

## PRESS RELEASE

### INNIO and Net Zero Innovation Hub Deliver World-First 3 MW Demonstration of 100% Hydrogen Backup Power for Data Centers

- INNIO and the Net Zero Innovation Hub for Data Centers achieve an industry-first demonstration of 100% hydrogen-fueled backup power at the 3 MW scale
- Technical experts from Microsoft, Google, and Data4 witness live testing, assessing performance under real-world data center conditions

**Jenbach, Austria | Fredericia, Denmark**– April 23, 2026 – INNIO Group, together with the Net Zero Innovation Hub for Data Centers, has completed a landmark, industry-first demonstration of backup power for data centers using 100% hydrogen-fueled gas engines at the 3 MW scale. The test was carried out as part of the Hub’s structured, collaborative approach to identifying and validating innovative technologies to enable large-scale deployment in the data center industry. Technical experts from Microsoft, Google, and Data4 witnessed live testing to assess performance against operational data center requirements.

INNIO’s natural gas engines are recognized for their rapid start-up capabilities, strong transient response, and stable performance. Now, these performance characteristics have been successfully demonstrated with hydrogen.

During 3 MW-class testing at INNIO’s research facility, the hydrogen-fueled Jenbacher engine met the demanding response profiles required for mission-critical data center operations. This achievement was validated using various AI load profiles and large, rapid load fluctuations to simulate real-world data center conditions. Technical experts from Microsoft, Google, and Data4 witnessed the live testing and assessed performance against real-world data center requirements, confirming that hydrogen engines represent a promising pathway for backup and prime power needs for next-generation, high-demand data centers.

This test forms part of the Hub’s structured, collaborative process to scale innovation. At the Hub, data center industry leaders jointly define requirements for new technologies to be deployed at scale in data centers. Following a global Request for Information (RFI) for low-carbon back-up solutions, hydrogen and clean fuels were selected as a pathway to substitute for diesel back-up generators. INNIO’s Jenbacher gas engine technology was chosen for MW-scale validation, with the company preparing and successfully executing the test in collaboration with the Hub technical team. The Hub team includes industry partners such as Data4, Google, Microsoft, Schneider Electric, and Vertiv.

With AI-driven load growth accelerating, data center operators are prioritizing supply certainty, rapid deployment, and decarbonization. Industry analysts anticipate that behind-the-meter and hybrid energy systems in new-build data centers will increase from 10–20% in 2025 to 50–60%

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by 2030, underscoring the need for scalable, low-carbon alternatives to diesel-based backup systems.

“Data centers are the backbone of the digital economy, and their energy demands are accelerating rapidly. This validation test demonstrates that INNIO’s technology delivers the transient performance, resilience, and flexibility data centers require, even when operating on 100% hydrogen,” said Dr. Olaf Berlien, President & CEO of INNIO Group.

“This successful test validates not only a scalable clean back-up solution, but also the novel collaborative Hub approach to accelerate the adoption of innovative solutions in the data center industry,” added Alberto Ravagni, CEO of the Net Zero Innovation Hub for Data Centers.

Hydrogen-powered behind-the-meter backup and prime power solutions offer a promising pathway for low-carbon backup and prime power, enabling faster data center deployment, grid integration, and grid stabilization. INNIO Group and the Net Zero Innovation Hub for Data Centers plan to continue collaborating on scaling this solution, focusing on critical enablers such as fuel availability, infrastructure, storage, permitting, dual-fuel capabilities, and integration in the data center architecture.

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### About INNIO Group

INNIO Group is a leading energy solution and service provider that empowers industries and communities to make sustainable energy work today. With its Jenbacher and Waukesha product brands and its AI-powered myplant digital platform, INNIO Group offers innovative solutions for data center power infrastructure, distributed power generation, and compression applications. With its flexible, scalable, and resilient energy solutions and services, INNIO Group enables its customers to drive the energy transition across the energy value chain and helps ensure reliable energy supply even where the grid is not available.

For more information, visit INNIO Group’s website at [innio.com](https://innio.com). Follow INNIO Group on [X](#) and [LinkedIn](#).

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### About the Net Zero Innovation Hub for Data Centers

The Net Zero Innovation Hub for Data Centers unites leaders of the data center industry to accelerate the deployment of advanced net zero solutions. Led by Danfoss, Data4, Google, Microsoft, Schneider Electric, and Vertiv, the hub de-risks innovation by removing technical, commercial, regulatory, and financial risks. Through a unique and structured collaborative innovation methodology, its goal is to support sustainable data center growth while enabling the transition toward a net-zero future.

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