

## ContainerPower Energy Solutions

# Two diversifications of new energy storage



## Overview

---

From iron-air batteries to molten salt storage, a new wave of energy storage innovation is unlocking long-duration, low-cost resilience for tomorrow's grid. Why are energy storage technologies important?

They are also strategically important for international competition. KPMG China and the Electric Transportation & Energy Storage Association of the China Electricity Council ('CEC') released the New Energy Storage Technologies Empower Energy Transition report at the 2023 China International Energy Storage Conference.

What is the future of energy storage?

Diversifying the Materials and Technologies for the Future of Energy Storage It is increasingly important to meet the growing global energy demand driven by factors such as population growth, electrification, and the rapid development of emerging economies, while minimizing the environmental harm caused by carbon dioxide emissions.

How many electrochemical storage stations are there in 2022?

In 2022, 194 electrochemical storage stations were put into operation, with a total stored energy of 7.9GWh. These accounted for 60.2% of the total energy stored by stations in operation, a year-on-year increase of 176% (Figure 4).

How can research and development support energy storage technologies?

Research and development funding can also lead to advanced and cost-effective energy storage technologies. They must ensure that storage technologies operate efficiently, retaining and releasing energy as efficiently as possible while minimizing losses.

What are the different types of energy storage technologies?

Depending on how energy is stored, storage technologies can be broadly divided into the following three categories: thermal, electrical and hydrogen

(ammonia). The electrical category is further divided into electrochemical, mechanical and electromagnetic (Figure 2).

How can a new technology improve energy storage capabilities?

New materials and compounds are being explored for sodium ion, potassium ion, and magnesium ion batteries, to increase energy storage capabilities. Additional development methods, such as additive manufacturing and nanotechnology, are expected to reduce costs and accelerate market penetration of energy storage devices.

## Two diversifications of new energy storage

---

### Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.websparafotografos.es>