

# Chile compressed air energy storage power generation





## Overview

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Some of the existing natural gas pipelines in Chile are underutilized; thus, these reservoirs could be utilized as Compressed Air Energy Storage (CAES) systems taking advantages of fluctuations in the price of e.

How many energy storage projects are in Chile?

Currently, 36 of the 129 large-scale projects Latin America projects with an energy storage component under development are in Chile, including 32 out of 71 of the region's early works projects. The storage technologies either in use or being considered include:

What kind of energy does Chile use?

Chile has the potential to run exclusively on renewable generation, with an estimated energy mix of 46% solar, 31% wind, 12% hydroelectric, and 8% flexible natural gas power plants, as well as 23% of battery storage capacity. The remaining 2% is split between biomass, geothermal, and other less common energy sources.

How much battery storage capacity does Chile have?

According to data from Acera, the Chilean Renewable Energy Association, there are only 64MW of battery storage capacity currently active, representing 0.2% of national capacity. AES Andes, a subsidiary of U.S. company AES Corp. operates all 64MW at their Angamos and Los Andes substations.

Will Chile support the energy transition?

A spokesperson for Engie Group told Dialogue Earth that Chile is seen as one of its strategic countries for supporting the energy transition, which "entails the investment of USD 1.8 billion by 2027. Our plan in Chile considers incorporating 1.4 GW to reach 2 GW of installed capacity in clean energy, including 2 GWh in storage systems".



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### [Compressed air energy storage: Characteristics, basic](#)

Feb 3, 2018 ·

With increasing global energy demand and increasing energy production from renewable resources, energy storage has been considered crucial in conducting energy ...

### Chile Energy Storage

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### [Latin America's energy storage leader is getting creative](#)

Jul 21, 2021 · And finally, Chile's energy regulator (Comisión Nacional de Energía or CNE) can pay for energy storage assets to support grid infrastructure. This last market is being targeted ...



### [Compressed Air Energy Storage \(CAES\): A Comprehensive ...](#)

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[Assessment of a Compressed Air Energy Storage System ...](#)

Mar 1, 2020 · A Compressed Air Energy Storage (CAES) system is a plant that allows storage of energy by means of air compression. The energy is subsequently released by power ...



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Multi-objective optimization of a combined cooling, heating, and power system with subcooled compressed air energy storage considering off-design characteristics



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Compressed air energy storage santiago Chile's installed base of 64megawatts and 79megawatt-hours of storage (based on figures from ...



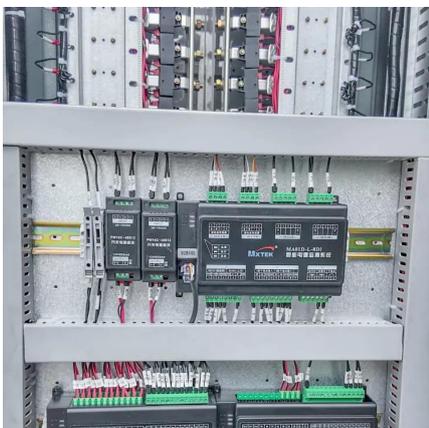
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**Energy storage/power/heating production using compressed air energy**

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[Finding a Longer-Duration Alternative to Battery Storage](#)

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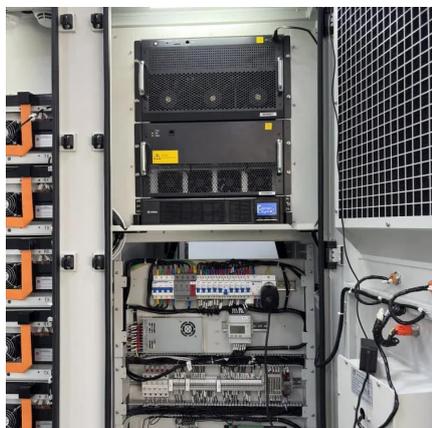


[Compressed Air Energy Storage Systems](#)

Jul 16, 2025 · Technical Terms Compressed Air Energy Storage (CAES): A method of storing energy by compressing air and storing it under high pressure, which is later expanded to ...

**Compressed air energy storage based on variable-volume air storage...**

Feb 28, 2025 · Compressed Air Energy Storage (CAES) is an emerging mechanical energy storage technology with great promise in supporting renewable energy development and ...



[Performance assessment of compressed air energy storage ...](#)

Nov 1, 2023 · In this study, two integrated hybrid solar energy-based systems with thermal energy storage options for power production are proposed, thermodynamically analyzed and ...



## Research progress of compressed air energy storage and its ...

Dec 2, 2025 · Abstract: Compressed air energy storage(CAES) is an energy storage technology that uses compressors and gas turbines to realize the conversion between air ...



### [New compressed air energy storage system](#)

With excellent storage duration, capacity, and power, compressed air energy storage systems enable the integration of renewable energy into future electrical grids. There has been a ...



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