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HYBRID SOLAR + STORAGE

POWERING A NEW ENERGY LANDSCAPE FOR INDIA



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GREEN HYDROGEN HUBS

STRATEGIC INFRASTRUCTURE & POLICY ROADMAP

India's energy story is entering a decisive phase, evolving from solar power success to the green hydrogen revolution — a transformation that companies like Nuberg Green Energy are actively driving through engineering innovation and end-to-end EPC excellence. Green hydrogen hubs are no longer just a futuristic concept, they are becoming a cornerstone in India's journey toward clean energy and net-zero goals. These hubs are more than production units; they are integrated ecosystems where hydrogen is produced, stored, transported, and utilized in a seamless manner. Beyond environmental benefits, they offer a transformative path to decarbonize heavy industries such as steel, cement, and fertilizers, while generating high-quality jobs, strengthening energy security, and positioning India as a global leader in green hydrogen and its value-added derivatives.

A key differentiator of India's emerging hydrogen hubs is their shared infrastructure model. Such integrated infrastructure models demand a partner with proven capabilities in hydrogen, ammonia, and methanol technologies — areas where Nuberg Green Energy brings strong process design and EPC expertise. Unlike standalone plants, these hubs consolidate large-scale electrolyzers powered by renewable energy sources to produce green hydrogen. The output is supplied directly to nearby industries or converted into carriers like ammonia and methanol for easier transport and storage. Comprehensive supporting infrastructure such as pipelines, storage tanks, refuelling stations, and port facilities, serves multiple users. This collaborative approach lowers costs, boosts efficiency, and accelerates adoption much faster than isolated projects.

Under the National Green Hydrogen Mission, several flagship hubs are now under development, marking India's shift from policy vision to on-ground implementation. In Odisha, the ACME Group is building a 1.2 MTPA green ammonia facility at Gopalpur Port, one of the largest of its kind globally. In Gujarat, Reliance Industries is creating a massive hydrogen and renewable energy complex in Jamnagar, while Adani New Industries Limited (ANIL) is aiming for 1 MTPA of green hydrogen by 2030. Indian Oil Corporation, in collaboration with NTPC and L&T, is developing a hydrogen hub at Panipat refinery to decarbonize refining and petrochemicals. In Maharashtra, JSW Energy is advancing hydrogen-linked projects, while ports such as Hazira and Kandla are being readied as export gateways. Most of these hubs are expected to be operational between 2026 and 2030, contributing to India's national goal of producing 5 MTPA of green hydrogen annually. Hydrogen's importance lies in its ability to address energy sectors that solar and wind cannot fully serve. While solar power is ideal for electricity generation, it cannot meet the ultra-high heat needs of fertilizer production, steelmaking, long-haul shipping, and aviation.



Green hydrogen and its derivatives (ammonia, methanol, and sustainable aviation fuel), plug this gap, with the added advantages of long-term storability and transportability, making hydrogen a commodity of the future for global trade. Nuberg Green Energy stands at the forefront of this transformation, not merely as an EPC contractor but as a strategic partner committed to enabling scale, efficiency, and sustainability. With expertise spanning green hydrogen plants, balance of stack H2 mobility solutions, alternative biofuels, compressed bio gas, and Green hydrogen-based chemicals (Green Methanol & Green Ammonia), the company provides integrated solutions from EPC to equipment manufacturing and export-ready terminal infrastructure. Backed by experience across 65 projects in 32 countries, Nuberg brings the technical reliability and execution finesse needed to transition from pilot initiatives to world-class operational hubs.

India's green hydrogen ambition represents more than an environmental milestone, it is about reshaping the nation's economic standing. With strong policy support, falling renewable energy costs, and proven engineering leadership from organizations like Nuberg Green Energy, hydrogen hubs can decarbonize hard-to-abate sectors, ensure energy independence, and position India as a clean fuel exporter and trusted global energy leader.

Through innovation and collaboration, the green hydrogen revolution is well underway.



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