



Project Site:

The Quinte Energy Storage Centre – East is a proposed Advanced Compressed Air Energy Storage (A-CAES) facility under development in Loyalist Township. The Project will support Ontario's growing capacity needs and will power up to 500,000 homes once operational, expected in 2033. The Project is being developed in partnership with the Mohawks of the Bay of Quinte.



Project Benefits:



Job Creation

Approximately 650 construction jobs will be generated during peak construction, and up to 40 full-time positions will be created once the facility is operational.



Economic Impact

The Quinte Energy Storage Centre will create over \$1 billion of new economic impacts across Ontario.



Proven Technology

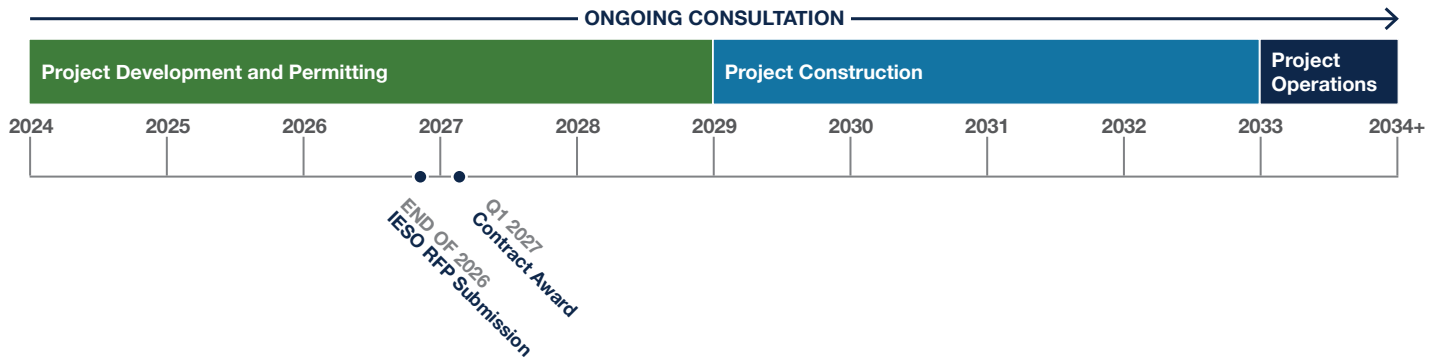
A-CAES technology is an evolution of traditional compressed air energy storage technology, that has been used globally for decades, and utilizes proven equipment and supply chains. The technology's operation produces no emissions.



Canadian Owned

Hydrostor is a Canadian company and a global leader in long-duration energy storage, headquartered in Ontario. Our made-in-Canada technology is being deployed worldwide.

Proposed Timelines



Frequently Asked Questions:

How big is the facility?

The footprint of the plant depends on the total megawatt capacity of the planned operation, however a typical full-scale project should be expected to have a footprint of between 100 and 200 acres depending on the capacity and potential for growth.

How long will construction and development take? How many people will be working at the site during this process?

The combined timeline for development and construction is estimated at five to six years, with the development and permitting phase lasting approximately two to three years and construction taking three to four years. Once underway, construction is expected to support up to 650 jobs at peak construction, offering meaningful employment opportunities and contributing to the strength of the local economy. Prior to the start of construction, there will be minimal on-site activity and no significant increase in traffic. Local communities will be provided with ample opportunity to review and provide feedback on the proposed project during the development and permitting phases to ensure residents are informed and know what to expect.

How many people will be working at the facility after construction?

The facility is expected to employ 40 full-time employees once operational, which will contribute directly to the local economy throughout the expected 50+ year life of the facility.

How tall is this structure and what will the visual impact be?

Hydrostor is committed to minimizing visual impact and complying with all relevant permitting standards. The facility's highest point will be approximately 34 meters (around 110 feet) tall.

What is the operational life of this facility? Can you explain how an A-CAES facility gets decommissioned?

Hydrostor A-CAES facilities have design lifespans of over 50 years. When the facility is ultimately retired, similar to mining best practices, the cavern is filled with water and the shaft is capped. All above-ground facilities are then decommissioned and removed, and the site is brought back to near original condition consistent with local guidelines and permitting requirements.

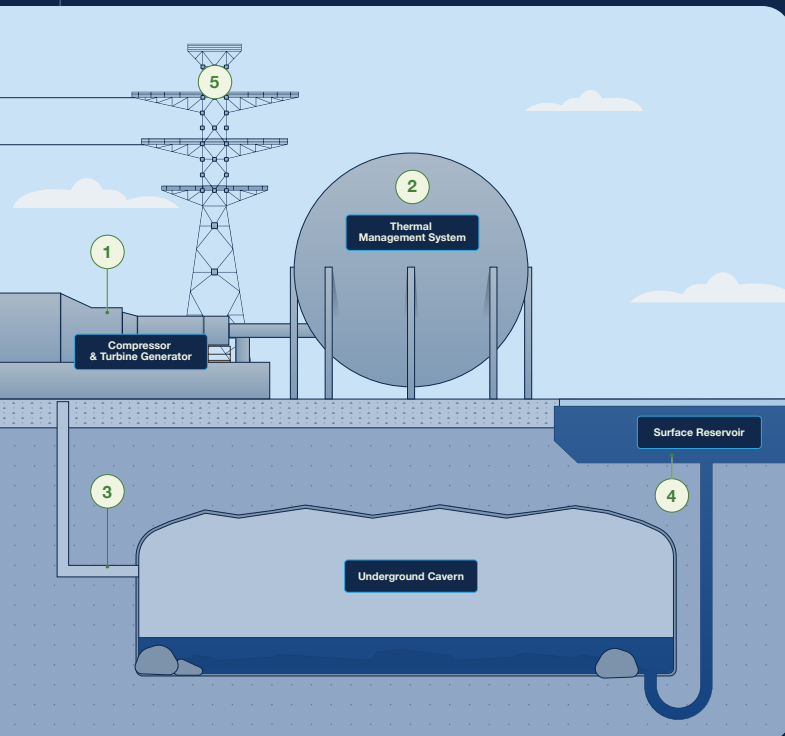
Do A-CAES facilities have the same safety risks as batteries?

A-CAES facilities store power in air and water, and use proven turbomachinery that have long been used in power plant operations. There are no hazardous materials or chemicals used in A-CAES facilities and no critical minerals, meaning the risks associated with A-CAES are significantly less than those associated with batteries, and more similar to those associated with a typical power plant.

Introducing Hydrostor

Hydrostor is a leading energy storage, technology, and infrastructure company dedicated to developing utility-scale long duration energy storage solutions.

Improving upon a proven, commercially mature technology to store compressed air in underground caverns, Hydrostor's cost-effective Advanced Compressed Air Energy Storage (A-CAES) delivers energy security and lasting reliability from a compact facility that can be strategically located to meet regional needs.



The Closed Loop A-CAES Process

- 1 Compression**
Energy powers an air compressor, generating heat in the process.
- 2 Heat exchange**
Heat is extracted from the compression process and captured by a thermal management system for reuse.
- 3 Air storage**
Compressed air is pumped down and stored in a purpose-built, water-filled cavern.
- 4 Water displacement**
Compressed air displaces water, forcing it up the shaft to the surface reservoir.
- 5 Discharge**
When energy is needed, the process is reversed to generate electricity.

Our Active Projects

KERN COUNTY, CALIFORNIA



 **WILLOW ROCK**
ENERGY STORAGE

500 MW (4,000 MWh) project in Kern County to help meet California's requirement for utilities to procure long-duration storage resources and ensure grid reliability.

BROKEN HILL, NEW SOUTH WALES



 **SILVER CITY**
ENERGY STORAGE

Precedent setting project that is providing LDES capacity and transmission reliability service with a 200 MW, 8-hour (1,600 MWh) long-duration storage project.

Building Projects and Partnerships

We power communities and become a part of them. Please let us know how we can support the priorities of your community. We'd love to hear from you, please call us at [613-917-0373](tel:613-917-0373) or email us at Quinte@hydrostor.ca.



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