

A-Core Container

Cuba s new energy storage ratio



Overview

Cuba currently operates 186 renewable parks generating 25% of its electricity. But here's the kicker – less than 15% have proper energy storage systems. "We're basically throwing away sunlight after sunset," admits a technician at Pinar del Río's solar farm. It's not just about buying.

Cuba currently operates 186 renewable parks generating 25% of its electricity. But here's the kicker – less than 15% have proper energy storage systems. "We're basically throwing away sunlight after sunset," admits a technician at Pinar del Río's solar farm. It's not just about buying.

The plan aims for one thousand megawatts of solar energy by 2025, but without installed batteries, which prevents meeting nighttime demand and limits its effectiveness against persistent blackouts. The Cuban government announced that it plans to incorporate one thousand megawatts (MW) of solar.

As indicated by official reports, each park will have between 42,588 and 43,904 solar panels, with 560 Wp and 555 Wp, respectively. According to information provided by the Cuban newspaper Granma, only four of the projects that will be operational this year have a 50-MW battery storage system.

On Saturday, Cuba initiated the installation of solar energy storage batteries at four electrical substations, marking a significant step in addressing its energy challenges. These Battery Energy Storage Systems (BESS), also referred to as "concentrator units," are being placed at Cueto 220, Bayamo.

Yet Cuba's power outages increased by 23% in 2023 despite adding 450MW solar capacity. What's really going wrong?

Cuba currently operates 186 renewable parks generating 25% of its electricity. But here's the kicker – less than 15% have proper energy storage systems. "We're basically throwing away.

The Cuban government has unveiled a bold initiative to introduce one

thousand megawatts (MW) of solar energy into the National Electric System (SEN) by 2025. This effort, which involves establishing approximately fifty photovoltaic parks across the nation, aims to address Cuba's persistent energy.

While Cuba has pledged to generate 24% of its energy from renewable sources by 2030, this effort was clearly too little, too late to prevent a major crisis. The question becomes: What if Cuba had met this target five years ago—or even now?

Decentralized systems with renewable energy and storage. What percentage of Cuba's energy consumption is renewable?

In 2019, renewable energy accounted for around 21.5 percent of actual total consumption in Cuba. The following chart shows the percentage share from 1990 to 2019:.

How much energy does Cuba produce per capita?

Per capita this is an average of 1,430 kWh. Cuba can completely be self-sufficient with domestically produced energy. The total production of all electric energy producing facilities is 20 bn kWh, also 121 percent of own requirements. The rest of the domestically produced energy is either exported into other countries or unused.

Is Cuba facing a severe economic crisis?

Compounding these problems, Cuba is facing a severe economic crisis, with rising inflation, decreased exports, and the introduction of austerity measures. Overcoming these energy challenges amidst the economic crisis will be extremely difficult.

How important is biogas to Cuba's energy security?

Cuba's energy and agriculture sectors combined account for more than 90 percent of its greenhouse gas (GHG) emissions. "Biogas is hugely important for Cuba's energy security," says Luis Cepero Casas, a researcher at the Indio Hatuey Experimental Station of Pastures and Forages, part of the University of Matanzas.

What does the EDF report tell us about Cuba's electric grid?

The report builds on a previous report published by EDF in 2017. That report,

similar to this one, provided information on Cuba's electric grid and recommended paths forward.

Cuba s new energy storage ratio

Contact Us

For catalog requests, pricing, or partnerships, please visit:
<https://www.a-core.pl>