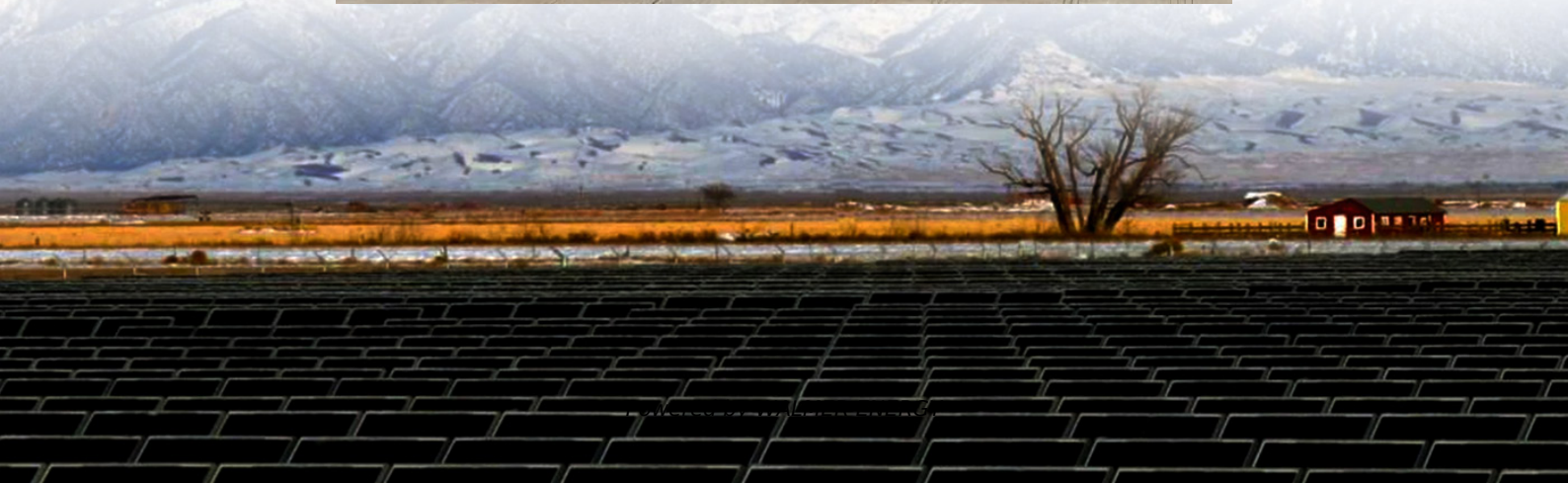


Low-pressure mobile energy storage container for scientific research stations





Overview

Can solid-state hydrogen storage materials be used for large-scale storage?

In solid-state hydrogen storage materials, Shanghai Jiaotong University and H2 Store (Shanghai) Energy Tech. Co. Ltd. jointly developed China's first 70 kg-level magnesium-based solid-state hydrogen storage prototype device, which can be used for large-scale storage and transportation of hydrogen in the future.

Why do we need hydrogen storage technologies?

Consequently, hydrogen storage technologies are required to balance hydrogen production and demand throughout the year. When solar energy is not available or cannot meet the hourly electricity supply to the electrolyser, hydrogen is regenerated through the dehydrogenation process.

What is hydrogen storage based on?

Z.Yanxing, G.Maoqiong, Z.Yuan, D.Xueqiang, S.Jun Thermodynamics analysis of hydrogen storage based on compressed gaseous hydrogen, liquid hydrogen and cryo-compressed hydrogen.

What is compressed hydrogen storage?

Compressed hydrogen storage represents the simplest and the most widely used method of hydrogen storage, finding application in both stationary systems, such as hydrogen-powered energy plants, and mobile applications. This method is favored for its operational simplicity, characterized by rapid hydrogen filling and release.



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