



HYDROSTOR

Rock-Solid Energy Storage Solutions

Hydrostor is a technology company dedicated to developing foundational long duration energy storage solutions. Hydrostor's technology operates on a compact footprint with flexible siting to deliver energy storage capacity of eight hours or more.

Using air, rock, water, an established supply chain, and skilled labor force, Hydrostor's pioneering technology is expanding the grid's capacity and accelerating the integration of renewable power supplies for a more reliable and resilient energy future.

Integrating Proven Technology and Construction Approaches



Utility-Scale (500+ MW)



Existing Supply Chains



Using Air, Rock, & Water



Long-Duration (8+ Hours)



Warranty & Bonding



Highly Scalable



Cost Effective



Customized System Design



Patented Process



Flexible Siting & Low Impact



Zero Degradation



50+ Year Asset Lifetime



Emission Free Operation

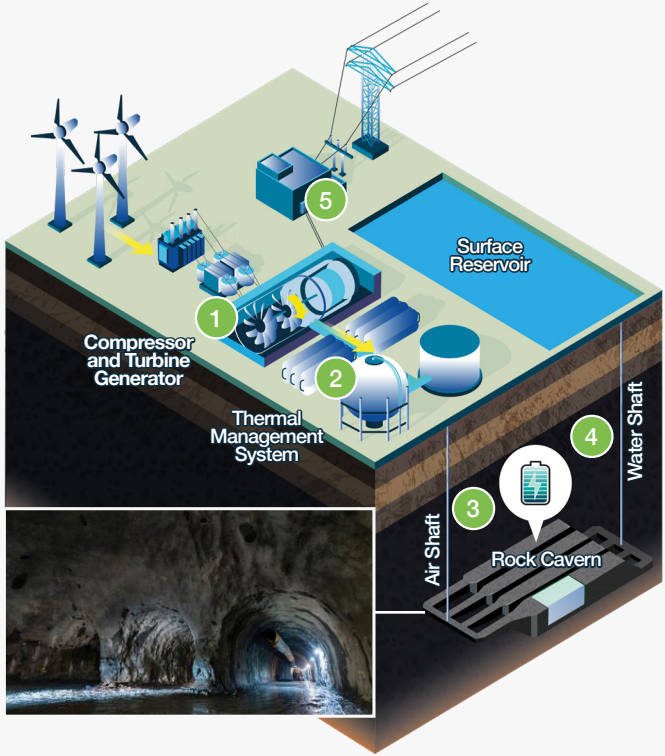


Effective, Unrestricted Cycling



Synchronous Inertia

How A-CAES Works?



1. Compression

Off-peak renewable electricity powers a compressor, that compresses the air and generates heat in the process

2. Heat exchange

Heat generated during compression is extracted from the air and captured by the thermal management system for reuse

3. Air storage

Compressed air is pumped into a purpose-built, water-filled cavern to be stored

4. Water displacement

Compressed air displaces water, forcing it up the shaft to the surface reservoir

5. Fully charged state and discharge

Once reservoir is filled, the plant is ready to provide energy on-demand by reversing the process and turning the above-ground turbine to generate electricity

Our projects



500 MW project in Kern County to help meet California’s requirement for utilities to procure 1,000 MW of long-duration storage resources and ensure reliability statewide.



200MW, 8-hour (1,600 MWh) energy storage capacity. Precedent setting project that is providing critical reliability services to the grid.

Investors:



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