneering hydrogen electrolyser and wind turbine technology
- Industrial battery storage to balance electrical grid
- Manufacturing of the wind and hydrogen technology in Whitehall, Montana
- Producing up to 300 metric tons of green hydrogen a day
- Green Hydrogen at \$2 kg

Whitehall, MT – 02/10/2025 – HFI Energy Systems US Inc is excited to announce an exclusivity agreement with Barrick Gold Corporation and Jefferson Local Development Corporation (JLDC) to evaluate the construction of a groundbreaking 500 MW clean energy park in Whitehall, Montana. This transformative project aims to set a new benchmark for clean, affordable energy and economic development in the region.

Pioneering Renewable Energy Technology



HFI Energy Systems Ducted Wind Turbine with hydraulic transmission

The proposed energy park will integrate HFI's advanced wind turbine technology with green hydrogen electrolysis, hydride storage, and large-scale battery storage. This innovative infrastructure will deliver unparalleled efficiency, reliability, and environmental benefits:

 Next-Generation Wind Turbines: HFI's revolutionary wind turbines feature a patented bi-cowling design that accelerates wind flow through the rotor blades, enabling a significant increase in energy production compared to conventional open rotor turbines. These turbines are considerably smaller in size, making them less visually intrusive, while their unique design also reduces noise and makes them bird friendly. The integration of the Smart Hydraulic Drive (SHD) allows the turbines to produce direct current (DC) electricity efficiently, eliminating the need for AC-to-DC conversion. These combined benefits make HFI's wind



Tim Blake - CEO of HFI Energy Systems

turbines more environmentally friendly, cost-effective, and harmonious with the surrounding landscape.

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This project represents a bold step toward a sustainable, technologydriven future, combining clean energy innovation with solid waste reclamation to produce a green hydrogen future." Tim Blake - CEO

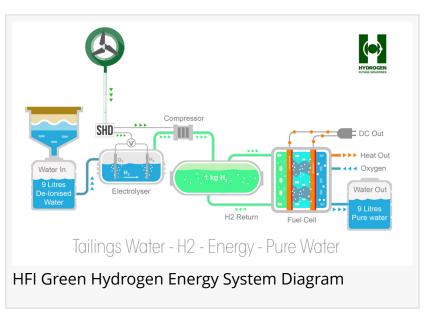
Green Hydrogen Production:

By utilizing wastewater as a resource, the energy park aims to produce green hydrogen at a cost of under \$2/kg. This process not only generates clean hydrogen for electricity production, industrial applications, and heavy equipment use but also returns pure water to the environment after the hydrogen is used to generate electricity through hydrogen fuel cells. The only byproduct of this process is clean water, aligning the park's operations with sustainability and environmental stewardship.

Battery Storage Integration:

The HFI Energy Park in Whitehall will feature a 500 MW Battery Energy Storage System (BESS), which plays a vital role in enhancing the efficiency, reliability, and flexibility of the energy system. The BESS will work seamlessly with HFI's advanced wind and hydrogen technologies, storing excess energy generated during periods of low demand and discharging it when demand is high. This capability supports peak shaving, reduces strain on the electricity transmission grid, and minimizes reliance on costly peaking power plants.

By integrating with the grid and renewable energy sources, the BESS ensures a stable and continuous energy supply, even during periods of intermittent wind generation. It also provides essential services such as frequency regulation, voltage support, and black start capabilities, stabilizing the grid and enabling the park to meet the energy needs of industrial users, including energy-intensive data centers. This combination of capabilities makes the 500 MW battery



storage system a cornerstone of the HFI Energy Park's mission to deliver clean, secure, and resilient energy solutions.

On-Site Manufacturing:

HFI plans to manufacture wind turbines and hydrogen electrolyzers within the park, establishing Whitehall as a hub for clean energy innovation.

Attracting Energy-Intensive AI Data Centers

The HFI Green Energy Park is uniquely designed to attract energy-intensive industries, particularly AI data centers, due to its unmatched combination of low-cost, carbon-free electricity and robust infrastructure. Al operations require vast amounts of secure, reliable energy and high-speed connectivity—both of which are provided by the park's multiple energy inputs (wind, hydrogen, battery storage, and grid electricity) and high-capacity fiber-optic connectivity. Al data centers are a significant driver of regional development:

1. Economic Growth: AI centers generate high-value jobs, support local businesses, and attract further investment.

2. Innovation Ecosystem: The presence of AI-focused industries spurs technological advancements and positions the region as a leader in emerging technologies.

3. Workforce Development: High-tech industries create opportunities for training and skill development, fostering a highly skilled local workforce.

4. Sustainability: Partnering with a clean energy source aligns AI and data-driven businesses with sustainability goals, enhancing their corporate responsibility profiles.

Transformative Benefits for Montana

The energy park will generate significant economic, environmental, and social benefits:

• Job Creation: The development and operation of the energy park will create thousands of temporary and permanent jobs across construction, manufacturing, and operations, benefiting Whitehall and surrounding communities.

• Economic Revitalization: Affordable, renewable energy will attract a diverse range of industries, fostering sustained regional economic growth.

• Environmental Impact: By producing renewable energy and clean water, the project will support Montana's commitment to sustainable development.

HFI's Vision for the Future

"This project represents a bold step toward a sustainable, technology-driven future," said Tim Blake, CEO of HFI Energy Systems US Inc. "By combining clean energy innovation with AI and other high-tech industries, we aim to create a vibrant economic ecosystem in Whitehall that benefits the local community, the state, and beyond."

About HFI Energy Systems US Inc

HFI Energy Systems US Inc has been in Whitehall, Montana, since 2017, with operations in the state since 2014. The company specializes in green hydrogen and renewable energy technologies, focusing on developing a wind-based green hydrogen energy system in Montana and the UK. This system is designed to provide carbon-free electricity or gas for applications in the mining and automotive industries.

HFI Energy Systems US Inc is licensing the advanced wind turbine and hydrogen technologies from <u>Hydrogen Future Industries PLC</u>, a UK-based company, for the US market. The hydrogen electrolyser development is conducted in tandem with operations at HFI's facilities in Ojai, California. The company is committed to manufacturing in Montana, supporting local economic growth while advancing sustainable energy solutions.

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