

# Guinea-Bissau storage batteries for solar power

Does Guinea-Bissau have solar power?

Guinea-Bissau relies on fossil fuels and solar has seen limited development, with the exception of rural electrification initiatives. The nation has one of the lowest electrification rates in Africa, as well as electricity prices among the highest on the continent.

Will China build Guinea-Bissau's first solar power plant?

A Chinese state-owned company has been contracted to build Guinea-Bissau's first large scale photovoltaic project, the Gardete solar power plant. The African Biofuel and Renewable Energy Company (ABREC), which promotes renewables and energy efficiency in several countries, has awarded the contract to China's hydropower entity, Sinohydro.

How much energy does Guinea-Bissau use?

As a result, around 95% of the energy consumed in Guinea-Bissauan households comes from biomass. The AfDB recently stated Guinea-Bissau has only 11MW of installed power generation capacity, almost all of being thermal generation.

Who financed the Guinea-Bissau solar project?

The entire solar and hybrid project is being financed by the Government of Guinea-Bissau with a \$42.9 million loan from the West African Development Bank (BOAD). This financing was granted as early as 2017. The solar project, for which Sinohydro signed the engineering, procurement and construction (EPC) contract, involves three facilities.

The project involves the construction of several solar power plants near the capital city of Bissau, including a 30 MWp solar power plant. These plants will be equipped with battery storage systems to ensure efficient energy distribution and support the electricity grid.

This study presented the energy and economic analysis of a microgrid based on solar PV energy with a battery ESS for the isolated community of Bigene in the African country of Guinea-Bissau. The analysis considered two ESS technology options: AGM and lithium batteries.

The World Bank, IDA, ESMAP, and GCF are funding Guinea-Bissau's first solar power plants with a \$78.15 million investment to support decarbonization and expand electricity access. The project will build solar plants near Bissau and install mini-grids on the Bijagós islands, thereby providing electricity to 1,200 households and SMEs.

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The Solar Energy Development and Electricity Access Project will involve constructing several solar power plants and battery storage units with participation from the private sector. A 30 MW solar power plant will be built near the capital, Bissau. This aims to reduce the average cost of electricity and diversify the energy mix.

This work studies the implementation of an isolated microgrid activated with photovoltaic energy and energy storage in batteries under the case study of the community of Bigene, located in the...

International finance institution the World Bank will support the development of Guinea-Bissau's first solar power plants with a \$35 million grant through its Solar Energy Scale-up and Access project.

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The solar plant will sell power to the national utility EAGB under a long-term contract. The facility will have a battery storage system to provide electricity to the inhabitants of Bissau and surrounding areas after sunset.

The Guinea-Bissau Solar Energy Scale-up and Access Project will work on the development of solar energy generation and network enhancement, including the preparation and implementation for utility-scale solar parks and upgrade and expansion of solar grid infrastructure.

Web: <https://gennergyps.co.za>