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HILLCREST ACHIEVES BREAKTHROUGH RESULTS IN HIGH EFFICIENCY INVERTER PROOF OF CONCEPT TESTING

Switching and Thermal Management Advancements Poised to Shake-Up Current EV Industry Standards

VANCOUVER, BC, November 2, 2021 – [Hillcrest Energy Technologies](#) (CSE: HEAT) (OTCQB: HLRTF) (FRA: 7HIA.F) (“Hillcrest” or the “Company”), a clean tech innovation and e-mobility development company, is pleased to announce that interim proof of concept (PoC) testing results on its High Efficiency Inverter (HEI) confirm the ability to eliminate switching losses and increase switching frequencies without increasing temperatures.

As previously announced, Hillcrest’s first PoC is a 10kW/800V silicon carbide (SiC) inverter being used to test performance and efficiency benefits for future electric vehicles and other e-mobility powertrains.

“The Company believes its HEI technology has the potential to offer a new class of energy densities in inverters and electric machines. The ability to completely eliminate the switching losses places our HEI at the boundary of what’s physically possible for inverter efficiency,” states Ari Berger, Hillcrest CTO.

Testing parameters for the first PoC inverter range from 470V to 870V, with a tripling of frequencies from 20kHz to 60 kHz at each voltage level. In each case, the HEI successfully demonstrated its ability to increase switching frequencies without increasing the temperatures under continuous operation.

For comparison, increasing switching frequencies in conventional SiC inverters from 20 to 40 kHz typically results in a temperature increase of 20-30 degrees Celsius in some applications; increasing further to 60kHz typically increases temperatures in some applications by 40-60 degrees Celsius.

“We’ve now demonstrated our ability to eliminate switching losses and increase switching frequencies in the HEI, effectively nullifying the long-term tradeoff faced in today’s inverters,” Berger continued. “As a result, we can realize increased efficiency and higher energy density, allowing for the use of smaller components and reduced cooling requirements not only in the HEI itself, but potentially across the powertrain system. These advances may, in turn, allow for the realization of lower overall cost and increased potential performance.”

Additional details relating to these results will be provided by Hillcrest CTO, Ari Berger and Harald Hengstenberger, Founder and Managing Director of the Company’s hardware development partner Systematec GmbH, and Hillcrest CEO, Don Currie, on an [investor webinar scheduled for](#)

[today at 4:05pm EST with Amvest Capital](#). Additional webinar details can be found at www.amvestcapital.com.

Benchmark testing on the SiC HEI will continue over the coming weeks, with planned PoC validation being completed later this quarter with additional announcements to follow.

Parallel Testing of the IGBT Inverter

The Company's second PoC is a 10kW/800V inverter based on IGBT technology, being used to test improved performance and increased energy production capability in grid-connected renewable energy generation, storage, and EV charging applications. The Company will release results as they occur.

Development of Our Next Technology

Hillcrest is pleased with the interim PoC results for the HEI and looks forward to updating the market on the development of its next innovation - a novel system control concept incorporating the HEI as a fundamental component in a system-level powertrain technology. The Company intends to provide updates on this emerging system technology as milestones occur.

About Hillcrest Energy Technologies

Hillcrest Energy Technologies is a clean tech innovation company developing transformative power conversion devices and control systems for next-generation powertrains and charging applications. The Company is transitioning from the production of fossil fuels from its West Hazel asset in Saskatchewan, to clean energy technologies that help unlock efficiencies in electrification and maximize performance of electric systems including electric vehicles, motors and electric generators. From concept to commercialization, Hillcrest is investing in the development of energy solutions that will power the future. Hillcrest is publicly traded on the CSE under the symbol "HEAT", on the OTCQB Venture Market as "HLRTF" and the Frankfurt Stock Exchange as "7HIA.F".

ON BEHALF OF THE BOARD

Donald Currie
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Some of the statements contained in this news release are forward-looking statements and information within the meaning of applicable securities laws. Forward-looking statements and information can be identified by the use of words such as "expects", "intends", "is expected", "potential", "suggests" or variations of such words or phrases, or statements that certain actions, events or results "may", "could", "should", "would", "might" or "will" be taken, occur or be achieved. This forward-looking information is provided as of the date of this news release. The forward-looking information reflects our current expectations and assumptions and is subject to a number of known and unknown risks, uncertainties and other factors, which may cause actual results, performance, or achievements to be materially different from any anticipated future results, performance or expectations expressed or implied by the forward-looking information. No assurance can be given that these assumptions will prove correct. Forward-looking statements and information are not historical facts and are subject to a number of risks and uncertainties beyond the Company's control. Investors are advised to consider the risk factors under the heading "Risks and Uncertainties" in the Company's MD&A for the year ended December 31, 2020 available at www.sedar.com for a discussion of the factors that could cause the Company's actual results, performance and achievements to be materially different from any anticipated future results, performance, or achievements expressed or implied by the forward looking information.. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements, except as may be required by law.

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