



MODERNIZATION SOLAR

# New Energy Storage Rail





## Overview

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Why is energy storage important in rail transportation?

At present, the high initial investment cost of the energy storage system in rail transportation limits its large-scale promotion, so it is especially important to improve the whole life cycle economic benefits of the energy storage system.

Should energy storage system in Rail Transit participate in peak and frequency regulation?

When conditions allow, the energy storage system in rail transit needs to participate in the grid's peak and frequency regulation dispatch to generate additional revenue and enhance the overall economic benefits of the rail transit system. This work was supported by Beijing Science and Technology Plan (Z20110000452).

Can batteries be used as energy storage systems for rail transportation?

The adaptability of batteries, supercapacitors, and flywheels as energy storage systems for rail transportation is summarized and compared. The topologies and integration methods of various energy storage systems are studied. The control strategies under each control of rail transportation are summarized and proposed.

Can energy storage be used in transport systems?

The reliability and economy of power supply have become essential factors in transportation. By adding energy storage to the power supply system of railways, energy efficiency can be increased, and the impact of power system failures can be reduced. The application of energy storage in transport systems has been studied to some extent.



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