

How big is the battery storage market in South Africa?

It is analyzed that the South African battery storage market can be expected to grow from 270 MWhin 2020 to 9,700 MWh in 2030 under the base-case scenario and 15,000 MWh under the best-case scenario. In both cases, the electric vehicle (EV) sector is expected to drive the bulk of this growth.

What is a battery energy storage project?

The battery energy storage project is funded by the African Development Bank and the World Bank, and is essentially a replacement for a planned concentrated solar power plant. As part of its funding application for Medupi and Kusile, Eskom committed to building clean energy power plants.

Is Eskom looking into more battery projects?

It's good to see Eskom is looking into more battery projects. Late last year, Eskom and Hyosung Heavy Industries, one of the appointed service providers for the Eskom Battery Energy Storage System (BESS) project, began construction of the first energy storage facility under Eskom's flagship BESS projects.



Battery Storage Technology for a minimum duration of 4 hours at the Contracted Capacity; The project contracted generation capacity size range from a minimum of 123MW to a maximum 124MW for 4 hours; IPP to declare availability and the SO will determine the Charging, Discharge or Steady State operating modes;

## BATTERY STORAGE COST PER MWH SOUTH AFRICA





South Africa's first public battery storage tender has awarded preferred bidder status to a consortium of CIP-owned Mulilo and renewables major EDF for three battery projects totalling 257MW/1,028MWh.



South Africa is not alone in pursuing battery storage as a key enabler for renewable energy integration. According to a report by BloombergNEF, the global battery storage market is expected to grow from \$5.4 billion in 2023 to \$17.5 billion in 2028, driven by the falling costs of lithium-ion batteries, the increasing penetration of wind and



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South Africa's Department of Mineral Resources and Energy has formally invited interested parties to register prospective bids under the Battery Energy Storage Capacity Bid Window of the



The scheme, the total cost of which amounts to ZAR 6.43 billion (USD 343.8m/EUR 317.6m), envisages the installation of 153 MW/612 MWh of storage capacity through the Red Sands BESS project at the Garona substation. According to Globeleq, this will be the largest standalone battery in Africa.



By the end of the third tender, South Africa is projected to have a total battery energy storage capacity of approximately 3,183 MWh. This capacity is sufficient to power an estimated 250,000 homes during peak demand periods.

## BATTERY STORAGE COST PER MWH SOUTH AFRICA





A South African energy project finance specialist estimates that the country's near-term battery energy storage project pipeline could grow to about R53-billion over the coming three years