

# Cave air energy storage power generation





## Overview

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What is Jintan salt cavern energy storage project?

The second phase of Jintan Salt Cavern Compressed-Air Energy Storage Project plans to build two 350-megawatt non-supplementary fired compressed air energy storage units, with a total volume of 1.2 million cubic meters, making it the largest in unit capacity, storage volume, and efficiency.

How much energy can a salt cavern store?

When salt cavern CAES stores 5% of solar and wind energy, the required energy storage capacity will reach 485.0 TWh by 2050. If 50% of Class A salt caverns and 20% of Class B salt caverns are repurposed for CAES (Mode 1), mining enterprises could provide 466.6 TWh of storage capacity by 2050.

Are abandoned salt caverns feasible for energy storage in China?

Abandoned salt caverns are feasible for energy storage in China. Minimum pressure of 9–12 MPa is recommended for Pingdingshan salt cavern. Investment cost is estimated for compressed air storage in salt caverns in China. Levelized cost is calculated for salt cavern compressed air energy storage systems.

What is compressed air energy storage (CAES)?

Compressed air energy storage (CAES) shows significant development potential compared to pumped hydro energy storage (PHES). For example, Germany's Huntorf CAES project, which has operated since 1978, provides 290 MW of generating capacity and can be started within 8 min for emergency use .



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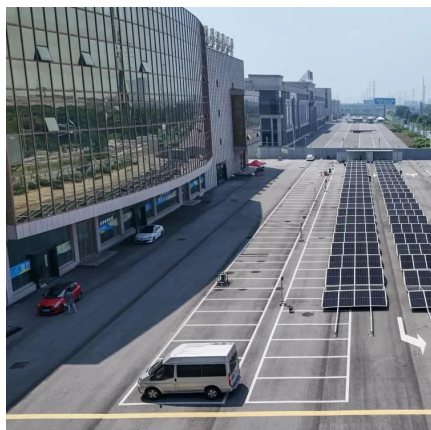


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