

Elogen delivers a 2.5 MW electrolyser for CrossWind's innovative energy hub in the Netherlands

Paris, 30 July 2025 - Elogen, a GTT group company, has successfully delivered a 2.5 MW Proton Exchange Membrane (PEM) electrolyser for the Baseload Power Hub¹ (BLPH), an innovation linked to the Hollandse Kust Noord (HKN) offshore wind farm. Led by CrossWind, a joint venture between Shell and Eneco, the project integrates wind power with green hydrogen production to advance a more flexible and sustainable energy system.

This delivery follows the successful Site Acceptance Test (SAT), which confirmed the electrolyser's performance and operational readiness. The order for the electrolyser was announced in February 2023.

Originally designed for offshore deployment, the BLPH will now be installed onshore in Eemshaven, the Netherlands. The system is designed to store surplus wind energy as green hydrogen during peak production and convert it back into electricity when demand exceeds supply, helping to stabilise the grid and reduce carbon emissions.

The project was executed in a fast-track timeline of just 30 months. It included a six-month engineering phase for design and documentation, followed by a 24-month EPCC phase, covering engineering, procurement, fabrication, installation, and commissioning.

As part of its scope, Elogen supplied the electrolysis stacks and key equipment for the PEM electrolyser system. Detailed integration and assembly were carried out by FORES Engineering, with contributions from partners including Rosetti Marino.

A final 17-week commissioning phase of the electrolyser, supervised by Elogen, was completed before the platform's planned sail-away in early August. This achievement reflects the close coordination and commitment of all partners.

The platform will ultimately be handed over to Delft Offshore Turbine B.V. (DOT) and serve as a collaborative innovation hub, bringing together institutions such as TNO, Groningen Seaports, and Dutch universities.

Eric Minaux, Managing Director of Elogen, declared: *"We are proud to contribute to a project that directly addresses the challenges of renewable energy intermittency. This PEM electrolyser combines an unprecedented level of marinization, integration into a complete energy hub, and readiness for long-term offshore operations. Delivering this within just 30 months demonstrates the agility of our teams and the robustness of our technology for dynamic energy systems."*

Maria Kalogera, Innovations Manager of CrossWind stated: *"The electrolyser is the backbone of the Baseload Power Hub. Completing the onshore integrated testing marks a major milestone in*

¹ A system combining wind power and hydrogen to deliver stable and dispatchable renewable energy.

demonstrating how green hydrogen can support a more flexible and resilient energy system. Working together with Elogen has made it possible to achieve this milestone and accelerate the energy transition.”

About Elogen

Elogen, a technological expert at the service of green hydrogen, develops cutting-edge technologies to design and produce PEM (Proton Exchange Membrane) electrolyzers to meet new uses of hydrogen in mobility, industry and energy storage. Elogen, a company of the GTT group, relies on a powerful R&D and a rigorous manufacturing process to provide its customers with competitive, reliable systems tailored to their needs. The technological solutions developed by Elogen, particularly suitable for renewable energies, demonstrate high efficiency and performance.

More information on elogenh2.com

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About CrossWind

CrossWind, a joint-venture between Shell and Eneco, builds and operates the Hollandse Kust Noord (HKN) subsidy-free offshore wind park, located 18.5 kilometers off the coast of the Netherlands near Egmond aan Zee. Once all 69 turbines are installed and commissioned, the Hollandse Kust Noord wind park will have a total installed capacity of 759 MW, generating at least 3.3 TWh per year. Siemens Gamesa Renewable Energy is supplying the wind turbines and Van Oord is supplying the foundations and cables and installing the wind turbines at sea. CrossWind is in close contact with TenneT, the developer of the 'offshore power socket' connecting HKN to the grid, as well as the relevant ministries, coastal authorities and other stakeholders.

More information on www.crosswindhkn.nl