

Finno Exergy Press release 21 Sept 2023

Finno Exergy advancing its innovative gas turbines technology with the help of Shell GameChanger

Company aims to help decarbonize hard-to-abate sectors and contribute to development of hydrogen economy by making technology available to the global market.

Finnish company Finno Energy is aiming to take another step forward in commercializing its gas turbines technology after proving its functionality through a successful testing phase which concluded this spring.

With the help of [Shell Gamechanger](#), Finno Exergy's team has validated their proof of concept and will now advance its research & development work toward commercial utilization.

"Finno Exergy has developed a solution that has shown potential to cut gas turbines' CO₂ emissions by up to 20%. In addition, our pressure gain combustion system works with any mixture of natural gas and hydrogen. This feature has potential to enable the direct utilization of hydrogen in the sectors where emissions are hard to abate, like heat and power generation in industrial applications, and dispatchable electricity generation.

For end users, like a manufacturing plant, our solution could deliver substantial cost savings and emissions reduction by improving the efficiency of energy production," says Mr. **Timo Erämaa**, Founder and CEO of Finno Exergy.

The essence of the innovation is a more efficient combustion system for gas turbines applications. Gas turbines are widely applied across many sectors and industries.

As the innovation is fuel-agnostic, meaning it can use any type of fuel, including hydrogen, it has potential to accelerate the transition to lower-carbon options like lower carbon hydrogen.

"We have been developing and piloting our solution in cooperation with Shell GameChanger since we won the [New Energy Challenge](#) competition in 2020 and our unique innovation is now protected by 10 patent families in Europe, the United States, China and Japan, " says Mr. **Fabio Ciccateri**, Chief Technology Officer at Finno Exergy.

Finno Exergy's goal is to start the first customer projects at the end of 2023 and to achieve a turnover of more than EUR 130 million through license sales in 2027. Commercial negotiations with potential customers, including gas turbine manufacturers worldwide, are already underway. Finno Exergy is starting a new project, in collaboration with academic and industrial partners, focused on the design and test of a retrofitting package for a selected industrial gas turbine, to be used as a technology demonstrator. **Shell GameChanger** will continue to monitor Finno Exergy's technology development for awareness about the progression and maturation of this technology.

For further information, please contact:

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Video: <https://vimeo.com/856646784/c5d783e38e?share=copy>

About Finno Exergy

Finno Exergy, founded in 2013, is an international company that operates in Finland, The Netherlands and Italy. We focus on solutions reducing CO₂ emissions in the hard to abate sectors. Our mission is to be actively involved in the global energy transition by enabling reduced fossil gas emissions and driving growth of hydrogen as a future lower-carbon energy source. Our technologies include a patented combustion chamber that improves a gas turbine's efficiency, reduces methane-based emissions, and enables flexible use of methane and hydrogen.

About Shell GameChanger

[Shell GameChanger](#) works with start-ups and businesses on unproven early-stage ideas that have the potential to impact the future of energy. The programme's team provides support, expertise, and seed funding, while the start-ups keep the independence to make their own decisions.