

Green Hydrogen Systems



Market: OMXC Mid Cap

Ticker: GREENH

Share price (DKK): 2.226

Market cap (DKKm): 477.9

Net cash (DKKm): 45.7 (H1 2024)*

Enterprise value (DKKm): 372.2

Share information



YTD: -63.1% 1 year: -69.8%
1 month: -62.3% 3 years: -92.2%

Note: We apply the closing price from 10 October 2024 (Source: Capital IQ).

Financials

(DKKm)	2022	2023	2024E**
Revenue	10.4	42.0	105.0-145.0
Revenue growth	102%	303%	150%-245%
EBITDA	-249.2	-267.5	-400.0 to -300.0
EBITDA margin	-2,390%	-637%	-381% to -207%
Net income	-282.3	-406.2	N/A
Net income margin	-2,709%	-968%	N/A
Cash/cash equivalents	340.4*	599.1*	N/A
Interest-bearing debt	508.0	815.6	N/A

Note: *Includes financial assets and related borrowings. Check full definition in Green Hydrogen Systems' reports. **Recent guidance for 2024E.

Valuation multiples

	2022	2023	2024E*
P/S (x)	78.7	26.7	3.3
EV/Sales (x)	94.8	31.9	3.0
EV/EBITDA (x)	-4.0	-5.0	-1.1
EV/EBIT (x)	-3.5	-3.4	N/A
P/E (x)	-2.9	-2.8	N/A
P/B (x)	1.0	1.3	N/A
P/CF (x)	-2.8	-4.0	N/A

Note: Multiples for 2022 and 2023 are based on historical numbers. *2024E multiples are based on GHS' guidance midrange.

Company description

Founded in 2007, Green Hydrogen Systems (GHS) designs and manufactures efficient standardized and modular electrolyzers to produce green hydrogen based on renewable energy. After delays and a strategy change, GHS is focusing on the commercialization of its X-Series product (capacity of 6 MW). As a result, future revenue will be dependent on sales orders of its X-Series product, as GHS will discontinue new sales of the A-Series product and finalize manufacturing of its existing A-Series order backlog in Q1 2025.

Investment case

In the short term, the investment case has changed significantly, as the company needs to secure the first round of external funding (up to DKK 300m) before the end of 2024. Historically, the company has been able to attract funding from its shareholder base which includes large institutional investors, however, there are no guarantees for this going forward. If funding is secured according to the plan, GHS must deliver on its cost-out and restructuring program. With the restructuring, GHS aims to reduce its cost base by at least 40-50% compared to the current level. GHS' program is expected to lead to one-off implementation costs of DKK 100-150m to be incurred in 2024 and in Q1 2025. At the same time, GHS expects to deliver on its order backlog for the discontinued A-Series unit.

GHS is still anticipating the first X-Series orders in the coming months. In the medium to long term, the attractiveness of the investment case is highly dependent on the potential success of its X-Series product, progress in green hydrogen projects, and the market's adoption of the technology.

GHS trades at 3.0x EV/Sales (2024E) based on its 2024 guidance (midrange). This is below the peer group median of 4.1x EV/Sales (2024E), which can be explained by GHS' current situation. However, GHS is expected to grow more than the peers based on analyst estimates, shown by a CAGR (2022-2025E) of 217% vs. a peer group median of 61% based on Capital IQ mean estimates.

Key investment reasons

The necessary plan has been outlined to align with the current situation and challenges. A restructuring plan and importantly a plan to cut the production costs on the X-Series with 40-50% fits the current market environment where lower costs are needed to be cost competitive. However, it is important to note that a capital increase is needed to take these steps.

In the short term, GHS still expresses optimism about ongoing negotiations on the X-Series product and anticipates the first orders over the coming months.

Other potential short-term speculative investment reasons are new political support to the sector or a potential industrial sale.

Looking ahead, GHS only needs a small fraction of the green hydrogen market to turn profitable, even after estimates of the green hydrogen market have been downgraded substantially.

Key investment risks

With covenants breached on loans by the end of October 2024 (unless waived) and a short runway (first half of 2025), GHS needs to complete a capital raise and make the necessary changes to continue its operations. In relation to that, the recent significant decline in GHS' market capitalization is increasing the dilution effect significantly for non-participating existing shareholders based on the current market capitalization. With another potential capital raise of a similar (up to DKK 300m) or increased size in the summer of 2025 to reach profitability in 2026, this will increase the dilution effect further and probably put pressure on the share price development depending on the news flow.

With no fully established commercial path for the green hydrogen industry yet, the market expectations for growth and especially the timing of the growth could be more unprecise than usual. Therefore, GHS' path to profitability could also be dependent on further political support which is a very uncertain factor.

Peer group

Company	Currency	Price (local)	YTD return (%)	Market cap (EURm)	Latest net cash (EURm)	EV/Sales (x)			Revenue growth (CAGR) 2022-2025E
						2023	2024E	2025E	
Nel ASA	NOK	4.20	-39.1%	594.6	174.0	4.7	3.2	2.5	24%
ITM Power PLC	GBP	0.48	-19.4%	353.3	254.9	26.6	5.1	3.5	61%
Mcphly Energy SA	EUR	1.70	-49.2%	49.8	58.3	N/A	N/A	N/A	76%
Median of selected companies			-39.1%	353.3	174.0	15.6	4.1	3.0	61%
Green Hydrogen Systems A/S	DKK	2.23	-63.1%	56.1	6.1	31.9	3.0	1.1	217%

Note: We apply Capital IQ analyst mean estimates for the peers. *GHS' EV/Sales 2024E is based on the company's 2024 guidance (midrange). We apply market data from 10 October 2024. Note that there are deviations in accounting and reporting periods across the selected companies, and the timing of analyst revisions/estimates in Capital IQ may differ.

Source: HC Andersen Capital and Capital IQ.

Appendix: Peer group

Peer group selection: Focusing on the European competitive landscape for electrolyzers and pure-play green hydrogen players, the market is characterized by being relatively immature but affected by increasing competitive pressure. Green Hydrogen Systems does not necessarily see increased competition as a constraining factor but instead it contributes to the total production capacity within the industry, which will bolster downstream confidence in the green hydrogen industry and generate additional demand certainty.

As mentioned, our peer group focuses on listed competitors within the pure-play European green hydrogen market to mitigate differences in technology, product offerings, and end-user applications. Therefore, diversified competitors such as Plug Power and Siemens Energy are not included in our peer group.

Below, we have briefly described the companies used in the peer group. Note that the comparison still varies in company sizes, delivered services, and located geographies. In addition, the peer group companies employ different technologies among the three most established electrolyzer technologies; Atmospheric alkaline, pressurized alkaline, and PEM. Although GHS focuses on pressurized alkaline, it often competes with other technologies in downstream application areas where all three are viable options. Secondly, note that GHS focuses on producing, installing, and servicing electrolyzers.

NEL: Headquartered in Oslo and listed in Norway, NEL is a Scandinavian peer to GHS, however, significantly larger. The company specializes in providing solutions for producing, storing, and distributing hydrogen obtained from renewable energy sources. Secondly, NEL has a diversified product portfolio consisting of all three of the most established electrolyzer technologies mentioned above.

ITM Power: Based in the UK, ITM Power designs and manufactures integrated hydrogen energy systems for energy storage and clean fuel production. The company focuses on PEM electrolyzer technology and offers a range of services including construction, consulting, and other services.

McPhy Energy: The company is headquartered in France, focusing on developing hydrogen storage and production solutions for both the merchant hydrogen market and renewable energy markets. Like GHS, McPhy mainly focuses on pressurized alkaline electrolyzer technology, meaning the production of industrial hydrogen on-site is carried out, on-demand, and according to customers' specifications.

Market development: For perspective, we compare Green Hydrogen Systems with Global X Hydrogen ETF (HYDR) since HYDR's first inception month in July 2021. The Global X Hydrogen ETF seeks to invest in companies poised to profit from the progress of the worldwide hydrogen sector. This includes companies involved in hydrogen production, the integration of hydrogen into energy systems, the manufacturing of hydrogen fuel cells, electrolyzers, and other technologies leveraged to exploit hydrogen as an energy source. As shown by the development below, the sector's development has declined, partly explained by challenges and delays in the green hydrogen market as well as challenging macro conditions which includes the development in the interest rates.

Green Hydrogen Systems vs. Global X Hydrogen ETF (HYDR)



Note: Capital IQ data from 10 October 2024.
Source: HC Andersen Capital and Capital IQ.

Estimates and assumptions: Peer data has not been calculated by HC Andersen Capital but is instead consensus analyst estimates from Capital IQ. Some of the companies have limited analyst coverage. HC Andersen Capital assumes no responsibility for the correctness of the numbers in the peer group; however, considers Capital IQ a credible source of information.