

# Rudong 100MWh Gravity Storage Project of China Tianying Inc. (CNTY) Gains Spotlight on CCTV

On November 11, 2023, *Live News* of CCTV-13 news channel shone a light on the evolution of diverse energy storage technologies throughout China, thoroughly presenting China Tianying's endeavor in constructing Rudong 100MWh gravity energy storage project.

The coverage not only identified the project as China's inaugural demonstration of gravity energy storage, now nearing the completion stage of its fine-tuning process, but also provided an in-depth look at the operating principles of CNTY's innovative gravity storage technique.

Jishun Lin, the project director at the Rudong site for CNTY, was interviewed about the sustainable approach of the technology, specifically its unique reuse of discarded materials for the manufacture of the gravity mass, underscoring the environmental and safety benefits of the system.

## **Video:**

Over the past two years, various provinces and cities in China have been accelerating the implementation of new types of energy storage projects.

In Yangkou Town, Rudong County, Nantong City, Jiangsu Province, there stands a large *Power Bank* approximately 150 meters tall, currently under accelerated construction.

This is China's first demonstration project to apply gravity storage technology – Rudong 100 Megawatt-hour gravity energy storage project, which has now entered its final commissioning phase.

This *Power Bank* is equipped with 12,600 individual gravity blocks, each weighing 25 tons. It uses the electricity generated by the grid, solar, or wind power to lift these blocks, converting electrical energy into potential energy for storage.

When the grid or users need electricity, these blocks are lowered, transforming the stored potential energy back into electrical energy for use.

The energy conversion efficiency can reach 85% to 90%, and the system boasts a lifespan of 50 years with zero degradation.

The primary structure of this energy storage project consists of a 35-story tower, with a

single charge-discharge cycle capable of delivering 100,000 Kilowatt-hours of electricity.

The working gravity blocks are made from waste materials such as incinerator bottom ash and construction debris, making the system even greener and safer.