



## Electrified Thermal Solutions and HWI, A member of Calderys Partner to Transform Industrial Heat

Strategic collaboration on conductive firebrick manufacturing addresses one of the world's most pressing challenges for industrial electrification by offering a unique energy storage solution

**BOSTON (July 24, 2025)** – Boston-based <u>Electrified Thermal Solutions</u>, a leader in electrified heating and thermal energy storage solutions, and <u>HWI, A member of Calderys</u>, one of the leading suppliers of refractory products and services in the United States, today announced a strategic manufacturing partnership. The collaboration will develop and produce electrically conductive firebricks (E-bricks) which will be used in Electrified Thermal's Joule Hive™ Thermal Battery.

The Joule Hive<sup>™</sup> Thermal Battery takes in electricity, then converts and stores it as heat through the E-bricks at temperatures up to 1,800°C (3,275°F), hot enough to power even the most demanding industrial processes. This capability allows customers to deliver consistent, high-temperature heat using renewable electricity at lower cost than traditional fossil fuels.

The E-bricks will be manufactured at HWI's production facilities, combining Electrified Thermal's technology, developed at MIT, with HWI's 160 years of refractory expertise. By leveraging this strategic collaboration, Electrified Thermal and HWI will demonstrate a viable pathway to reduce costs and mitigate emissions across energy-intensive industries. Electrified Thermal's first commercial-scale demonstration is expected to be operational in 2025, with the goal of deploying 2 gigawatts of electrified thermal power by 2030.

"Industrial heat represents one of the most challenging frontiers in the world's effort to address climate change. The majority of energy used annually for industrial heating worldwide comes from burning fossil fuels," said Daniel Stack, Co-Founder and CEO of Electrified Thermal Solutions. "To make a meaningful impact at global scale, we needed a solution that could be produced rapidly through existing supply chains. Our partnership with HWI transforms what could have been a manufacturing bottleneck into a powerful scaling advantage, allowing us to meet the multigigawatt demand we're seeing from industrial customers worldwide."

Ben Stanton, Director, Applications Technology for Thermal Markets, EEC and C/I Network, highlighted the technical synergy behind the partnership: "For generations, HWI has been developing advanced refractory solutions for the most demanding applications in industry. Electrified Thermal's E-Brick material is a breakthrough in refractory technology that maintains the high-temperature durability required by customers, while also generating the heat to run their





processes. This partnership aligns perfectly with our Group's commitment to supporting our customers through their energy transition journey."

The industrial sectors increasingly seek viable pathways to reduce emissions while maintaining reliable performance, and this collaboration offers both benefits while providing opportunities to expand production throughput.

Bruno Touzo, Global Vice President of Innovation & Technology for Calderys Group, concluded: "Leveraging our extensive global network, deep expertise in refractory materials, and established supply chains, we are well-positioned to support the design and rapid scale-up of E-brick manufacturing. This collaboration aligns closely with our broader innovation strategy and enables us to respond effectively to the growing demand from industries transitioning to cleaner energy solutions."

**About Electrified Thermal Solutions:** Electrified Thermal Solutions is pioneering the future of zero-carbon industrial heat. Developed at MIT, the electrically and thermally conductive bricks at the heart of Electrified Thermal's Joule Hive<sup>TM</sup> Thermal Battery (JHTB) represent a step-change improvement in electric heating technology in terms of high-temperature performance and durability. The company's JHTB generates, stores, and delivers unprecedented near-flame temperature heat (up to 1,800°C / 3,275°F), offering the most cost-effective, clean alternative to fossil fuels.

With industrial heat processes responsible for over 20% of global greenhouse gas emissions, Electrified Thermal is creating the commercially viable decarbonization pathway for industries such as power, cement, mining, steel and metals, chemicals, and food processing. The Boston-based company is on track to commercialize the JHTB by 2026, accelerating the transition to decarbonized industrial processes and helping industries meet their net-zero goals.

For more information, please visit www.electrifiedthermal.com

## **About HWI:**

HWI is one of the leading suppliers of refractory products and services in the United States, with a history that spans 160 years. It is part of Calderys and is the brand for the Americas region of the Group. HWI operates an extensive network of manufacturing sites and distribution centers across the Americas, along with the largest refractory industry research facility in North America. Serving virtually every major industry that requires refractory solutions to enhance production and protect assets, HWI is consistently recognized for its talented experts, industry firsts, and intensely driven excellence.

For more information visit www.thinkhwi.com





## **Media Contacts**

Electrified Thermal Solutions
Emily Torrans
Mahoney Communications Group
EmilyT@MahoneyCommunications.com
(212) 220-6045

HWI, A member of Calderys Jennifer Faines Public Relations <a href="mailto:jfaines@thinkHWI.com">jfaines@thinkHWI.com</a> (412) 559-2860