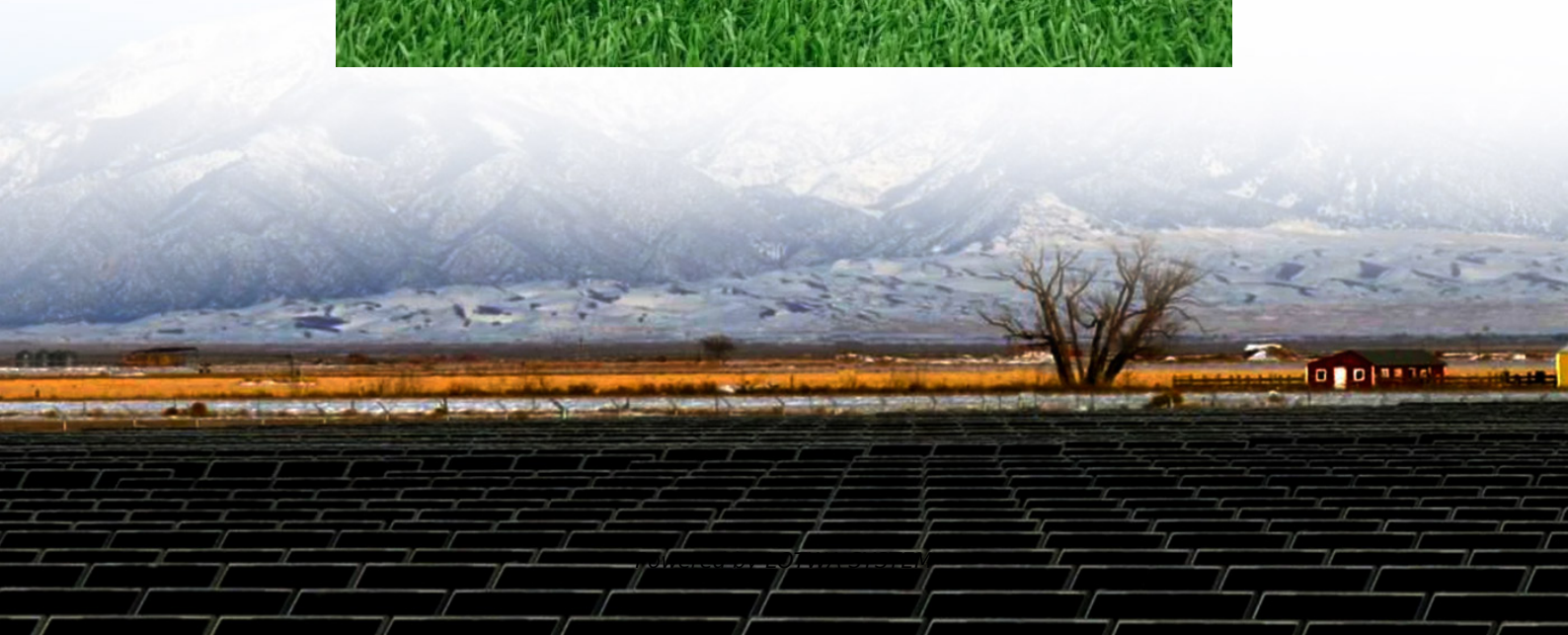


Demand-side energy storage power station





Overview

The traditional power system is facing significant transformations due to the integration of emerging technologies, renewable energy sources (RES), and storage devices. This review focuses on the shift.

Why is energy storage and demand response important in China?

Providing valuable policy implications for the development of energy storage and demand response in China. Energy storage and demand response offer critical flexibility to support the integration of intermittent renewable energy and ensure the stable operation of the power system.

How does energy storage affect demand response?

The utilization of demand response is offset by the more cost-effective flexibility options provided by energy storage, leading substitution between energy storage and demand response. Nevertheless, as demand response capacity and time period increase, demand response grows rapidly.

Are energy storage and demand response a viable solution?

Energy storage and demand response are widely regarded as promising solutions to these challenges.

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).



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