

Surviving the next phase of electrolyser consolidation

By Stephen B. Harrison, sbh4 consulting

As consolidation reshapes the hydrogen electrolyser value chain, the surviving players will need to adapt by leveraging strategic investments, critical component innovations, and value-driven acquisitions.

Survival will depend on strategic alliances and access to capital, setting the stage for the next phase of electrolyser innovation.

While technical mould-breakers will challenge conventional designs, PEM and alkaline players will continue to make multiple incremental improvements.

When comparing electrolyser efficiency, stack life, minimum turn-down, permissible number of 'offs', and other key performance parameters, it is becoming increasingly difficult to identify points of difference between many of the 'standard' players. This is especially true when looking at pressurised PEM and pressurised alkaline stacks and systems.

For the electrolyser builders which survive, innovative critical components will be in high demand. They are the differentiators that lead to the stack builder having a USP.

To ensure stack builders and electrolyser system OEMs continue to stand out in the long term, when they believe they have found something unique, they may wish to acquire the associated critical component manufacturer. Or they may seek to bring

"The tail may begin to weigh the dog, with leading critical component manufacturers acquiring electrolyser stack or system builders"

emerging component-level technologies in-house through other means to strengthen their competitive position.

Many critical components for electrolysers are also relevant to other sectors. For example, woven, knitted and sintered meshes are used for filters in the automotive and chemical sectors, in addition to being used to build electrolyser stacks. The tail may therefore begin to weigh the dog, with leading critical component manufacturers acquiring electrolyser stack or systems builders to add value to their market offer.

Producers of high-tech manufacturing equipment which traverses sectors may take over start-ups that have encroached into their field. For example, builders of atomic layer deposition (ALD) coating machines for the semiconductor industry may take on similar technology providers who are working on electrolyser electrode ALD coating equipment.

Established players which cover a broad range of sectors with their technologies will have sufficient resources and cash from other business units to execute the transactions they wish to pursue.

A buyer's guide

Capitalising on the next wave of hydrogen opportunities will look more like a value play than a growth play. The venture capitalist

(VC) era is over; those heady valuations based on hockey-stick green hydrogen growth are gone.

Looking for special situations where some key components of value can be salvaged from the wreckage may be a relevant buy-side strategy to follow.

Engaging with potential partners to let them know the olive branch is there, if and when they need it, will also be prudent.

There could be less risk investing in this area than there was three years ago. Valuations in this market are more realistic than they were when multiples were in the thousands or loss-making entities were being valued for hundreds of millions of dollars.

When the deals come, valuations may largely be influenced by competitive bidding with the price based on the strategic value of the jewel in the target's crown, rather than a bottom-up valuation of the entire entity based on its business model and revenue projection.

Despite current valuations of players in the hydrogen electrolyser value chain being lower than they were some years ago, no investor would take the risk of buying assets that are likely to decay their value to zero.

While prudence and due diligence remain essential, the stage is being set for a different kind of player to step in. With valuations down to more realistic levels, the conditions are ripe for a new wave of strategic investors – especially private equity firms – to enter the fray.

"This must be the bottom. Things can only get better from here, right? Perhaps not"

Get ready for private equity day

The start-up CEO's hopes and dreams may come true. Perhaps the customers will come, and the orders will eventually begin to flow. Perhaps this next R&D investment will yield the killer product. Perhaps electrolyser build projects which have been awaiting FID come to fruition.

This must be the bottom. Things can only get better from here, right? Perhaps not.

For the proactive sellers, the start-ups looking to exit, or those running out of capital, some actions can hedge against the risk of being left with nothing. Or worse, being left with a heavy burden of debt.

When all was going well, there was a pitch deck at the ready to show to potential investors. Now that there may be a more nervous environment, a deck still needs to be prepared. Different messages, different target audiences, different terms. But being realistic and being ready will mean that you are likely to have some kind of leverage if the axe begins to fall.

Talking to potential future partners now, whilst things are still going well, will be a wise investment of time by the CEO. After all, their ultimate role is to increase the value, or at least preserve the viability, of the entity they lead.

Or join the sharks. Get in with an ambitious investor. Play the consolidation game from the driving seat. Do it to others, before they do it to you. Who knows, you may find yourself boosted from start-up founder to CEO of a major player almost overnight.

In this high-stakes environment, the players who adapt proactively – whether through strategic acquisitions, innovation, or collaboration – will emerge as the leaders of green hydrogen's next chapter. **HV**