

Photovoltaic panels power generation in Sudan





Overview

Can a 1 GW solar PV power plant be built in Sudan?

In this work, simulations of a solar photovoltaic (PV) system located in Sudan are carried out using PVSyst7.0. By comparing the power production, performance ratio and price, the ideal area for setting up a 1-GW grid-attached solar PV power plant in the north region is identified.

Is a grid-connected PV solar plant feasible in Sudan?

As a result, the proposed grid-connected PV solar plant is considered economically, technically and environmentally feasible in Sudan. More details concerning the electrical layout, possible mechanical load, dimensions for the mounting structure and also protection, disconnection switches and metering are needed.

What are the risks and barriers to solar PV in Sudan?

For Stage 1, a list of risks and barriers was produced based on a literature review of solar PV studies in Sudan and interviews with nine stakeholders. Affordability was the risk most often mentioned (eight times from nine interviewees), followed by concerns about poor utility grid infrastructure.



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ENERGY PROFILE Sudan

... e resource potential Solar PV: Solar resource potential has been divided into seven classes, each representing a range of annual PV output per unit of capacity (kWh/kWp/yr). The bar chart ...

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Renewable Energy in Sudan

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