Canaan Inc. Expands Energy Efficiency Initiatives with 3 MW Compute Heat Recovery Proof-of-Concept at Canadian Greenhouse

Canaan's Avalon® computing system to supplement electric-boiler heating at a greenhouse in Manitoba

SINGAPORE, Jan. 6, 2026 /PRNewswire/ -- Canaan Inc. (NASDAQ: CAN) ("Canaan"), an innovator in crypto mining, today announced a 3.0 MW proof-of-concept (PoC) with Bitforest Investment Ltd. ("Bitforest" or the "Host") in Manitoba, Canada, to recover heat from an Avalon computing system and use the heat as a supplemental source for greenhouse operations. The pilot is part of Canaan's broader initiatives to make high-density computing operations more efficient through the use of cutting-edge semiconductor chips that create practical energy reuse across commercial and consumer applications. The project will also allow Canaan to evaluate key performance indicators for agricultural applications, such as heat recovery efficiency, system stability, and operating and maintenance intensity under real operating conditions.

Under the agreement, for an initial 24-month term, Canaan will deploy an Avalon computing system consisting of 360 units of the Avalon A1566HA-460T liquid-cooled computing servers and four liquid-cooling container modules (the "Canaan Equipment") to be operated by the Host. Delivery will follow Bitforest's notice to proceed. Heat captured from Canaan's computing system will preheat the intake water for the site's electric boilers through a closed-loop heat-exchange system, thus lowering the incremental energy required to meet target temperatures. The Host targets 95% uptime for the Canaan Equipment. Based on current assumptions, Canaan estimates that approximately 90% of the electricity consumed by the computing servers will be captured and transferred to the heating system. Actual performance metrics will be confirmed once fully operational.

Subject to actual operating conditions, the computing system is expected to achieve attractive capital efficiency. The unique system is expected to lower capital expenditure by removing the industrial cooling towers which would otherwise be needed in liquid-cooled data centers. In terms of operating expenses, Canaan also enjoys a very low all-in cost of power of US$0.035/kWh, which includes the Host's power cost and routine operation, troubleshooting, and maintenance of the Canaan Equipment. If Bitforest participates in grid demand-response or sells power back to the grid, Canaan will share in the economic benefits of such programs, making this PoC a true win-win collaboration.

"With this PoC, we are not just deploying computing equipment for one project—we hope to build a data-driven, replicable model," said Nangeng Zhang, chairman and chief executive officer of Canaan. "This program will allow us to measure, model, and scale heat recovery for agriculture in colder climates. Liquid cooling enables us to output high-temperature hot water above 75°C, making compute heat directly usable for greenhouses. The PoC expands our broader efforts to rethink how computing infrastructure can enhance energy sustainability for households, businesses, and industrial partners."

Large greenhouse facilities often rely on fossil-fueled boilers as their primary heat source. Several regions, including Canada, have adopted carbon pricing to encourage lower-carbon heating options in greenhouses. Canaan's Avalon computing system will provide supplemental heat that ties into Bitforest's existing boiler loop. The combined setup is designed to deliver up to one million tonnes of hot water annually by recycling heat from computing servers that would otherwise be wasted, improving overall site power efficiency while reducing environment impact.

Canaan will continue expanding its energy efficiency initiatives, including industrial heat-reuse deployments, bitcoin-mining space heaters for home use, and ongoing advances in power-efficient Avalon systems built on Canaan-designed semiconductor chips.

About Canaan Inc.

Established in 2013, Canaan Inc. (NASDAQ: CAN), is a technology company focusing on ASIC high-performance computing chip design, chip research and development, computing equipment production, and software services. Canaan has extensive experience in chip design and streamlined production in the ASIC field. In 2013, Canaan's founding team shipped to its customers the world's first batch of mining machines incorporating ASIC technology under the brand name Avalon and, today, the Company's machines have the second largest share of the global bitcoin mining market. In 2019, Canaan completed its initial public offering on the Nasdaq Global Market. To learn more about Canaan, please visit https://www.canaan.io/.

Safe Harbor Statement

This press release contains forward-looking statements. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements can be identified by terminology such as "will," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates" and similar statements. Among other things, the business outlook and quotations from management in this announcement, as well as Canaan Inc.'s strategic and operational plans, contain forward-looking statements. Canaan Inc. may also make written or oral forward-looking statements in its periodic reports to the U.S. Securities and Exchange Commission ("SEC") on Forms 20-F and 6-K, in its annual report to shareholders, in press releases and other written materials and in oral statements made by its officers, directors or employees to third parties. Statements that are not historical facts, including statements about Canaan Inc.'s beliefs and expectations, such as expectations with regard to revenue or mining hash rate deployment, are forward-looking statements. Forward-looking statements involve inherent risks and uncertainties. A number of factors could cause actual results to differ materially from those contained in any forward-looking statement, including but not limited to the following: the Company's goals and strategies; the Company's future business development, the ability of the Company to execute against its goals, financial condition and results of operations; the expected growth of the bitcoin industry and the price of bitcoin; the Company's expectations regarding demand for and market acceptance of its products, especially its bitcoin mining machines; the Company's expectations regarding maintaining and strengthening its relationships with production partners and customers; the Company's investment plans and strategies, fluctuations in the Company's quarterly operating results; competition in its industry; changing macroeconomic and geopolitical conditions, including evolving international trade policies and the implementation of increased tariffs, import restrictions, and retaliatory trade actions; and relevant government policies and regulations

relating to the Company and cryptocurrency. Further information regarding these and other risks is included in the Company's filings with the SEC. All information provided in this press release and in the attachments is as of the date of this press release, and Canaan Inc. does not undertake any obligation to update any forward-looking statement, except as required under applicable law.

Investor Relations Contact

Canaan Inc.
Xi Zhang
IR@canaan-creative.com

Christensen Advisory
Christian Arnell
canaan@christensencomms.com

Public Relations Contact

BlocksBridge Consulting
Jesse Colzani
canaan@blocksbridge.com

View original content:https://www.prnewswire.com/news-releases/canaan-inc-expands-energy-efficiency-initiatives-with-3-mw-compute-heat-recovery-proof-of-concept-at-canadian-greenhouse-302653360.html

SOURCE Canaan Inc.