## The Most Practical Means to Decarbonize Building Heat, SMTI Announces Investment by Enbridge to Commercialize Thermally-Driven Gas Heat Pumps

July 29, 2021

Stone Mountain Technologies, Inc. (SMTI) is pleased to announce that Enbridge Inc. (Enbridge) (TSX: ENB) (NYSE: ENB), a leading North American energy infrastructure company, has invested CAN \$4,000,000 in the late stage start up. The funding provides key support for SMTI's final steps towards the market release of its Thermally Driven Heat Pump (TDHP) technology, currently slated for 2022. Enbridge joins two other strategic investors supporting SMTI.

A simple and direct replacement for furnaces, boilers, and water heaters, TDHPs (also known as gas absorption heat pumps) are the most rapid and economically practical method to reduce the carbon footprint in residential and small/medium-sized commercial buildings.

"Advancing the commercialization of low-carbon technologies for building heat is one example of the initiatives Enbridge is undertaking to lead the transition to a low carbon energy future," said Cynthia Hansen, Executive Vice President & President, Gas Distribution & Storage, Enbridge Inc.

SMTI has developed a low-cost heat-pump technology driven by heat instead of electricity, which is well-suited for colder climates such as the northern half of the US, Canada, and Europe. The design uses a 150-year-old thermodynamic cycle with an extremely long track record of success, re-engineered for optimum heating performance and low-cost manufacturing to take place in North America.

SMTI's heat pump technology has many advantages:

- Requires no additional backup energy sources to keep residents warm and comfortable at winter temperatures as low as minus 40 degrees.
- Reduces energy use, operating cost, and CO2 emissions for space and water heating by 30-50%, with 1/3 of the total heating output derived from renewable energy (from the atmosphere or ground).
- Avoids the need for significant and expensive infrastructure changes to buildings as compared to an electricity delivery system that would result in a mass-scale adoption of electrically driven heat pumps.
- Offers a fast path to net-zero heating by utilizing and leveraging the impact of low-carbon renewable gas and hydrogen blends that are poised to become an increasing part of North America's gas delivery system.
- SMTI's Thermally Driven Heat Pumps are "future proofed" because they utilize a 100% natural refrigerant with zero Global Warming Potential

"I started the company a decade ago in order to develop a low-cost, mass-scalable gas heat pump that doesn't suffer the weaknesses of electric heat pumps in cold climates," says SMTI's CEO, Michael Garrabrant "Decarbonization of space and commercial water heating loads is very difficult to electrify without increasing end-user utility costs and a massive infrastructure build-out that will take decades to achieve, if at all. We are very excited about the potential of our family of heating products to offer immediate CO2 emission reductions while decreasing costs for our customers, in addition to providing a credible path to net-zero as the gas grid decarbonizes over the next decade."

With four years of field trials in residential space and water heating, and commercial water heating applications to refine the product design, third-party verification of a 140% AFUE (Average Fuel Utilization Efficiency) rating, and certification to California's low-NOx emission requirements, SMTI is on the cusp of a commercial launch. Extensive market testing with homeowners, building managers, and installation contractors shows a strong likely market acceptance, owing to its relatively simple ability to replace existing gas heating appliances with a technically straight-forward and economically sound solution.

With the Enbridge investment, SMTI will complete key final steps involved in certifying and testing for reliability the final design of the TDHP product. Final production and market release is planned to begin in 2022.

## For more information, please contact:

Scott Reed VP Strategy & Marketing 818-421-4229 Scott.Reed@StoneMountainTechnologies.com

## **About Enbridge**

Enbridge Inc. is a leading North American energy infrastructure company. We safely and reliably deliver the energy people need and want to fuel quality of life. Our core businesses include Liquids Pipelines, which transports approximately 25 percent of the crude oil produced in North America; Gas Transmission and Midstream, which transports approximately 20 percent of the natural gas consumed in the U.S.; Gas Distribution and Storage, which serves approximately 3.8 million retail customers in Ontario and Quebec; and Renewable Power Generation, which generates approximately 1,750 MW of net renewable power in North America and Europe. The Company's common shares trade on the Toronto and New York stock exchanges under the symbol ENB. For more information, visit www.enbridge.com.

## **About SMTI**

Stone Mountain Technologies, Inc. (SMTI) is a Tennessee corporation, headquartered in Johnson City since 2008. Founded by Michael Garrabrant, its mission is to provide our global customers with high-comfort, cost-effective, low-carbon heating & cooling by developing and manufacturing the world's best Thermally-Driven Heat Pumps and Thermal Compressors. The approach replaces furnaces, boilers, water-heaters with an average fuel efficiency of 140%, saving between 30-50% of energy/cost/emissions inherent to conventional heating technologies. The approach ushers in a new generation of building heat technology.