

# Unlocking the Potential of Salt Caverns, Reservoirs, and Hard Rock Storage to Support Alberta and Canada’s Energy Transition Goals

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## Overview

This article examines the potential for utilizing salt caverns, reservoirs, and hard rock formations as pivotal solutions in Alberta and the rest of Canada’s energy transition. With a focus on hydrogen, compressed air, and carbon dioxide storage, it explores the geological feasibility, engineering challenges, and economic opportunities associated with these subsurface storage methods. The discussion also highlights ongoing energy storage projects, offering insights into their development, applications, and alignment with Canada’s energy transition goals.

In addition, the article examines the strengths and limitations of each storage type, including salt caverns, reservoirs, and hard rock storage. It examines the circumstances under which each method is most appropriate, considering factors such as geological suitability and cost efficiency. By addressing these critical considerations, the article aims to offer actionable insights for stakeholders seeking to leverage underground storage to advance Canada’s energy transition.