

Rondo Powers Up World's Largest Industrial Heat Battery

100 MWh Rondo Heat Battery, world's most efficient energy storage of any kind, now delivering 24-hour steam from off-grid solar power — proving a new path for factories to cut carbon and costs

ALAMEDA, Calif., Oct. 16, 2025 /PRNewswire/ — Today, Rondo Energy announced the start of commercial operation of the world's largest industrial heat battery. A 100 MWh Rondo Heat Battery (RHB) has entered daily automatic operation, powered exclusively by an on-site PV solar array and delivering continuous high-pressure industrial heat and steam to a Holmes Western Oil Corporation facility in California. The unit sets new records for the industrial heat battery industry in capacity, round-trip efficiency, and power. This 100 MWh unit delivers a volume of heat equivalent to 10,000 home heating systems.

During the day, off-grid solar PV charges the heat battery, and the RHB delivers heat 24-hours a day. After 10 weeks of operation, the project has achieved all milestones for daily automatic operation, performance, efficiency, and reliability proving out Rondo's unique design, which boasts storage temperatures over 1000°C and round-trip efficiency above 97%.

"The Rondo Heat Battery is now proven at industrial scale," said Eric Trusiewicz, CEO of Rondo Energy. "We are already deploying heat batteries across four continents and five industries. Our customers are improving their competitiveness and slashing their carbon emissions at the same time."

This Rondo Heat Battery is directly delivering steam alongside gas-fired boilers without changes to the facility. This project was delivered with zero lost-time injuries and is fully meeting all customer contract specifications. By replacing gas consumption with the fixed-cost of on-site solar power, the project reduces energy cost volatility, as well as reducing regulatory and carbon market exposure. The lower carbon intensity of the customer's fuel products strengthens competitiveness in low-carbon markets.

Decarbonizing Industry at Scale

Industrial heat makes up 25% of global final energy use, and industries from chemicals to cement rely on high-temperature heat. Rondo's technology provides a simple and safe way for manufacturers to reduce costs and slash Scope 1 emissions today.

Unlike heat pumps or electric boilers that need constant power, the Rondo Heat Battery charges using only the six lowest-cost hours of electricity per day — whether from off-grid solar or from the grid. Intermittent and low-cost hours of electricity are becoming available in electricity systems around the world, thanks to the deployment of solar & wind.

"The commercialization of the heat battery represents yet another global inflection point for solar & wind power, said Andy Lubershane, Partner at Energy Impact Partners. "Just as electric vehicles opened up the transport market to renewable electricity, heat batteries will open up an even larger new market, industrial heat, which accounts for roughly a quarter of global energy consumption. We're thrilled that Rondo is leading the way."

Simple, Proven, Safe

The Rondo Heat Battery's storage medium uses only brick and wire — abundant, proven materials that can't catch fire, explode, or cause toxic leaks. Heat batteries replace or drop in alongside industry-standard boilers and seamlessly integrate into existing steam flanges, delivering steam at any conditions at 100+ bar (1450 PSI). Because it produces no emissions, it requires no air permits, easing deployment.

Global Scale, Ready Now

Rondo is already developing and operating projects across North America, Europe, Asia, and Australia, with deployments underway for chemicals, biofuels, food & beverage, and cement. The company's technology scales quickly, using only proven industrial components and no scarce minerals.

With the 100 MWh Rondo Heat Battery now online, Rondo is demonstrating the future of industrial heat, power, and cogeneration — renewable, reliable, and cost-competitive.

About Rondo Energy

Rondo is purpose-built for industrial facilities: Rondo Heat Batteries are constructed from proven, durable materials and are designed for seamless integration with existing industrial equipment and processes. Whether deployed as a drop-in replacement for retiring fossil-fueled heating equipment or as a resilient complement to existing systems, Rondo requires no disruptive changes to customers' operations.

Building on strong momentum, including five full industrial-scale heat batteries in deployment globally, Rondo is actively scaling deployment and manufacturing. Rondo currently operates the world's largest thermal energy storage for industry, a 100 MWh Rondo Heat Battery. Rondo Energy is headquartered in California, with a global team throughout North America, Europe, Asia, and Australia.