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# Capstone Turbine Corporation Announces Significant Progress in Microturbine Hydrogen Testing

***Development Testing Demonstrates up to 70% Hydrogen to Natural Gas Mix***

**VAN NUYS, CA / ACCESSWIRE / August 24, 2020** /Capstone Turbine Corporation ([www.capstoneturbine.com](http://www.capstoneturbine.com)) (NASDAQ:CPST), the world's leading clean technology manufacturer of microturbine energy systems, announced today that through a collaboration with the U.S. Department of Energy's Argonne National Laboratory, it has achieved significant progress in the development of a hydrogen operable microturbine product.

Development testing performed at Argonne demonstrates that a blend of up to 70% hydrogen to natural gas can be successfully operated in an off-the-shelf Capstone microturbine, before the addition of specialized hardware or software. The next stage in the testing will be to replace injectors with Capstone's patented hydrogen compatible design, which is intended to ensure combustion stability and flashback margin. The testing will proceed to higher hydrogen levels until the program's goal of 100% is reached.

[See *Capstone Turbine Issued Two New Patents For Multiple Fuel Applications - Including Hydrogen and Liquid Fuel Ultra-Low Emissions Capabilities*; <https://ir.capstoneturbine.com/press-releases/detail/3688/>]

"The initial goal of the testing is to establish the capabilities of our current off-the-shelf production systems," commented Don Ayers, Capstone Turbine's Senior Director for Engineering and Quality. "There is a broad global initiative to decarbonize electricity generation through renewable natural gas or RNG by blending natural gas and hydrogen in existing pipelines. The Argonne Lab tests are showing that we have a significant margin in our standard product because of our robust designs and existing design margin. Our microturbines, unmodified, can handle any of the blends currently being discussed for pipeline injection around the world," added Mr. Ayers.

"The recent experiments at Argonne demonstrated the resiliency of existing Capstone power generators to bridge the gap between grey-hydrogen and green-hydrogen use," said Muni Biruduganti, Principal Research Engineer at Argonne National Lab.

Hydrogen technology is advancing to the forefront of not just carbon neutrality, but a completely carbon-free society. Microturbines are uniquely positioned as a distributed energy source to be located at the source of hydrogen generation. The technology can be deployed immediately, without the need to wait for extensive infrastructure modernization and hydrogen specific upgrades. This unique advantage means customers will be able to

operate carbon-free sooner, while also providing a flexible, resilient energy source that provides both power and thermal energy all day, every day of the year. This can be particularly advantageous in highly efficient combined heat and power systems (CHP) as a part of a microgrid, with excess renewable generation used to produce green hydrogen through electrolysis.

"As a thought-leader in the energy sector, Capstone recognized years ago that hydrogen would play an important role as a key part of the future of renewable, green energy landscape," said Darren Jamison, Capstone's President and Chief Executive Officer.

"Microturbines are a proven technology on alternative fuels like biogas and butane. Renewable Natural Gas showcases how Capstone's innovative and adaptable microturbine technology can continue to grow into new segments of the expanding green energy economy. Hydrogen microturbines are the perfect complement for the intermittent nature of wind and solar power, making them an ideal component of the modern, clean and green microgrid," concluded Mr. Jamison.

### **About Capstone Turbine Corporation**

Capstone Turbine Corporation ([www.capstoneturbine.com](http://www.capstoneturbine.com)) (NASDAQ:CPST) is the world's leading producer of highly efficient, low-emission, resilient microturbine energy systems. Capstone microturbines serve multiple vertical markets worldwide, including natural resources, energy efficiency, renewable energy, critical power supply, transportation and microgrids. Capstone offers a comprehensive product lineup, via our direct sales team, as well as our global distribution network. Capstone provides scalable solutions from 30 kW to 10 MWs that operate on a variety of fuels and are the ideal solution for today's multi-technology distributed power generation projects.

For customers with limited capital or short-term needs, Capstone offers rental systems, for more information, contact: [rentals@capstoneturbine.com](mailto:rentals@capstoneturbine.com). To date, Capstone has shipped nearly 10,000 units to 83 countries and in FY20, saved customers an estimated \$219 million in annual energy costs and 368,000 tons of carbon.

For more information about the company, please visit [www.capstoneturbine.com](http://www.capstoneturbine.com). Follow Capstone Turbine on [Twitter](#), [LinkedIn](#), [Instagram](#), [Facebook](#) and [YouTube](#).

### **Forward-Looking Statements**

This press release contains "forward-looking statements," as that term is used in the federal securities laws. Forward-looking statements may be identified by words such as "expects," "believes," "objective," "intend," "targeted," "plan" and similar phrases. These forward-looking statements are subject to numerous assumptions, risks and uncertainties described in Capstone's filings with the Securities and Exchange Commission that may cause Capstone's actual results to be materially different from any future results expressed or implied in such statements. Capstone cautions readers not to place undue reliance on these forward-looking statements, which speak only as of the date of this release. Capstone undertakes no obligation, and specifically disclaims any obligation, to release any revisions to any forward-looking statements to reflect events or circumstances after the date of this release or to reflect the occurrence of unanticipated events.

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