

Redoxblox Closes \$40.7 Million Series A to Support Industrial Decarbonization and Grid Storage with Next-Gen Thermochemical Energy Storage System

The company welcomes Pasquale Romano as CEO to bring to market, at scale, products that make powering the planet with zero emissions energy practical.

San Diego, CA (October 30, 2024) – Redoxblox raised an additional \$30M in Series A funding, led by Prelude Ventures and joined by Imperative Ventures and New System Ventures, alongside existing investors Breakthrough Energy Ventures and Khosla Ventures. This brings the total Series A round to \$40.7M. Redoxblox is pioneering a new class of low-cost thermochemical energy storage systems (TCES) designed to accelerate industrial decarbonization and address long duration energy storage needs for the grid. The company's TCES units store energy both chemically and as heat at high temperatures, allowing for continuous or on-demand discharge for industrial processes or electricity generation. The system can fast charge when electricity prices are low or during periods of surplus renewables generation.

Today, 95% of industrial heat is provided by fossil fuels, which accounts for [30% of global carbon emissions](#). Decarbonizing this sector has been historically challenging due to a lack of affordable emissions-free alternatives. With a conversion efficiency comparable to lithium-ion batteries, higher energy density, and direct high temperature air discharge, Redoxblox provides the first reliable, cost-competitive solution to effectively use electricity as an alternative to fossil fuels. The system also offers space efficient, grid-scale long duration energy storage, enabling intermittent renewables to meet baseload needs.

The company also announces the appointment of a new CEO, Pasquale Romano, formerly President and CEO of ChargePoint and currently Member of The President of the United States' National Infrastructure Advisory Council (NIAC). Romano will lead the company through its next phase of growth, expanding into key industrial heat and long duration grid scale storage markets.

"Decarbonization depends on widespread adoption of cost-competitive alternatives to fossil fuels for industrial heat applications that address the time-varying nature of electricity demand and fluctuating renewable generation. Our goal is to address the density, cycle life, reliability, efficiency, and cost requirements to enable the world to decarbonize without economic compromise," said Romano. "Decarbonization has to be a natural side effect of utilizing cost-competitive technologies to meet the world's energy needs."

The company's Series A funding follows grants from the California Energy Commission (CEC) and the U.S. Department of Energy (DOE). Redoxblox was selected by the CEC for a project to demonstrate the ability to provide 24 hours of electricity storage capacity in collaboration with UC San Diego and the Electric Power Research Institute (EPRI). Similarly, the DOE's Industrial Efficiency and Decarbonization Office chose Redoxblox for an industrial-scale thermochemical energy storage project, partnering with Dow Chemical and EPRI to decarbonize steam production at Dow's West Virginia plant. Both initiatives represent significant strides toward decarbonizing industrial heat and grid storage at scale.

Redoxblox's technology offers several advantages over traditional energy storage. The storage modules are built with stable, long-lasting, non-toxic, non-flammable, and recyclable materials that can operate at temperatures up to 1500°C. After extensive cycle testing, the material proved capable of supporting mission critical industrial applications and as a reliable energy store for the grid. A single unit can store up to 20 MWh of energy at 95% round trip efficiency. Multiple units can be combined to meet the energy requirements at large facilities and can charge in as little as two hours. The system is designed to

integrate seamlessly into existing industrial processes, allowing businesses to adopt without significant alterations to how their business works.

“Redoxblox is tackling one of the toughest sectors to decarbonize, industrial heat,” said Gabriel Kra, Managing Partner at Prelude Ventures. “They've accomplished what once seemed impossible: creating an electrical alternative to natural gas that is affordable, easy to adopt, and charges more quickly than other solutions. We're excited to support them as they continue to scale and bring this solution to market.”

About Redoxblox

Located in San Diego, Redoxblox is pioneering a new class of low-cost thermochemical energy storage systems (TCES) designed to accelerate industrial decarbonization and address long duration energy storage needs for the grid. The company's TCES units store energy both chemically and as heat at very high temperatures that can be discharged continuously or as needed directly into industrial processes or as an energy source for electricity generation. The system can be fast charged when electricity prices are low or during surplus renewables generation and discharged as needed. Redoxblox is backed by Prelude Ventures, Khosla Ventures, Breakthrough Energy Ventures, Imperative Ventures, and New System Ventures. To learn more, [visit the website](#) or follow [Redoxblox on LinkedIn](#).

About Prelude Ventures

Prelude Ventures is a climate-focused venture capital firm that invests in and supports early-stage startups with the greatest potential to mitigate climate change. For over a decade, Prelude Ventures has sought out purpose-driven founders and provided the capital and expertise needed to build the next generation of category-defining businesses that will reshape our global economy for the greater good of people and the planet. Located in San Francisco, Prelude Ventures has approximately \$2 billion under management.