

What is Antora thermal battery?

Antora's thermal battery turns cheap, clean energy into the standard that powers global industry. Charges with surplus clean electricity to deliver cost-effective, zero-emission energy at a predictable price. Multi-day storage delivers always-on heat and power for industrial operations where downtime is not an option.

What is Antora energy?

Antora Energy is unlocking zero-emissions industrial heat and power, cheaper than fossil fuels. Antora's thermal battery uses renewable electricity to heat blocks of solid carbon--a low-cost, earth-abundant, and safe storage medium that's used extensively across industries--to glowing-hot temperatures.

Is Antora launching a heat-only battery product?

Antora is currently developing major commercial projects for its first heat-only battery product as Antora's combined heat and power battery product moves rapidly towards commercialization.

How does Antora work?

Antora's thermophotovoltaic (TPV) technology converts light from the hot carbon blocks into electricity with no moving parts. This enables output of both electricity and heat at industrial scale. Antora's factory-made thermal batteries flexibly scale to match the energy needs of any industrial facility.

What can Antora do for your business?

They Could Also Help Spell the End of Fossil Fuels. LET'S TALK ABOUT WHAT ANTORA CAN DO FOR YOUR BUSINESS. Electrify industrial operations, predictably and profitably. Antora's American-made thermal batteries convert renewable energy into reliable heat & power.



This week we spoke to Antora Energy, a thermal battery company which is currently building a world-first thermal energy storage system featuring thermophotovoltaic cells. Antora will buy excess renewable electricity from the grid to store it as heat in graphite blocks. This energy can be converted back to electricity via thermophotovoltaic solar cells, or ???



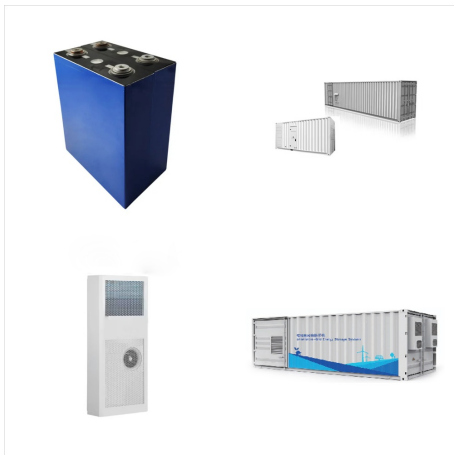
Sunnyvale, CA ??? Antora Energy, a leader in zero-emissions industrial heat and power, has been selected by the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E) to begin award negotiations for up to \$14.5 million to accelerate the launch of Antora's combined heat and power thermal battery product.



Antora's thermal battery manufacturing facilities and demonstration unit are located in sun-soaked California, where renewables make up close to a third of all electricity. But Antora's team says its technology holds promise in other regions as increasingly large renewable projects connect to grids across the globe.



Antora's thermal battery converts low-cost, intermittent renewable electricity into a reliable, on-demand source of zero-emissions industrial heat and power. Industry is the single biggest



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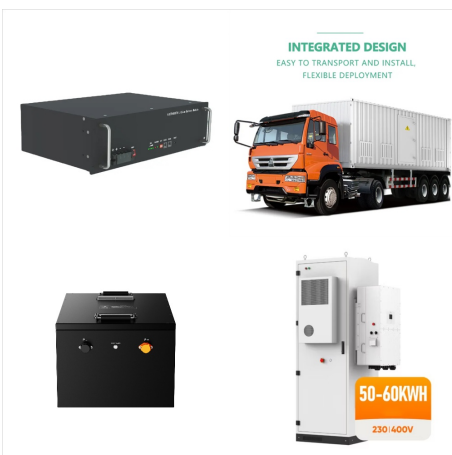
We turned on our first thermal battery deployment in 2023, and now we're on the path to manufacturing thousands. Our landmark gigafactory in San Jose, California is actively producing thermal batteries for our first commercial projects.



Similar to Rondo, Antora's battery uses carbon blocks that are extremely stable and relatively inexpensive to produce to store heat produced from electric elements. In addition to extracting heat directly from the battery for industrial processes, Antora has also developed innovations around thermophotovoltaic (TPV) cell technology.



The Antora Energy team will develop key components for a thermal energy storage system (solid state thermal battery) that stores thermal energy in inexpensive carbon blocks. To charge the battery, power from the grid will heat the blocks to temperatures exceeding 2000°C (3632°F) via resistive heating. To discharge energy, the hot blocks are exposed to ???



Antora's thermal battery can store 15 megawatt hours in the footprint of a shipping container???that's 5 times more than a Lithium-ion battery. Antora's thermal batteries take excess solar and wind energy not needed for the grid, and use it to heat blocks of carbon until they're glowing hot ??? think of the glow from your toaster when



Today, we're proud to announce that Antora has been selected by ARPA-E for a \$14.5M award to accelerate the launch of our combined heat and power thermal battery product. This funding unlocks commercial-scale manufacturing for Antora's pioneering heat-to-power technology and paves the way for gigaton-scale decarbonization impact in the industrial sector.



To learn more about Antora Energy, visit and follow the company on LinkedIn and Twitter. About Antora Energy . Antora Energy is unlocking zero-emissions industrial heat and power, cheaper than fossil fuels. Antora's thermal batteries convert low-cost, intermittent renewable electricity into reliable industrial energy.



Just like any other battery, including Li-ion, you charge Antora's battery with electricity. If it's renewable-energy-generated electricity???the cheapest form of primary energy in the world???it's going to be intermittent due to natural fluctuations in wind and sunshine.



Antora Energy's battery energy storage system (BESS). It is currently at a technology readiness level (TRL) of 7 and not ready for full-scale deployment. To support decisions on the value of near-term demonstrations, this analysis looked at the potential value of Antora Energy's BESS if deployed in the future.



Antora Energy ??? thermal battery named one of fast company's 2023 world changing ideas. The winners of Fast Company's 2023 World Changing Ideas Awards were announced, honoring sustainable designs, innovative products, bold social initiatives, and other creative projects that are changing the way we work, live, and interact with the world.



Assignee: Antora Energy, Inc. Inventors: Andrew Joseph Ponec, Justin Briggs, David Bierman, Sam Kortz Actuated heat engines can be utilized to discharge the solid-state thermal battery, converting the heat stored in the thermal storage medium into electricity. The heat engines are actuated in a manner that reduces thermal gradients in the



Antora's solution is to collect electricity from inexpensive, renewable sources like wind and solar and store it as high-temperature heat, creating a thermal battery. This stored thermal energy can then be used directly to provide process heat up to 1500°C, which many industrial processes require, or it can be converted back to the



US thermal batteries company Antora Energy has completed a USD 150 million (EUR 138m) Series B funding round led by Decarbonization Partners, a joint venture between US investment giant BlackRock (NYSE:BLK) and Singapore's sovereign wealth fund Temasek. At the scale and temperatures required by large industrial operations, the company



Antora Energy, an American cleantech company founded in 2017, develops a low-cost thermal storage solution for grid-scale energy storage of renewable. Antora Energy heat battery. As schematically depicted in the ???



Factory Marks Significant Milestone for Large-Scale Industrial Decarbonization and Domestic Manufacturing . Sunnyvale, CA ??? Antora Energy, a leader in zero-carbon heat and power for the industrial sector, has announced its first large-scale thermal battery manufacturing facility. Located in San Jose, California, the 50,000-square-foot manufacturing facility will be ???



Thermal battery maker Antora Energy on Thursday said it has raised \$150 million in a funding round led by a tie-up between the world's biggest asset manager BlackRock and Singapore state



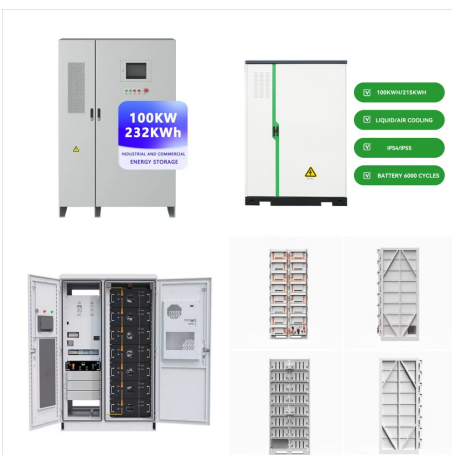
Antora Energy, a developer of thermal batteries, secured \$150 million in Series B funding to help ramp up production. The round was led by Decarbonization Partners, a partnership between BlackRock and Temasek. ???



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Antora Energy is addressing the intermittent nature of wind and solar with a low-cost, highly efficient thermal battery that stores electricity as heat to allow manufacturers and other energy-hungry businesses to eliminate their use of ???



Drawing inspiration from smelting plants, which already utilize hot rocks to store ten times more energy than all the world's lithium-ion battery storage combined, Antora is innovating by incorporating cavities and insulated ???



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Antora's thermal battery can output electricity at "breakthrough efficiencies" using proprietary heat-to-power "thermophotovoltaic" (TPV) technology, which converts the stored heat directly to ???



Antora's modular architecture enables rapid installation by an experienced construction team to deliver projects on time and on budget. 5 Operation & Maintenance We ensure reliable plant operations using advanced software and controls, experienced on-site operators, and around-the-clock monitoring.



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An Antora thermal battery leaving the factory
Manufacturing at Scale From the very beginning, we've designed our American-made thermal batteries for rapid production and scale. We turned on our first thermal battery deployment in ???