

# Smart Microgrid solar container energy storage system





## Overview

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The intelligent microgrid system, built in the Port of Lianyungang, consists of 5.2 MW of distributed photovoltaic power generation equipment, 5 MW of new energy storage facilities, battery-swapping container trucks, all-electric tugboats, electric front cranes, and empty container stackers, with the aim of achieving near-zero carbon emissions throughout the entire process of ship berthing, cargo handling and transportation, Science and Technology Daily reported on Wednesday. What is a hybrid microgrid?

BoxPower's hybrid microgrid technology combines solar, battery, and backup power into a modular platform designed for remote and resilient energy.

How can a microgrid save energy?

"Through flexible scheduling of the microgrid, annual electricity cost savings at our port exceed 3 million yuan (417,270 U.S. dollars). We can save 21,000 tonnes of standard coal and thus reduce carbon dioxide emissions by 56,000 tonnes every year," said Yang.

What is State Grid Jiangsu's 'multi-energy complementary intelligent microgrid'?

In response, State Grid Jiangsu Electric Power Co., Ltd. collaborated with the Port of Lianyungang in building the "multi-energy complementary intelligent microgrid" featuring green energy and high efficiency.

How many kWh can a microgrid generate a year?

"With various types of power generation and consumption equipment connected to the microgrid, annual clean energy generation can exceed 6 million kWh," said Yang Huadong, general manager of the Engineering and Technology Department of Lianyungang Port Holding Group Co., Ltd.



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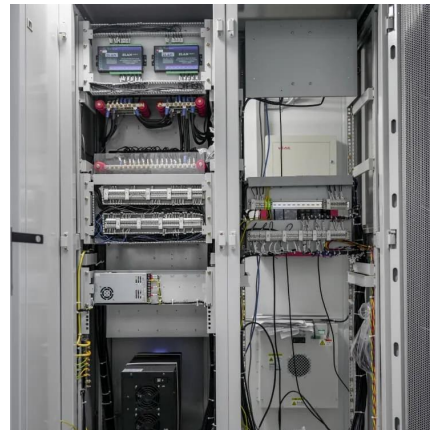


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