



**Groupe
Monnoyeur**

Eneria

Press Release

September 03, 2020

EODev (Energy Observer Developments) and Monnoyeur Group, through its subsidiary ENERIA, have just signed an innovative partnership for the industrialization of hydrogen-based solutions

EODev and the Monnoyeur Group, through its subsidiary Eneria, have signed a partnership agreement for the industrialization by Eneria of the hydrogen power generator GEH₂ developed by EODev. To discover EODev's GEH₂ in operation, visit Eneria's site in Montlhéry (91310) between September 15 and 18, 2020.

Eneria, a Strategic Industrial Partnership

Specialized in the design, installation, and maintenance of turnkey power generation solutions, Eneria will bring to EODev its expertise and know-how in the field of solution packaging.

The industrial partnership between EODev and Eneria will accelerate the industrialization, deployment, and after-sales service management of the GEH₂ generators.

For Eneria, this development is part of a broader ambition: providing real solutions to both energy and environmental challenges, commensurate with the issues reminded by the government in the context of the green recovery plan.

For Jérémie Lagarrigue, CEO of EODev: "*The whole team did a great job, not only in designing this generator, but also in bringing all the partners together to take up this challenge. The GEH₂ is the answer to tomorrow's energy needs, paving the way for the supply of totally decarbonized energy, in harmony with nature. We are proud and happy to be able to rely on strong partnerships, such as the one we have sealed with Eneria, to accelerate the energy transition.*"

For Heric Blain, CEO of Eneria: "*We are very proud to participate in the adventure and the development of the hydrogen power generator GEH₂ with EODev's teams. This is a major partnership that will allow us to mobilize our management, with its historic know-how in packaging innovative energy solutions, and our technical resources such as our workshops and test beds to industrialize the GEH₂.*"

An Eco High Tech Innovation

Designed to provide any energy ecosystem with instantaneous electricity, the GEH₂ offers a noiseless solution with no CO₂ nor fine particles emissions, for a power ranging from 100kVA to 2MVA.

After months of development and intensive testing in real conditions of use, the GEH₂ generator developed by EODev and designed around Toyota's latest generation fuel cell is, with its record energy density, a modular solution allowing to get, now, a hydrogen power generator at an affordable cost.

Each GEH₂ has a Prime Running Power of 100kVA and an Emergency Stand-by Power of 110kVA for one hour, with an output voltage of 230/400V at 50Hz. Thanks to its double H₂ adduction, the GEH₂ operates continuously, as you can switch to the second supply circuit while in operation thus allowing the hydrogen cylinder to be replaced without interrupting electricity production. Finally, no minimum operating power is required.

The GEH₂ offers many advantages over equivalent diesel units. Indeed, in addition to its low noise pollution and the total absence of CO₂ and fine particle emissions, its compact design allows 4 stackable units to be transported in 20-foot containers and to be easily moved by forklift trucks.

With its IP43 ingress protection and its integrated 230V plug for frost protection, it can operate in almost every corner of the world, from -5°C to +45°C. Its instant start allows to get full power immediately, and its "time 0" response make it independent of the UPS; all these features being integrated with its cooling circuit and fan.

Connected and monitored, the GEH₂ can be controlled remotely with an optional remote interface. Running exclusively on hydrogen and its fuel cell having no moving parts, usually contributing to engine wear and clogging (in traditional generators), the GEH₂ has a much longer life span than diesel generating sets thanks also to its design and the predictive maintenance that will be provided by EODev's teams.

Eco-designed, the GEH₂ includes an aluminum frame, easily recyclable, and an outer casing made of sustainably produced bamboo fibers, both resistant and natural.

A Solution that can be Adapted to all Uses

With its Plug & Play solution, the GEH₂ is easy to use. Designed to meet environmental challenges without sacrificing efficiency, it is suitable for all sites seeking or needing energy autonomy, both as a back-up solution, particularly for sensitive sites such as hospitals, airports, or data centers - or as the main energy source in isolated (scientific bases, islands, refuges, relay antennas...) or confined sites (tunnels, mines...). It can also be used to provide additional power for construction sites or events (concerts, sporting events, trade shows, etc.) or to access protected and regulated zero-emission zones.

The management of the entire system is ensured by an automated Power Management System specifically developed by EODev, which calculates the remaining autonomy according to the usage profile.

IMPORTANT

The presentation of the GEH₂ in Montlhéry is above all intended to demonstrate its performance in a "B2B" context and is thus aimed at energy professionals as well as power generator users. While many industrialists have already made an appointment, it is not too late to plan a visit. However, as available slots are limited, please contact us as soon as possible.

About the GEH₂

With a footprint of barely four cubic meters and a limited weight, the GEH₂ equipped with the latest generation of Toyota fuel cells (PAC) is today, in terms of power generated, the most compact and most efficient hydrogen power generator on the market. The development carried out by EODev's teams allows to reach powers up to 2MVA when the generators are stacked. This implementation flexibility makes the GEH₂ the ideal tool for customized hydrogen solutions for autonomous energy supply.

About EODev

EODev is a subsidiary of the Energy Observer group, an organization bringing together both expeditions and innovations, and developing solutions proving that another future, more respectful of mankind and nature, is possible. The company's ambition is to accelerate the energy transition by offering sustainable, reliable, and accessible industrial solutions. The products and solutions developed by EODev are based on the smart and optimized use of energy mixes combining different renewable energy sources and hydrogen as a storage means. EODEV's products address the entire value chain: medium power electro-hydrogen generators (GEH2); on-board hydrogen energy systems (REXH2) for maritime and river use (propulsion and life on board), and floating mobile stations (STSH2) for the production and distribution of green hydrogen. The recent fundraising carried out by EODev not only allows our company to launch the industrialization and marketing of these products, but also demonstrates the commitment of a group of entrepreneurs wishing to support the energy transition with practical solutions.

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About Eneria

Eneria, a subsidiary of the Monnoyeur Group, is a specialist in power generation and motorization solutions. Exclusive Caterpillar dealer in France and abroad, Eneria has developed a recognized expertise and know-how around the offer of turnkey energy solutions. Eneria designs the installations, implements them, and ensures their maintenance. Eneria can integrate a wide range of products such as diesel and gas generators, inverters, engines for marine, industrial, and oil applications, photovoltaic panels, thermal solar panels, biomass boilers, hybrid systems with storage. Eneria has the best expertise in all these fields, in terms of energy optimization and environmental protection, and provides both daily and long-term support to its customers, through performance contracts. Present on 9 sites in France and in 5 other countries, Eneria employs nearly 900 people (including 540 in France), with an annual turnover of €280 million.

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The GEH2 ready to operate © EODev / Romain Jallon / Eneria



3D rendering of 4 GEH2s in a container © EODev / Jean Hiss