InterContinental Energy's Game-Changing P2(H2)Node™ System Cuts Green Hydrogen Costs and Scales Global Production

PERTH, FOREIGN, AUSTRALIA, May 12, 2025 /EINPresswire.com/ -- New Innovation can Lower CAPEX by 10%, Improve Efficiency by 10%, and will Power the Largest Hydrogen Projects in the World


InterContinental Energy CEO, Alexander Tancock

InterContinental Energy, a global leader in giga-scale green hydrogen development, announces its patented P2(H2)Node™ system. Designed in Australia after four years of intense innovation and engineering, this game-changing solution cuts costs, boosts efficiency, and allows for the scaling of giga-scale green hydrogen production.

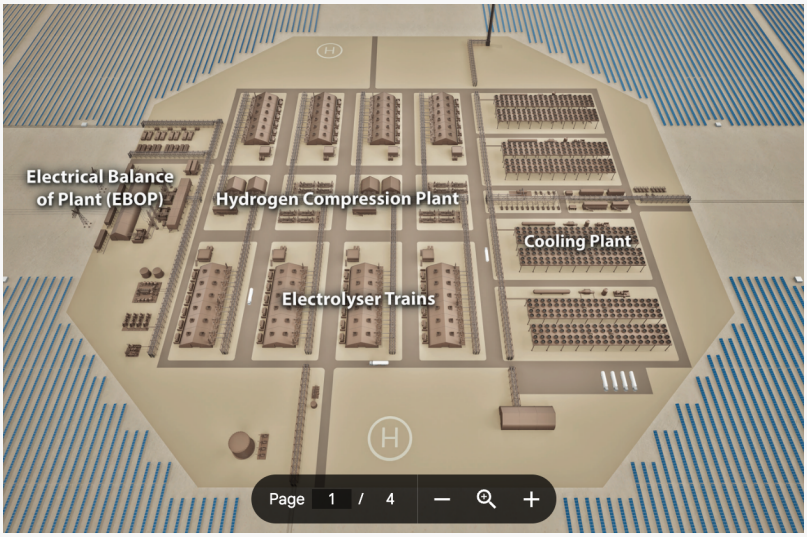
Just as standardised shipping containers revolutionised the global shipping industry, the P2(H2)Node standardised architecture will streamline the green hydrogen industry by replacing bespoke projects with a uniform approach. Removing complexity and increasing repeatability will ensure all projects can access the lowest cost of production. Conventional centralised models require expensive electricity transmission, leading to energy losses and inefficiencies. The patented P2(H2)Node system flips this model by collocating giga-scale hydrogen production with wind and solar farms, ensuring power is used where it's generated.

This system lowers production costs by 10-20%, which will enable faster large-scale hydrogen adoption for industries such as green iron, fertilizers, power, shipping and aviation fuels.

Rethinking Hydrogen Production to radically lower costs

Key advantages of the P2(H2)Node architecture include:

- Up to 10% less CapEx through standardisation, modularity, reduced electrical infrastructure and reduced storage requirements
- Up to 10% more efficiency through design optimisation and elimination of very high voltage power equipment
- Built-in energy storage to allow for more consistent flow delivery to customers via line packing of hydrogen pipelines



The patented P2(H2)Node™ Architecture

Powering the World's Biggest Hydrogen Project

The P2(H2)Node architecture is the backbone of Australia's groundbreaking Western Green Energy Hub (WGEH). Designed to produce and export green hydrogen and ammonia, WGEH boasts a planned 70GW renewable energy capacity - positioning it as the world's largest and most cost-efficient green hydrogen hub. With the support of newly announced Australian Government hydrogen incentives, WGEH is projected to drive down production costs for green ammonia below US$650 per tonne, unlocking transformative investment opportunities and job creation.

Accelerating the Global Hydrogen Economy

With demand for green hydrogen set to surge, the P2(H2)Node system offers a global, scalable, cost-efficient model for providing green molecules to the hard to de-carbonise heavy industry and transport sectors.

"We are proud that our team in Perth has developed this globally significant technology. The P2(H2)Node architecture is a breakthrough in clean hydrogen production. By eliminating transmission losses and leveraging a modular approach, we are making green hydrogen cost-competitive at scale for the planet" said Alexander Tancock, CEO at InterContinental Energy. "This technology comes at a time when Australia is poised to become a global leader in e-fuels and green iron."

InterContinental Energy is working with global partners to deploy the P2(H2)Node architecture and fast-track industrial decarbonisation. As the hydrogen market grows, this solution is set to drive efficiency, scale, and cost reductions worldwide.

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InterContinental Energy P2(H2)Node Corporate Video :
https://vimeo.com/1071710409?share=copy
InterContinental Energy P2(H2)Node Fly Through Video :
https://vimeo.com/1071712184?share=copy

About InterContinental Energy
InterContinental Energy has been at the forefront of green fuels development since 2014, leveraging upstream wind and solar resources to create best-in-class Tier 1 projects across Australia and the Middle East.

With a global multidisciplinary team, InterContinental Energy transforms innovation into action, accelerating the energy transition through large-scale green fuel production and its US and Australian patented P2(H2)NodeTM architecture—an advanced giga-scale system that underscores its commitment to sustainable energy solutions and leadership in the green hydrogen industry.

As the trusted partner in hydrogen, InterContinental Energy focuses on optimising outcomes for all stakeholders, including First Nations and other communities, while collaborating with project partners to deliver value to its strategic investors.

For more information, please visit: https://intercontinentalenergy.com/

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