

# Trading statement

Q3 2021



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## Performance highlights for Q3 2021

- Following the guidance update for 2021, assembly and tests sees positive progress confirming execution of the plan with delivery of the initial A90 electrolysers to commence from Q4 2021
- Backlog of 10.0 MW - an increase of 8.0 MW or 400% compared to Q3 2020
- Positive pipeline development in key strategic markets with a large increase in average project size
- Revenue from customer contracts of DKK 0.2 million compared to DKK 8.1 million in Q3 2020
  - Revenue recognition of the 2021 backlog postponed to first half of 2022
- Gross profit of DKK -14 million compared to DKK 2.0 million in Q3 2020
  - Provisions related to the postponed deliveries recognised in the income statement in Q3 2021
- Following the listing at Nasdaq Copenhagen in June 2021 and due to the strong investor interest in Green Hydrogen Systems, additional shares (overallotment option) to a value of DKK 165 million were issued in July 2021, consolidating the company's capital structure even further
- Final signature on the GreenHyScale project supporting the X-Series as part of a future 100 MW Power-to-X platform
- Continued progress on strategic objectives:
  - Three firm customer orders in Q3 2021 totalling 3.2 MW. The continued order intake validates Green Hydrogen Systems' technology offering and price point
  - Expansion of production facilities progressing as planned
  - Ole Vesterbæk appointed as Chief Financial Officer and member of the Executive Management
  - Kasper Tipsmark Therkildsen promoted to Chief Technology Officer succeeding Jørgen Krogsgaard Jensen who will assume a position as Senior Vice President, Technology & R&D
  - Recruitment of Birgitte Høgh Frederiksen as new Chief Human Resource Officer following the integration of the HR discipline to the company's C-level

## Guidance for 2021

The full-year guidance for 2021 (updated 29 September 2021) is maintained:

• Revenue	Around DKK 5 million
• Gross profit	Around DKK -15 million
• EBITDA	DKK -145 to -155 million
• EBIT	DKK -160 to -170 million
• R&D	DKK 75-85 million
• CAPEX	DKK 135-145 million

### Sebastian Koks Andreassen, CEO of Green Hydrogen Systems comments:

*"With the orders signed in Q3 2021, our order backlog has increased to 10 MW, which is an increase of four times compared to last year. This progress shows that there is great trust in our technology, and that we are offering electrolysers at a competitive price point. Generally, we are experiencing a rapidly growing interest in the development of the green hydrogen industry both in Denmark and other European countries, and we need to keep pushing for the energy transition to accelerate.*

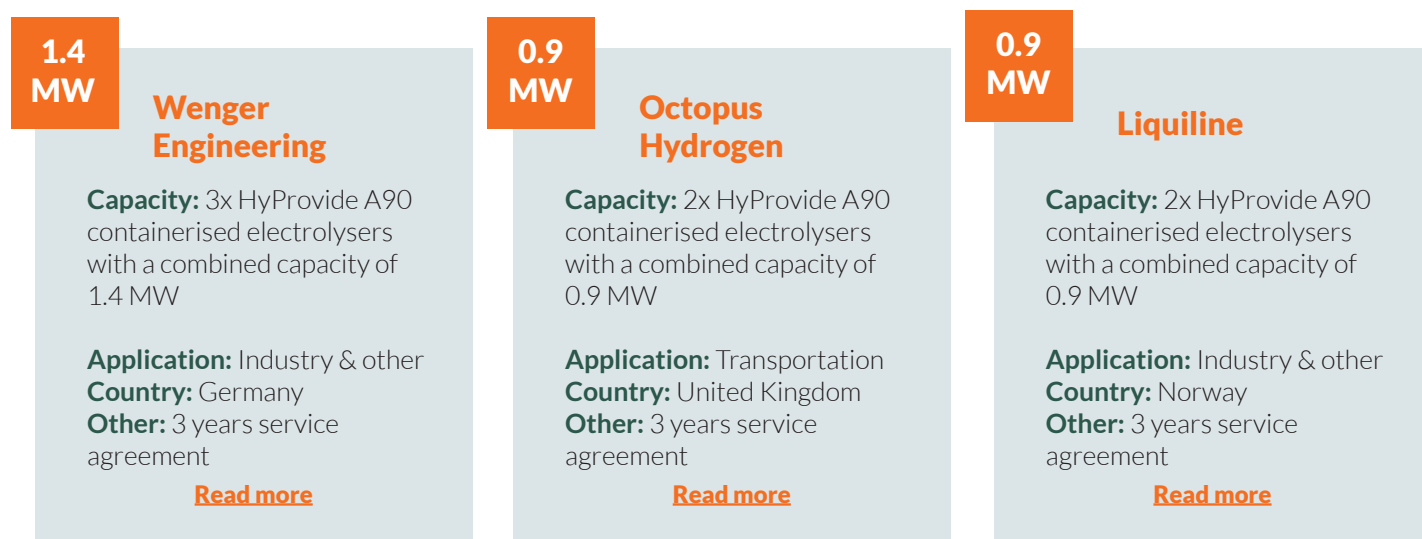
*The industry has experienced delays from OEMs like us on finalisation and installation ahead of full-scale serial production. However, we are executing on our plan and we are on track to start delivering on the delayed orders this year, which will allow us to recognise revenue from these orders in the beginning of 2022."*

# Performance highlights

## Customer orders and delivery of order backlog

In Q3 2021, three orders totalling 3.2 MW were signed. The orders were signed with end-customers in Germany, the UK and Norway and were won in tender processes. The electrolyzers ordered in Q3 2021 will be applied across different end-use applications. Green Hydrogen Systems and the individual customers will gain valuable operational experience from these relatively small-scale projects as preparation for future large-scale hydrogen applications based on pressurised alkaline electrolysis.

The orders signed during Q3 2021 increased the total equipment backlog to 10 MW. Compared to Q3 2020, the backlog has increased by 8.0 MW or 400%.



The recent guidance adjustment derived from delay in delivering the initial A90 electrolyzers reflects the early stage of the commercialisation of Green Hydrogen Systems' current product platform. Such unforeseen delays are not unusual seen across the industry while scaling-up towards serial production. Furthermore, and as part of the development of the A90 electrolyzers, ongoing tests and customisations will be expected.

Green Hydrogen Systems has prior to 2021 delivered five A-Series electrolyzers in a previous product version. Daily, these electrolyzers are at the customer sites producing hydrogen for end-use cases such as transportation and CO2 neutral eMethanol. The operational data from the installed base confirms the reliability and performance of the technology and Green Hydrogen Systems' ability to develop and deliver efficient electrolyser based on pressurised alkaline electrolysis. With the recent experience from the installed base and the positive progress on the test of the initial A90 electrolyzers, delivery to the customers target commencement from Q4 2021 and thus we are able to execute on our revised plan.

The deliveries of the delayed orders are planned for revenue recognition in the first half of 2022 after acceptance tests at the customer sites. The revenue recognition of the delayed orders will add to the existing backlog for 2022 now consisting of 10 MW capacity corresponding to approximately DKK 84 million, which includes electrolyzers, water and cooling systems and containers.

Scale-up of the organisation and production facilities continues as planned for 2022. Green Hydrogen Systems remains positive on the continued near-term development in the green hydrogen market which is also confirmed by a positive pipeline development in key strategic markets with a large increase in the average size of planned projects. The positive development is also reflected in Green Hydrogen Systems views for 2022 where continued commercial momentum is expected.

## Key figures

DKK '000	Q3 2021	Q3 2020	9M 2021	9M 2020	Full year 2020
<b>Customer orders</b>					
Order backlog end of period	84,000	13,800	84,000	13,800	38,500
Order backlog end of period (MW)	10.0	2.0	10.0	2.0	4.9
<b>Profit &amp; loss</b>					
Revenue from contracts with customers	161	8,073	2,035	8,499	9,433
Operating profit, EBIT	-42,646	-6,962	-114,291	-25,790	-72,689
Net financials	-8,055	40	-332,725	-282	-2,858
Net profit for the period	-49,326	-6,319	-442,891	-24,699	-73,241
<b>Balance sheet</b>					
Total assets	1,314,585	58,156	1,314,585	58,156	232,898
Equity	1,221,570	35,060	1,221,570	35,060	-4,077
<b>Cash flows</b>					
Operating activities	-57,392	-31,397	-126,489	-24,407	-25,172
Investing activities	-496,648	-4,969	-531,915	-11,670	-31,625
Financing activities	87,696	36,404	1,157,541	34,773	203,338
Free cash flow	-554,040	-36,366	-658,404	-36,077	-56,797
Cash and cash equivalents	655,090	8,108	655,090	8,108	155,953
Changes in net working capital	-10,988	-28,712	-26,269	-4,837	31,307
<b>Employees</b>					
Employees at the end of the period	138	38	138	38	52
<b>Financial key ratios</b>					
Solvency ratio (%)	93%	60%	93%	60%	-2%
Return on invested capital (%)	-7.7%	-22%	-57%	-50%	-53%
Return on equity (%)	-8.3%	-36%	-73%	-89%	-890%
<b>Other performance measures</b>					
Gross profit	-13,911	1,975	-13,389	1,915	-4,022
Gross profit margin	-8,641%	24%	-658%	23%	-43%
Total R&D spend	21,072	5,901	46,515	12,362	20,385
EBITDA	-38,655	-6,166	-105,922	-23,724	-69,617
EBITDA margin	-24,009%	-76%	-5,205%	-279%	-738%
Intangible CAPEX	9,072	2,743	28,272	6,242	11,490
Tangible CAPEX	85,260	2,225	105,845	5,428	20,647
Total CAPEX	94,332	4,968	134,117	11,670	32,137

## Conference call details

In connection with the announcement of the Q3 2021 trading statement, Green Hydrogen Systems will host a conference call. **The conference call will take place 2 November 2021 at 10:00 CET.** Please visit [investor.greenhydrogen.dk](https://investor.greenhydrogen.dk) to access the presentation used for the meeting.



### Conference call details

[https://webinars.on24.com/q4/GreenHydrogen\\_Q3\\_2021](https://webinars.on24.com/q4/GreenHydrogen_Q3_2021)

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## Forward-looking statements

This announcement contains forward-looking statements. Words such as 'believe', 'expect', 'may', 'will', 'plan', 'strategy', 'prospect', 'foresee', 'estimate', 'project', 'anticipate', 'can', 'intend', 'outlook', 'guidance', 'target' and other words and terms of similar meaning in connection with any discussion of future operating or financial performance identify forward-looking statements. Statements regarding the future are subject to risks and uncertainties that may result in considerable deviations from the outlook set forth. Furthermore, some of these expectations are based on assumptions regarding future events which may prove incorrect.

Please refer also to the overview of risk factors in pages 9-37 of the Prospectus available at [greenhydrogen.dk](https://greenhydrogen.dk).

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## Performance highlights continued

### Expansion of production facilities to 400 MW

In July 2021, the decision on a second expansion phase for the current manufacturing, R&D, and office facilities was made. The new facilities will increase the Green Hydrogen Systems' current yearly capacity from 75 MW to 400 MW worth of electrolysers. The commissioning of the production facilities will commence from Q3 2022 and by mid-2023 the facilities will be complete.

In subsequent phases, the land plot can be further scaled to a production capacity of +1,000 MW a year. The short lead time from decision to inauguration in subsequent capacity expansions allows for timely capacity planning as demand for Green Hydrogen Systems' electrolysers continues to grow. Furthermore, the phased expansion approach decreases the level of tied-up capital.

The construction work is progressing as planned. The ground-breaking ceremony to kick off the construction took place by end August and in the beginning of November the plot had been prepared for the initial construction work.

Read more in the press release [here](#)



## GreenHyScale - an agreement that promotes the HyProvide X-Series electrolyser as part of a future 100 MW Power-to-X platform

The Q2 2021 interim report described Green Hydrogen Systems' application to an EU Horizon funding programme covering a 100MW electrolysis project. At the beginning of September 2021, as a member of the GreenHyScale consortium, Green Hydrogen Systems signed the grant agreement with the European Climate, Infrastructure and Environment Executive Agency (CINEA) in connection with the EU Green Deal 2.2 funding call with a total consortium grant of EUR 30 million.

The goal of the project is to demonstrate a 100 MW of green electrolysis production located at Green-Lab, Denmark. Green Hydrogen Systems is responsible for delivering the first 6MW test module which aims at validating the solution for the future 100 MW project. Green Hydrogen Systems was granted up to DKK 69 million to develop the test module which will be subject to later qualification for a 100MW solution worth more than DKK 360 million in contract value.

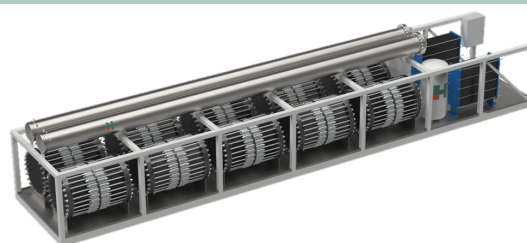
The project will provide a welcomed opportunity to demonstrate Green Hydrogen Systems' new electrolysis system. The HyProvide X-Series is based on the existing A-Series technology, optimised for use in large-scale applications. The solution employs pressurised alkaline electrolysis, the most cost-efficient type of electrolysis, and a technology that works efficiently with the variable load from renewable electricity sources.

As a first step, the 6 MW X-Series electrolyser module will be demonstrated towards the end of 2022. Depending on certain performance criteria, the 6 MW module is planned to be expanded into a 100 MW electrolysis plant by the end of 2024.

Secondly, a 7.5 MW offshore test module with increased pressure from the current 30 bar will be developed in a collaboration with Siemens-Gamesa Renewable Energy and Equinor and tested at GreenLab as a precursor for offshore hydrogen generation produced by offshore wind turbines. The 7.5 MW high-pressure electrolyser for offshore application is planned for operation by the end of 2025.

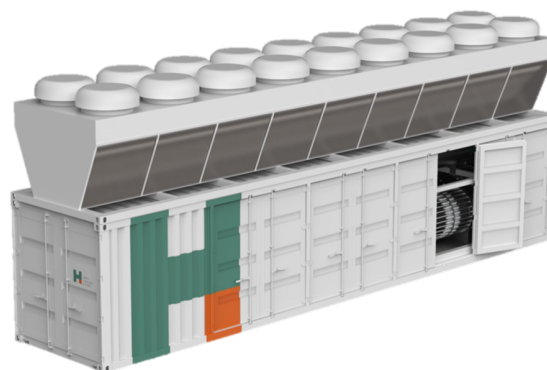
Read more in the press release [here](#)

### HyProvide X-Series



#### Power consumption

**5 – 7,500 kW**



## New Chief Financial Officer

On 1 November 2021 Ole Vesterbæk was appointed as Chief Financial Officer (CFO) and member of the Executive Management of the company. Ole Vesterbæk joins Green Hydrogen Systems with an impeccable track record from leading finance organisations, today being the CFO in the largest division of Danish Crown, Danish Crown Pork. Prior to that Ole has held senior positions in Ecco, Lantmännen and Velux and has an extensive experience in designing, building and running efficient finance organisations in a production and manufacturing environment. Ole's leadership profile has been formed by successfully running culturally diverse organisations across Europe, the US and Asia. Ole will assume the position no later the 1 May 2022.

## Chief Technology Officer succession

In September 2021, Green Hydrogen Systems announced the promotion of Kasper Tipsmark Therkildsen as CTO succeeding Jørgen Krogsgaard Jensen, who decided to step down after 14 years as the company's CTO in order to fully dedicate his focus on Green Hydrogen Systems' research & development in a position as Senior Vice President, Technology & R&D. Kasper holds a PhD in experimental atomic physics from the Niels Bohr Institute at the University of Copenhagen and has extensive experience developing and implementing new technology. Kasper has worked in the industry since 2012 and has been with Green Hydrogen Systems since 2019 as the head of the technology team. Furthermore, Kasper is the author or co-author of a number of patents and peer-reviewed publications.

## New HR position and officer at the company's C-level

Creating and maintaining a high-performance organisation is a pivotal objective for the company. To support that, the HR discipline will be integrated at the company's C-level to enable HR to become a strategic voice in the company's senior leadership, planning and decision making. The company has successfully recruited Birgitte Høgh Frederiksen as new Chief Human Resource Officer. Birgitte is trained in Organisational Psychology and joins Green Hydrogen Systems with a broad set of strategic, leadership and practical competences from her roles across various sectors, today being the Head of HR at INEOS Oil & Gas Denmark. She has also served with Danish Crown, Tican, Hilton Hotels and ISS. Birgitte will assume the position no later than 1 January 2022.





## Safety, organisation and employees

The health and safety of Green Hydrogen Systems' employees and other stakeholders is the uncompromising priority number one. Green Hydrogen Systems continuously promotes an organisational culture with the safety mindset "take care" in all production processes to maintain vigilance and take action to preserve a safe working environment. As a relatively young company, Green Hydrogen Systems is focused on developing its capabilities to monitor, register and handle leanings and incidents to continuously improve health and safety across the company – a crucial focus also in a fast-growing organisation. As an important step in maturing and formalising its systems' the company in September achieved certification for quality management, environmental management as well as occupational health and safety management through ISO9001, ISO14001 and ISO45001, respectively.

By the end of Q3 2021, Green Hydrogen Systems employed a total of 138 people. This is an increase of 263% or an additional one hundred employees compared to Q3 2020. Whereas the ongoing recruitment of employees has progressed well, the recent market tightness in access to skilled employees have started to show. The growing organisational capability is in line with the company's scale-up towards 2025, as demand for Green Hydrogen Systems' product offering continues to grow. In Q3 2021, the total number of employees increased by 55% compared to the end of Q2 2021. The organisational ramp-up are strengthening the company's A-Series team as well as project capabilities for the ongoing development of the future X-Series electrolyser platform.

## Outlook

In late September 2021, Green Hydrogen Systems adjusted its guidance for 2021 due to the delays in assembly and delivery of the order backlog scheduled for delivery and revenue recognition in Q4 2021. This became evident after a number of compounding events materialising during the completion of the first customer orders with planned delivery in late Q3 2021. Consequently, the guidance was adjusted.

### Political sentiment

From the EU and many of the individual member states, there is a strong sentiment to establish electrolyser and renewable energy capacity targets, support demand creation and lower the regulatory barriers. The political sentiment towards green hydrogen is a necessity as the market for green hydrogen strongly relies on continuous and long-term outside investments until it becomes financially self-sustainable. Accordingly, the electrolysis industry is directly dependent on the long-term political commitment and willingness to support the green hydrogen market and value chain. If slowed down, this may have an adverse impact on the development of the green hydrogen market with spillover effects on Green Hydrogen Systems future performance.

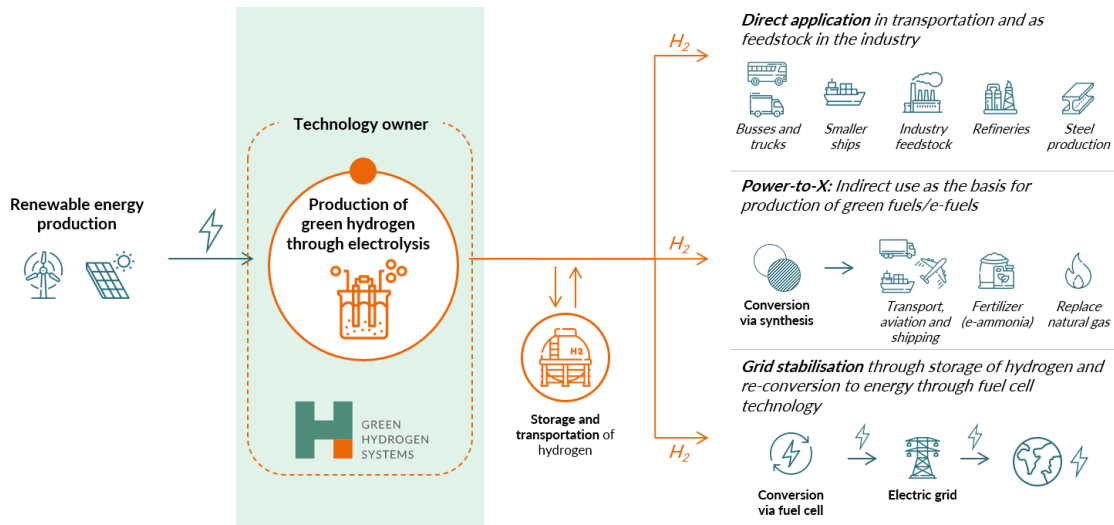
### Product development

The recent guidance adjustment derived from delay in delivering the initial A90 electrolysers reflects the nature of the early-stage commercialisation of Green Hydrogen Systems' current and future product platform. The planned upgrade of the A-Series electrolyser models will strengthen the ability to deliver to medium and large-scale projects in the near term. Similarly, the X-Series is positioned to be used for large-scale green hydrogen projects and is expected to become a key revenue driver in the future. As such, successful delivery of the A90 electrolysers as well as timely development and launch of the X-Series electrolysers are important factors for the Green Hydrogen Systems' continued ability to adapt to demand for large-scale green hydrogen projects.

### Medium-term targets

Based on the strong political sentiment and positive market momentum, Green Hydrogen Systems remains positive on the continued near-term development in the green hydrogen market and thereby confirming the financial targets set for 2025. By 2025, Green Hydrogen Systems expects to deliver +200 MW of electrolyser capacity combined with service and maintenance activities for an installed base of 300-400 MW resulting in an expected revenue of DKK +1,000 million. The adjustment of the guidance for 2021 is not impacting the expectations to the targets for 2025 as the general progression of Green Hydrogen Systems' operations, scale-up and commercial traction develop as planned.

Green Hydrogen Systems’ technology developed to work with renewable energy sources



**Pressurised alkaline electrolysis** – Green Hydrogen Systems has explored different technologies and decided to prioritise **pressurised alkaline electrolysis** as its core technology, which is well-positioned in terms of reliability, efficiency and physical footprint. Furthermore, the technology requires relatively low water purity, which decreases capital expenditure and operating expenses. **Pressurised alkaline electrolysis** is characterised by providing a high level of operating flexibility. Green Hydrogen Systems demonstrates this in terms of dynamic as well as static flexibility.

**Dynamic flexibility** is measured by the ramp-up/ramp-down rate of the electrolyser, which is determined by the possible percentage change in load per second. Green Hydrogen Systems has demonstrated an ability to go from a load of 0% to 100% in four seconds, which leads to a ramp-up rate of 25%/second. This is a competitive ramp-up rate that matches renewable power-output fluctuations in for example, a wind farm and it thereby qualifies Green Hydrogen Systems’ product offerings to work with different renewable energy sources.

**Static flexibility** is measured by the static range, which is understood as the minimum and maximum range of electric loads at which the electrolyser can continue operations without risk of gas crossover. The HyProvide A90 electrolyser has the ability to operate at variable load rates between approximately 17% and 100% per unit. The ability to combine multiple of Green Hydrogen Systems’ electrolyser units can furthermore facilitate a higher system static range, e.g. a range between approximately 4% and 100% in a system with four stacks. This flexibility makes Green Hydrogen Systems’ technology highly competitive across technologies and competitors.

Benchmarking of competing technology regimes

Competitive dimension	Pressurised alkaline	PEM	Atmospheric alkaline
<b>Flexibility</b> <i>Capacity to operate dynamically at variable load rates</i>	✓	✓	✗
<i>Key for utilisation of renewable energy sources – across potential applications and minimisation of energy/lost</i>			
<b>Reliability</b> <i>System uptime and durability</i>	✓	(✓)	✓
<b>Efficiency</b> <i>Competitive energy to hydrogen conversion</i>	✓	✓	✓
<b>Footprint</b> <i>Minimal footprint compared to other electrolyser technologies</i>	✓	✓	✗
<b>Independency of scarce resources</b> <i>Noble metals not an input in process</i>	✓	✗	✓
<b>Water purity</b> <i>Lower water purity required in process</i>	✓	✗	✓

The main electrolyser technology regimes including **pressurised alkaline electrolysis**, PEM, and atmospheric alkaline are benchmarked on critical competitive features in the diagram to the right. The assessment of the competitive features is based on currently available products across technologies.