

Cuba Puts Its First Battery Storage Facility Into Operation



Only with battery storage systems can solar farms realize their full potential (Source: [Cubadebate](#))

Cuba commissioned its first battery storage facility on Wednesday. The system, with a capacity of 50 megawatts, is based on lithium-ion technology and is located in the Cotorro district of Havana. According to [information](#) from the engineers in charge, the commissioning phase yielded “satisfactory” results.

The system has already proven its effectiveness during critical events in recent days, according to engineer Ulloa Rodríguez: When the Antonio Guiteras thermal power plant went offline and transmission lines were damaged, the storage system reacted quickly, feeding energy into the grid or drawing energy from it to maintain a stable grid frequency and prevent a power outage.

“We had several disruptions this week, and the system was able to supply or draw energy as needed. There were neither automatic frequency shutdowns nor system failures,” the specialist explained. As a result of the power plant outage, the power deficit reached [record levels](#) of over 2,100 megawatts in recent days—levels at which a system failure would normally have been expected.

A Prerequisite for Grid Stability

Furthermore, the storage system will enable solar farms to operate at full capacity in the future, as excess energy is stored during the day and fed into the grid at night.

“The system operates around the clock,” the engineer emphasized, “it stores the solar surplus and releases it at night, which provides continuous stability to the power grid and

facilitates the integration of additional renewable sources such as wind and hydroelectric power.”

In fact, without this first storage system, a portion of the existing solar energy would have had to go unused. According to the Cuban engineers, for every 1,000 megawatts of installed solar capacity, 100 megawatts of regulating capacity from batteries [is required](#). Currently, daily peak solar output of around 700 megawatts is being generated.

Ulloa Rodríguez also emphasized that operation of the system is entirely in the hands of Cuban technicians who have been specifically trained in this technology. “We are prepared,” he said.

Three Additional Sites Planned

The project in Cotorro is the first of a total of four planned battery storage systems on the island. The other facilities, each with a capacity of 50 megawatts, are to be built in other parts of Havana, in Cueto (Holguín Province), and in Bayamo (Granma Province), resulting in a total of 200 megawatts of battery storage.

Once all four sites are operational, they could, according to Ulloa, absorb the energy from all future solar farms and unlock the country’s full renewable energy potential. “These four sites will make it possible to maximize the use of all solar farms as well as wind and hydroelectric power generation, with corresponding savings in fuel consumption,” the engineer summarized.

The development of the battery infrastructure is part of [Cuba’s strategy for the accelerated expansion of renewable energy](#) against the backdrop of an ongoing energy crisis. Since early 2025, 54 solar parks with a total capacity of 1,177 megawatts have been installed as part of the program with Chinese assistance; the latest one [went into operation](#) on June 18 in the province of Pinar del Río. By 2028, a total of 90 parks with a capacity of just under 2,000 megawatts are to be built. ([Cubaheute](#))