

The information communicated within this announcement is deemed to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 which is part of UK law by virtue of the European Union (withdrawal) Act 2018. Upon the publication of this announcement, this inside information is now considered to be in the public domain.

**26 September 2024**

**Clean Power Hydrogen plc  
("CPH2", the "Company" or the "Group")**

**Successful Factory Acceptance Test for MFE110 electrolyser**

***Successful testing proves technology works at scale and paves way for commercial roll out***

CPH2, the UK-based green hydrogen technology and manufacturing company that has developed the IP-protected Membrane-Free Electrolyser ("MFE"), is pleased to announce the successful completion of the Factory Acceptance Test ("FAT") for its MFE110 electrolyser, marking a major milestone for the company's technology.

**Highlights**

- The FAT has been completed after a formal demonstration of the MFE110's successful operation and performance, independently witnessed by Lagan MEICA the Principal Contractor, and Arup, representing Northern Ireland Water.
- The Group's MFE110 successfully produced separated hydrogen and oxygen at the pre-determined specifications for commercial deployment.
- The successful test confirms the first customer acceptance and validation of CPH2's scaled electrolyser technology.
- The completion of testing validates CPH2's membrane-free technology as a viable and potentially highly competitive alternative to PEM and Alkaline electrolysers.
- The successful FAT is a major commercial milestone and lays the foundation for the commercialisation of the MFE220, CPH2's flagship 1MW system.
- The next stage is the deployment of the MFE 110 unit to Northern Ireland Water's site for installation leading to commercial hydrogen and oxygen production.

The final stage of the FAT for the MFE110 involved successfully verifying the safe and fully automated startup, operation, performance, and shutdown of the MFE110 unit to the pre-determined specification. During this operation, key metrics such as the unit's hydrogen and oxygen output pressure, flow rate, and purity levels were recorded. All metrics achieved the necessary thresholds, confirming that the unit can function effectively.

The Level 3 test was witnessed by both Arup and Lagan MEICA and followed successful pre-commissioning checks (Level 1) and functional tests (Level 2). The MFE110 will now be shipped to Northern Ireland Water for site installation, integration, and commissioning, before commencing commercial hydrogen and oxygen production.

This marks the most significant milestone in CPH2's journey to market, validating its Membrane-Free Technology as a viable alternative to PEM and Alkaline electrolysers. It also represents a crucial step forward for the MFE220, CPH2's flagship 1MW design.

**Strategic context of the MFE110 FAT**

Capitalising on the successful MFE110 FAT, the Company now turns to a phase of Commerciality, where the focus moves from product development to commercialisation. The Commerciality Phase will consist of: delivering on our existing three customer contracts for MFE220 units; activating the licensees and supporting them; continued technology and product improvement; and growing the commercial pipeline.

The deliverables through the Commerciality Phase will be revenue generating, commercial MFE220 electrolysers working on customer sites and licensees commencing manufacturing. The capabilities developed and activities undertaken over the Commerciality Phase are expected to provide valuable learnings in preparation for scaling commercial activities.

**Jon Duffy, CEO of CPH2, commented:**

*"The successful FAT of our MFE110 electrolyser marks the most significant milestone in CPH2's history to date. Our new low cost and highly robust technology solution is proven. This achievement is a true testament to our unwavering commitment to innovation, quality, and safety, and positions us strongly for the next phase of our journey.*

*The completed FAT is the culmination of many hours of hard work and determination from our entire team. I want to extend my deepest gratitude to our dedicated team, supporting shareholders, Northern Ireland Water, and to Lagan*

*extend my deepest gratitude to our dedicated team, supportive shareholders, Northern Ireland Water, and to Lagan MEICA for their support throughout this process.*

*The process that CPH2 to reach this point has seen us overcome unexpected technological and engineering hurdles but has meant a stepped improvement in the product offering including significantly enhanced safety to industry recognised SIL ratings and fully automatic operation, control and shutdown. There is a renewed confidence in the capability of our technology to address the significant market opportunity. We will now turn our attention to the commercial roll-out and delivering the MFE220 through our own manufacture and of our license holders."*

**Alistair Jinks, Director of Business Services at Northern Ireland Water, commented:**

*"We are thrilled to have reached this pivotal milestone with CPH2. The MFE110 electrolyser will play a crucial role in our efforts to decarbonise our operations and explore the transformative potential of hydrogen and oxygen in wastewater treatment. This project is not just about meeting current needs; it's about pioneering the future of sustainable water management and contributing to the broader hydrogen economy in Northern Ireland. We are excited to see how this technology will help us achieve our ambitious environmental goals and set a new standard in the industry."*

ENDS

**For more information, please contact:**

**Clean Power Hydrogen plc**

Jon Duffy, Chief Executive Officer  
James Hobson, Chief Financial Officer

via Camarco

**Cavendish Capital Markets Limited - NOMAD & Broker**

Neil McDonald +44 (0)131 220 9771  
Peter Lynch +44 (0)131 220 9772  
Adam Rae +44 (0)131 220 9778

**Camarco PR**

Billy Clegg  
Owen Roberts  
Lily Pettifar

+ 44(0) 20 3 757 4980

To find out more, please visit: <https://www.cph2.com>

**Overview of CPH2**

CPH2 is the holding company of Clean Power Hydrogen Group Limited which has almost a decade of dedicated research and product development experience. This experience has resulted in the creation of simple, safe and sustainable technology which is designed to deliver a modular solution to the hydrogen production market in a cost-effective, scalable, reliable and long-lasting manner. The Group's strategic objective is to deliver the lowest LCOH in the market in relation to the production of green hydrogen. CPH2 is listed on the AIM market and trades under the ticker LON:CPH2.

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact [ms@seg.com](mailto:ms@seg.com) or visit [www.ms.com](http://www.ms.com).

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our [Privacy Policy](#).

END

MSCZZGZLGKRGDZZ