

8 reasons why location matters when choosing your electrolyzer supplier



When you're preparing to make an electrolyzer purchase, there's a lot to consider, like price, energy efficiency, and operating expenses. But there's another aspect that's just as important as these concrete things: where your electrolyzer supplier is located. Opting for a local supplier can make a world of difference in the success of a hydrogen project, offering advantages that go beyond just proximity. From more reliable support and quicker response times to a deeper understanding of regional regulations and market needs, local electrolyzer suppliers bring substantial benefits that make them a smart decision for producers looking to ensure the success of their hydrogen project.

Accounting for supplier location in your electrolyzer quote

Evaluating electrolyzer technology nearly always involves calculating the levelized cost of hydrogen (LCOH), as it factors in capital costs, operating expenses, energy resource costs, and more. However, accurately determining LCOH can be tricky, as each project and electrolyzer system can have unique variables that may not be reflected in standard supplier quotes. For instance, shipping costs can vary widely depending on where the supplier is located and where the project site is—and this is almost never reflected in the quote you receive. So to truly compare two electrolyzer options, it's crucial to examine both the technical details from each supplier and the sometimes-overlooked details that can impact the success of your project. By doing so, you'll ensure you're making a true "apples-to-apples" comparison.

1. Local suppliers offer technical expertise with unique insights

Local electrolyzer suppliers bring a deeper level of technical expertise to a project, thanks to their familiarity with the region's specific requirements and conditions. They understand local energy sourcing methods, environmental regulations, and market dynamics, allowing them to offer solutions that are finely tuned to meet the unique demands of your project. For example, electricity sourcing in Europe differs greatly from North America, and having a local supplier means they can adapt designs to meet these regional constraints. Their proximity makes it easier to collaborate on every aspect of the project, from initial design and engineering to installation and maintenance, ensuring that all technical specifications are met with precision. Additionally, local suppliers are better positioned to provide ongoing technical support and upgrades tailored to local operational challenges, making them invaluable partners throughout the lifecycle of the electrolyzer system.

2. They reduce transportation costs

Choosing a local supplier for your electrolyzer significantly cuts transport costs by eliminating the need for long-distance shipping. When electrolyzers are sourced from overseas, shipping fees can add up fast; each 5MW electrolyzer (1,000Nm³/hr H₂) typically weighs 60-80 tons, and for large projects, producers will need to ship 20-30 electrolyzers before operations can even begin. When you consider that each stack can cost \$20,000-30,000 in shipping fees, then producers will owe hundreds of thousands of dollars that they may not have accounted for, whereas a local supplier dramatically reduces transportation requirements. Those shipping costs will continue to be an issue once operations begin, as producers will need to send their stacks to be refurbished every 8-10 years to maintain optimal efficiency.



In addition, using a local supplier helps you avoid expensive import tariffs and customs duties, which can be steep—up to 30% for electrolyzers from China to the US, which, could potentially increase further. Beyond cost savings, working with a nearby supplier reduces the risk of delays, potential damage during transport, and other logistical challenges, ensuring smoother delivery and fewer unexpected expenses.

3. They can enhance your supply chain reliability

The Covid-19 pandemic and the 2021 Suez Canal obstruction showed all of us how much an unreliable supply chain can disrupt our lives. Within the context of hydrogen projects, the same holds true: a local supplier strengthens supply chain reliability by reducing dependence on foreign suppliers, which helps to mitigate risks associated with geopolitical tensions, trade restrictions, and other supply chain issues. And when electrolyzers are produced locally, they can be manufactured and delivered faster than electrolyzers produced overseas, enabling faster project execution. This means hydrogen producers can avoid the delays often caused by international shipping or customs issues. Finally, local production means local access to parts, which translates to more resilient plant operations with replacement components readily available when needed.

4. They make it easier to ensure regulatory compliance

In general, it is much easier for hydrogen producers to achieve regulatory compliance when working with a local electrolyzer supplier, which tends to have a strong understanding of regional requirements and standards. Close proximity also means that it's easier for a local supplier to work closely with customers, sometimes even tailoring their technology to meet specific regulatory needs, reducing the risk of non-compliance penalties that can arise from unfamiliarity with local rules. And while this is not yet the case in the US, other regions are introducing more stringent requirements regarding electrolyzer sourcing. For instance, the European Union has recently approved a cap that limits the sourcing of Chinese electrolyzer stacks to 25% of total capacity for projects bidding for Hydrogen Bank subsidies.

5. They have local records that ensure easier financing

Local electrolyzer suppliers can make it easier to secure financing by offering a level of familiarity and trust that appeals to local financial institutions. Banks and investors are more likely to support projects involving a local supplier with a proven track record and strong reputation for stability in the area. From an investor's perspective, this reduces perceived risks, as the supplier has experience working within the region's market and regulatory environment. Investors also feel more confident in the supplier's capabilities, knowing they are well-versed in the types of projects common to the area. This local expertise reassures financial backers that the project will be executed successfully, making them more willing to offer funding.

6. Local suppliers mean a lower carbon footprint

Just like how local suppliers cut down on shipping costs, they also lower a project's carbon footprint by reducing the need for long-distance international shipping and the emissions that come with it. Instead, by sourcing equipment locally, producers can avoid the heavy environmental impact of transporting goods across the globe, getting them closer to reaching ESG goals. Local suppliers can also offer greater assurance that they will follow regional practices and regulations regarding the environment, ensuring that their production processes are responsible—while simultaneously helping to create a sustainable, locally focused hydrogen ecosystem that keeps environmental impacts to a minimum.

7. Local support keeps projects up and running

Close proximity allows for fast response times when issues arise or when ongoing maintenance is needed, making local electrolyzer suppliers an invaluable support system for hydrogen producers. For some, their understanding of the local market and project types means they may even offer technical upgrades tailored to your project's specific needs, so your system remains efficient and up-to-date. Local suppliers are also better equipped to provide training and ongoing support, as they can deliver these services in person and in your language, ensuring your team is well-prepared to operate the electrolyzer throughout the lifetime of your project.

8. Nearby proximity facilitates easier quality control

And finally, working with a local supplier enhances quality control by allowing for closer oversight and more frequent inspections throughout the production process. The proximity of a local manufacturer means it's easier to inspect parts regularly, ensuring they meet any specific standards and requirements of local projects. This hands-on approach helps identify and address any issues early on, preventing costly errors or delays. Being nearby also allows for better collaboration between teams, enabling adjustments and improvements to be made in real-time to ensure the highest quality output.

How John Cockerill's North America presence blends local support with global expertise

John Cockerill Hydrogen is the only electrolyzer supplier that pursues a model with local manufacturing facilities and a global footprint. Our US gigafactory in the Houston area leverages local energy expertise, streamlines logistics, ensures compliance with domestic content requirements, and reduces the risks tied to manufacturing and transportation by minimizing travel distances for materials and products. At our US gigafactory, John Cockerill electrolyzers are specifically designed for North American use, meeting electrical standards, size, and certification requirements, while ensuring they are free from banned materials, and keeping your project eligible for all subsidies. At the same time, our North America team is supported by a global organization with 200 years of industrial experience including over 30 years of hydrogen experience, ready to step in and offer insights, troubleshooting, and recommendations.

If you're searching for the right electrolyzer for your hydrogen project, choosing the right partner can position yourself for success from the start. For more about our hydrogen electrolyzers and our North American gigafactory, visit <https://hydrogen.johncockerill.com/en/north-america/>.