

Investment Confidence





Exponential Scaling Comes with Challenges

The demand for green hydrogen has surged due to the global push for renewable energy, and recent developments, such as the US Inflation Reduction Act, have accelerated the energy transition and incentivized the development of green hydrogen capacity. However, challenges have emerged with the exponential scaling of global electrolyzer shipments.



INDUSTRY SCALE

• Availability of large scale electrolyzer manufacturing facilities is uncertain • Unproven scaling of electrolyzer technologies



- Equipment and electricity cost
 Rare metals availability for PEM electrolyzers
 Growth of renewable energy production needs to match the rapid expansion

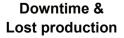


LONG TERM PERFORMANCE

Technology is mature but scale is untested
 No existing benchmarks on the durability of electrolysis cells and their

What Are the Consequences When There Are Missteps?







Maintenance & Repair



Safety Risks



Reputation **Damage**



Regulatory **Non-Compliance**

Strategies for Success:



1. Understanding **Market Dynamics**

Understanding the market dynamics helps facilitate demand forecasting, supply chain optimization, competitive analysis, and drive technological advancements, leading to more efficient operations and competitive advantages for companies.



2. Global Supply **Chain Insights**

Familiarity with the global supply chain of electrolyzers is necessary to evaluate a supplier's scaling potential, bankability, credibility, maturity of their production and assembly capabilities, etc.



3. Technology & **Quality expertise** Proficient knowledge of electrolyzer technologies (PEM vs Alkaline), including understanding of quality risks related to component failures, along with environmental, health, and safety risks.

CEA Is Uniquely Qualified to Solve These Problems

Team In China

Team Members



Electrolyzer factory engagements

In-factory Experience

Solar PV and Battery Energy Storage System factory audits

Engagements with global factories and strong credibility with C-level decision makers

Supply chain insights

Supply Chain Consultant to dozens of global developers, EPCs, and utilities

Leading Market Intelligence Analyst

for technology, supply chain, cost/pricing trends, and policy developments

Project experience in

countries

How We Help Our Customers Make Informed Decisions



- · Supplier profile and benchmarking
- Technology review
- · Market assessment

Supply Chain Management

- Supplier selection support
- · Product requirement definition
- Contract negotiation
- · RFP management
- · Strategic sourcing

- Pre-production factory audit
- In-production Monitoring
- Factory Acceptance
- Pre-shipment Inspection



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