

# South Sudan grid-connected energy storage system exports







#### **Overview**

What is the grid-based electricity situation in South Sudan?

At present, the grid-based electricity situation in South Sudan is characterized by routine power outages and lack of efficiency in the distribution system . In fact, in 2020, 580 GWh or nearly  $100\,\%$  of electricity was produced from oil and gas, and just  $1\,$  GWh from renewable sources .

Does South Sudan have a solar-plus-battery storage project?

Key Figures & Findings: South Sudan is embarking on a significant renewable energy transformation, with a new solar-plus-battery storage (BESS) project to address the country's alarmingly low energy access.

Can solar power improve South Sudan's Energy Infrastructure?

Future Implications: Integrating solar and storage solutions could stabilize South Sudan's energy infrastructure, creating a model for renewable energy adoption in other energy-deprived regions. South Sudan launches solar-BESS project to expand grid access, replacing diesel generators and boosting energy for underserved regions.

What is the demand for electricity in South Sudan?

There is also significant demand for electricity in the rural areas with only about 1 % of the population connected to the grid. According to recent projections, in the long term, the demand for electricity in South Sudan could grow to 1400 MW by 2030.

How has South Sudan impacted its energy security?

Indeed, the situation plunged South Sudan into a political, economic and humanitarian disaster. The dependence of South Sudan on its regional partners for the importation of processed fuel constitutes another challenge undermining its energy security. East African countries rely on each other to guarantee their oil supply.



What are the main energy sources in South Sudan?

The most commonly-used energy sources are biomass and petroleum products. Forests, animal wastes, agricultural residues, and sugar cane are all biomass resources in South Sudan. The country's reliance on oil pervades all aspects of the economy, accounting for roughly 72 % of the 700 Ktoe total primary energy supply.



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