

# **Comparison of Wind Resistance of Energy Storage Containers**





## Overview

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What are energy storage systems?

Energy Storage Systems (ESSs) may play an important role in wind power applications by controlling wind power plant output and providing ancillary services to the power system and therefore, enabling an increased penetration of wind power in the system.

Can energy storage systems connect large-scale wind energy to the grid?

This study conducts a life cycle assessment of an energy storage system with batteries, hydrogen storage, or thermal energy storage to select the appropriate storage system. To compare storage systems for connecting large-scale wind energy to the grid, we constructed a model of the energy storage system and simulated the annual energy flow.

Can energy storage be used for wind power applications?

In this section, a review of several available technologies of energy storage that can be used for wind power applications is evaluated. Among other aspects, the operating principles, the main components and the most relevant characteristics of each technology are detailed.

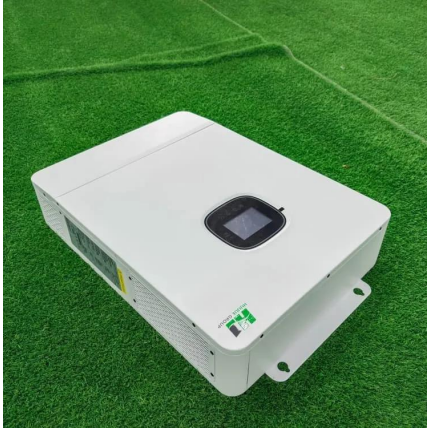
Why are energy storage systems compared with conventional power grids?

Because the energy systems could supply constant power, the power from the energy systems was compared with that from the average conventional power grid in Japan. The facilities used in the energy storage systems were assumed to be as follows. In the battery system, the battery was assumed to be LIB.



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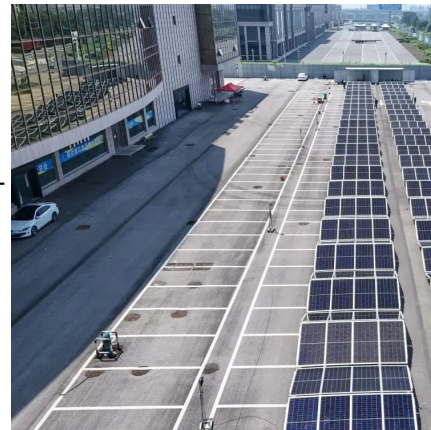


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