

Cost of Grid-Connected Solar Containers for African Mines





Overview

Can solar mini grids solve Africa's energy access gap?

NAIROBI, February 27, 2023 – Solar mini grids can provide high-quality uninterrupted renewable electricity to underserved villages and communities across Sub-Saharan Africa and be the least-cost solution to close the energy access gap on the continent by 2030.

Is Africa ready for a solar mini grid?

“While Africa remains the least electrified continent, it also has the biggest potential for solar mini grid deployment,” said Gabriela Elizondo Azuela, Manager of the World Bank’s Energy Sector Management Assistance Program (ESMAP). “Solar mini grids can reach populations today that would otherwise wait years to be reached by the grid.

How much does a solar PV mini-grid cost in Africa?

Stand-alone solar PV mini-grids or solar PV-hybrid mini-grids have installed costs in Africa ranging from USD 1.9 to USD 5.9/W for systems greater than 200 kW. Solar PV mini-grids that came online in 2012 or earlier have higher costs.

How much does it cost to build a mini grid in Africa?

Powering 380 million people in Africa by 2030 will require the construction of more than 160,000 mini grids at a cumulative cost of \$91 billion. At the current pace, only around 12,000 new mini grids serving 46 million people will be built by 2030 at a total investment cost of approximately \$9 billion.



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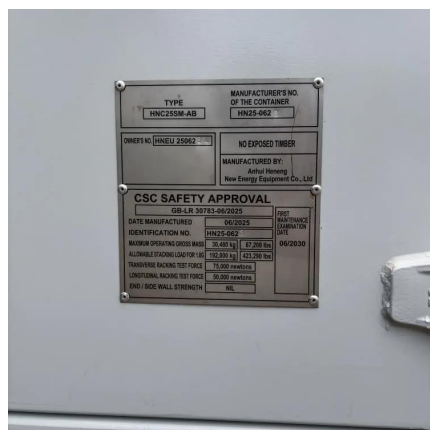
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