



Tomorrow's Hydrogen, Today



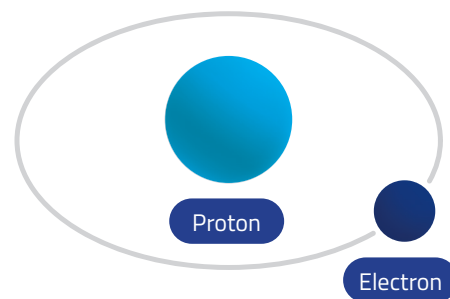
Simple. Safe. Sustainable.

OUR MISSION

Clean Power Hydrogen manufactures the unique **Membrane-Free Electrolyser™** producing green hydrogen in a simple, safe, and sustainable manner, and at any scale. We are passionate about hydrogen and clean energy for a sustainable world. For now, for our children and future generations.

WHY HYDROGEN?

With zero CO₂ emissions at the point of use, hydrogen - the most abundant element in the universe - will help to fast-forward the world's journey to carbon neutrality.



THE COMPANY

In December 2012, Dr. Nigel Williamson and Joe Scott had the vision to help clean up the environment using water electrolysis to produce hydrogen, without the costly polymer membrane or precious metal catalysts.

Over four years, they developed the unique **Membrane-Free Electrolyser™** and, in 2016, established the Clean Power

Hydrogen Group Limited, bringing together knowledge and technical excellence from the cryogenics and hydrogen sectors.

Following a period of rapid growth, the company relocated in 2021 to a 29,000sq ft R&D and production facility, a short distance from the original building where the company opened its first premises in 2018.

Our values are to be a dynamic, innovative, and resilient company dedicated to providing the best solution possible for producing green hydrogen. With 22 patents approved in the UK, Europe, India, and the USA, we are not afraid to push the boundaries of science. Our disruptive clean technology represents a shift in how the global economy will reach its targets to eliminate carbon emissions.



Simple

Simple to build, simple to operate and simple to maintain. This wasn't easy to achieve and has required a huge amount of engineering effort, commitment and many years of development.



Safe

Our Membrane-Free Electrolysers™, with safety being central to every design decision, are safe and simple to operate. This simplicity of design ensures that our systems can be manufactured in standard production facilities.



Sustainable

Not just in the renewable energy powering our efficient systems, but in the selection of widely available, sustainable and recyclable components and materials that we specify for our equipment.

OUR TECHNOLOGY

Ground-breaking design.

Our hydrogen production technology includes a **Membrane-Free Electrolyser™** which, in combination with cryogenic gas separation delivers pure hydrogen and pure oxygen in separate streams. When the electrolyser is supplied by renewable electricity (e.g. wind and solar) it delivers green hydrogen with a purity of up to 99.999% and medical grade oxygen. This approach to hydrogen generation is both unique and patented.

Our gas leaves the system at 34bar(g) pressure, or, alternatively, may be taken further down the Kelvin scale to produce liquid hydrogen. This makes our electrolyser highly cost-effective and efficient in many applications including **power generation, oil and gas, renewables, petrochemical, transport and medical uses.**

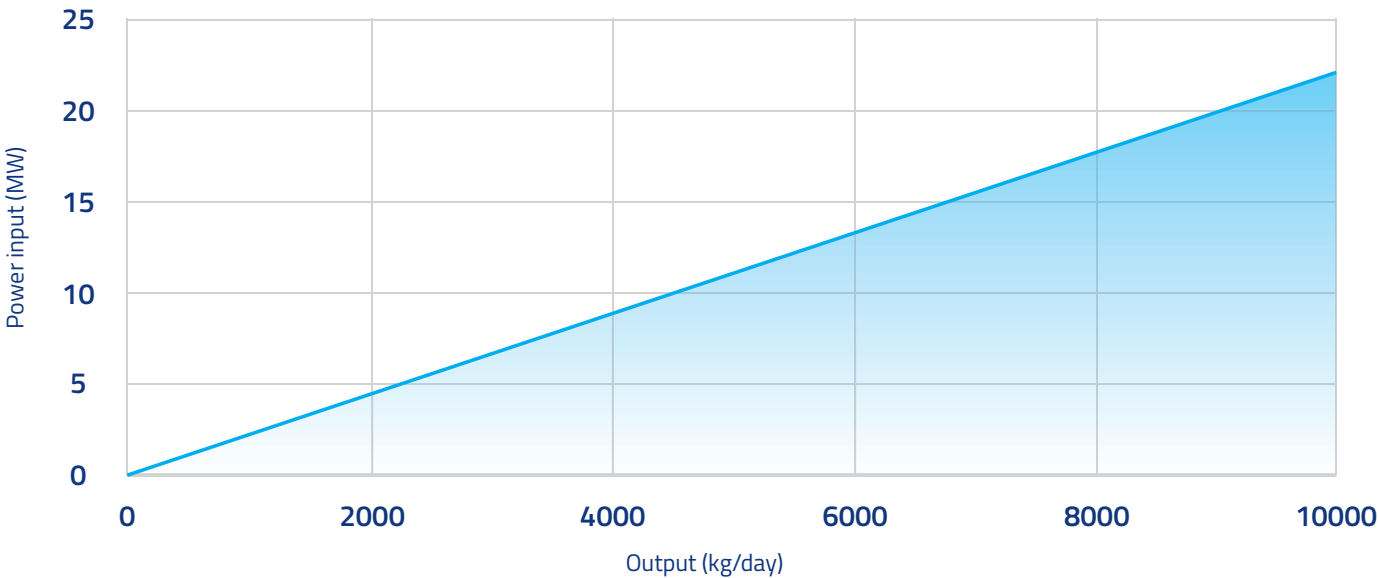


| | MFE220* | MFE440* |
|------------------------------|-------------|-------------|
| Hydrogen Production [kg/day] | up to 450 | up to 900 |
| Oxygen Production [kg/day] | up to 3,600 | up to 7,200 |

*Refer to our Technical Datasheet for more information

And scalable.

From 1MW to a multi-MW system, the Clean Power Hydrogen **Membrane-Free Electrolyser™**; is designed to be housed in an ISO container or purpose-built facility. This flexibility ensures the technology is fully scalable to meet the growing demand of the hydrogen generation market.





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