



Hillcrest Completes Design of EV Industry's First ZVS-enabled Power Module

- Hillcrest ZVS-enabled power modules are expected to offer new levels of power density, system efficiency, performance and reliability for EV applications up to 1,000 volts
- Potential to reduce or even eliminate the need for EMI filters and shielding could save manufacturers hundreds of dollars per vehicle and reduce the overall weight of the powertrain

VANCOUVER, BC, June 14, 2023 /CNW/ - Hillcrest Energy Technologies (CSE: HEAT) (OTCQB: HLRTF) (FRA: 7HIA.F), a pioneering clean technology company, is pleased to announce the completion of the design phase for the industry's first silicon carbide (SiC) power module optimized for Hillcrest's proprietary Zero Voltage Switching (ZVS) technology.

Hillcrest's ZVS power modules are being developed in collaboration with the Company's strategic partner, Systematec GmbH, with Hillcrest retaining all intellectual property.

Hillcrest Chief Technology Officer, Ari Berger, commented, "Our partners at Systematec GmbH have been developing and designing silicon carbide (SiC) power devices for the automotive sector for nearly twenty years. Their extensive hardware experience combined with our proprietary ZVS technology platform are allowing us to expand the efficiency and performance possibilities for power conversion devices. Our current ZVS-enabled traction inverter is already delivering industry-leading results in e-mobility applications. The ability to integrate and build our own, ZVS-enabled power modules for applications up to 1,000 volts will allow us to achieve ever more impressive levels of system efficiency, reliability, reduced cost and performance."

Harald Hengstenberger, Founder and Co-Owner of Systematec GmbH, stated, "Our ZVS-enabled power modules are expected to offer even greater improvements power density, efficiency as well as further reductions in electromagnetic interference (EMI) behaviour. The ability to reduce or possibly even eliminate the need for EMI filters and shielding, increased power density and efficiency could save manufacturers hundreds of dollars per vehicle and reduce the overall weight of the powertrain. Achieving these results in a cost-effective power module designed for large-scale manufacturing will represent a significant advancement for the EV industry."

Power modules are a critical component in all high energy-density power conversion equipment, such as automotive traction inverters. They consist of a substrate containing power semiconductor devices (silicon carbide dies), connected to form a circuit that provides excellent electrical and thermal contact and insulation.

The Hillcrest SiC traction inverter harnesses the power of the Company's proprietary ZVS technology platform. Extensive lab tests and simulations have showcased substantial improvements in system-level efficiency, performance, and reliability for electric systems such as electric vehicles and stationary energy generation and energy storage systems.

Hillcrest has granted incentive stock options to certain employees of the company to purchase up to 287,967 common shares in the capital of the company, pursuant to the company's Share Option Plan dated July 29, 2021. The options vest immediately and are exercisable on or before June 14, 2028, at an exercise price of CDN\$0.57 per share.

The Company also granted restricted stock units ("RSU") to certain employees, officers, directors, and consultants of the company to purchase up to 3,351,126 common shares in the capital of the company, pursuant to the Company's RSU Plan dated July 28, 2021. 1,426,317 of the RSUs vest immediately, 210,527 vest on July 3, 2023, and the remaining 1,714,282 vest over a 3-year period; 20% will vest after one year, 30% after two years and the remaining 50% vest after 3 years. All RSUs are exercisable on or before December 1, 2026.

About Hillcrest Energy Technologies

Hillcrest Energy Technologies is a clean technology company delivering high-value, high-performance power conversion technologies and digital control systems for next-generation powertrains and grid-connected renewable energy systems. From concept to commercialization, Hillcrest is investing in the development of energy solutions that will power a more sustainable and electrified future. Hillcrest is publicly traded on the CSE under the symbol "HEAT," on the OTCQB Venture Market as "HLRTF" and on the Frankfurt Exchange as "7HIA.F". For more information, please visit: <https://hillcrestenergy.tech/>.

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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 Dec. 31, 2022, 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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