

Cost-effectiveness of special energy storage batteries in Lagos Nigeria





Overview

We developed a techno-economic model to simulate the performance of residential solar-battery systems as a means of reducing the reliance on backup generators in grid connected households in Lagos.

Why should you use solar battery storage systems in Nigeria?

By using solar battery storage systems, you contribute to reducing greenhouse gas emissions and combatting climate change. In Nigeria, where reliance on fossil fuels for power generation is high, adopting solar energy can significantly lower the nation's carbon footprint.

How much does a battery cost in Nigeria?

The batteries come in a range of capacities, and as expected, higher capacities attract higher prices. For instance, the Felicity 3.5kwh lithium battery 24V 150AH retails at approximately ₦610,000 in the Nigerian market. Conversely, lower capacity batteries are priced differently.

Which lithium battery is best in Nigeria?

Maypatronic is proud to offer the Felicity Lithium Battery 15kwh 48V to our customers in Nigeria. This exceptional battery has proven to be one of the top-performing Lithium batteries on the market. With the capability to charge using solar panels, it offers a sustainable energy supply to households and businesses alike.

Does installing solar-battery systems reduce reliance on backup generators in Lagos?

Conclusions We find that installing solar-battery systems reduces the reliance on backup generators in Lagos's households with poor grid reliability. In turn, the addition of the solar-batter systems reduces fuel consumption, which is expensive and polluting when burnt.



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