

Efficiency and cost of compressed air energy storage

Source: <https://h2arq.es/Sat-19-Nov-2022-18619.html>

Website: <https://h2arq.es>

This PDF is generated from: <https://h2arq.es/Sat-19-Nov-2022-18619.html>

Title: Efficiency and cost of compressed air energy storage

Generated on: 2026-03-27 15:24:51

Copyright (C) 2026 . All rights reserved.

For the latest updates and more information, visit our website: <https://h2arq.es>

OverviewTypesCompressors and expandersStorageEnvironmental ImpactHistoryProjectsStorage thermodynamicsCompression of air creates heat; the air is warmer after compression. Expansion removes heat. If no extra heat is added, the air will be much colder after expansion. If the heat generated during compression can be stored and used during expansion, then the efficiency of the storage improves considerably. There are several ways in which a CAES system can deal with heat. Air storage can be adiabatic, diabatic, isothermal, or near-isothermal.

Web: <https://h2arq.es>

