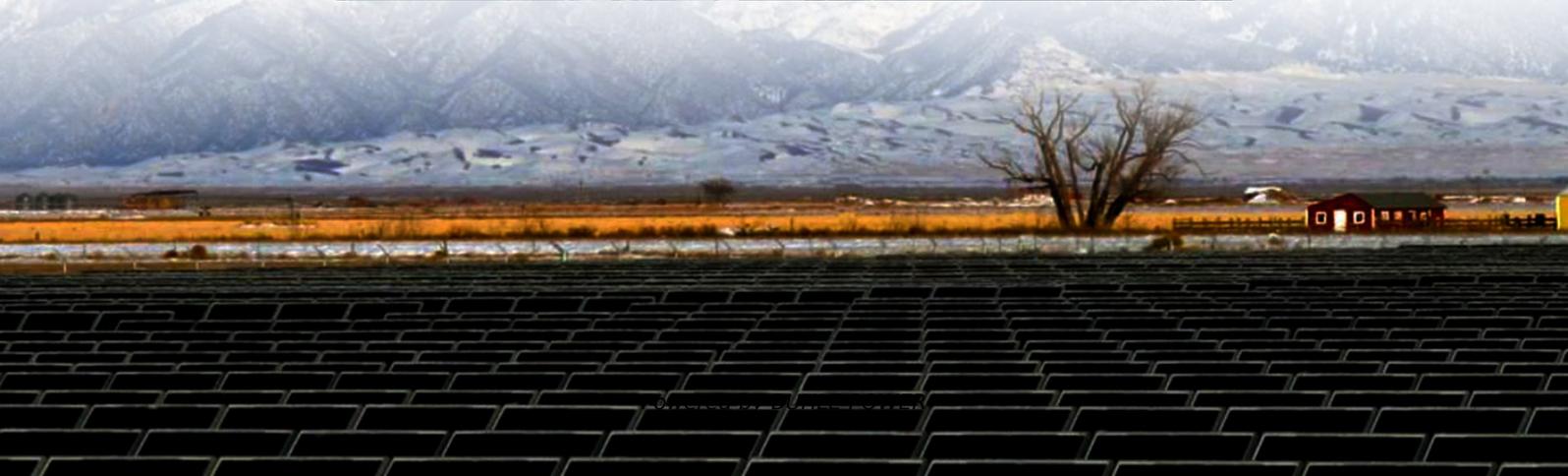


The school uses a 20MWh Ethiopian photovoltaic container





Overview

U.S.-based solar technology company Sol-Ark, in partnership with Twende Solar and The Community Project: Ethiopia, has delivered reliable, clean electricity to Wogagen School, the country's first public K-12 STEM academy. Can photovoltaic power a remote rural school in Ethiopia?

Nearly 85% of Ethiopia's urban population has access to public electricity, but this figure is only 29% for the rural population. This study examines the feasibility of using combined photovoltaic (PV)/diesel/battery systems to power a remote rural school in southern Ethiopia.

Is solar PV a viable alternative energy source in rural Ethiopia?

Solar PV and other renewable energy sources like wind, biogas, and hydropower in rural Ethiopia require more study to establish their viability. Future research can be undertaken using a variety of combinations and components. Additionally, computational techniques can be used to optimize hybrid systems.

Is solar PV off-grid a viable option for Ethiopia's remote rural communities?

However, hydropower potential is not being fully utilized to satisfy the country's energy needs, particularly in rural areas. As a result, the solar PV off-grid hybrid system is believed to be the optimal option for electrifying Ethiopia's remote rural communities.

Do Ethiopian schools lack electricity?

According to a study on the electrification of African schools, more than half of public primary schools in at least twenty countries, including Ethiopia, lacked electricity in 2013 (World Bank and International Energy Agency, 2014).



The school uses a 20MWh Ethiopian photovoltaic container



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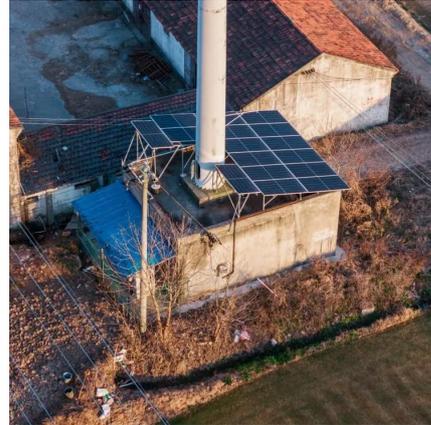
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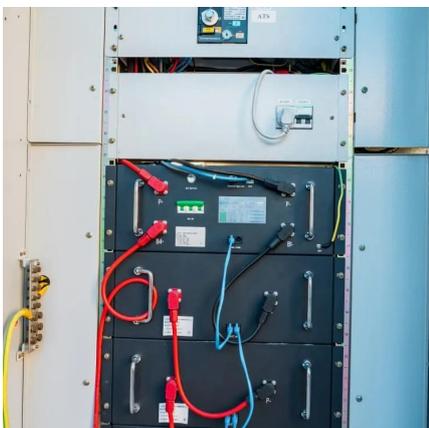


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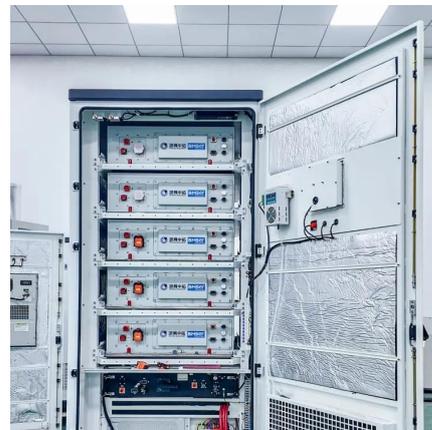


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