# Burundi utility-scale energy storage

Burundi utility-scale energy storage

Global |Publication |November 2022

Merchant BESS projects operate in the wholesale market, generating all or most of their revenue from the merchant market. In layman terms, in order to maximize revenue from a merchant BESS project, an operator must buy electricity (and charge the BESS) during the lowest priced hours and sell during the highest priced hours each day on the relevant market. The revenue earned from the spread between sale and purchase price in the wholesale merchant market can then be stacked with other income streams such as ancillary services and capacity mechanisms.

Merchant market projects are complex, relying heavily on the use of innovative AI technology to inform the BESS to operate in the wholesale market at the optimum time(s) in order to minimise exposure to prices that can vary at intervals of anything from five minutes to an hourly basis. The complexity and uncertainty associated with modelling these revenues forms one of the key risks for lenders when considering financing a BESS project on a pure or majority merchant basis. How these risks are addressed contractually, who bears the legal risk of technology failure and whether there is any exclusion of liability under the legal framework will need to be carefully considered by the parties.

GlobalBattery storage supply chain shocks ‘spark interest in non-lithium alternatives’

Acute global supply chain issues have had a detrimental impact on corporates across the energy storage industry, resulting in a widespread shift to alternative lithium ion technologies. Effects have been accentuated following the rapid growth of the US’ domestic market, forcing other countries to scramble to compete. The resulting fallout has been a chain of renegotiations with customers in an effort to pad price shocks through the introduction of raw material indexed pricing and other mitigation strategies.

According to Mercom Capital, energy storage companies raised almost as much corporate funding in the first half of 2022 as in the whole of 2021. The market research groups quarterly funding and M& A report for energy storage, smart grid and energy efficiency found that US$15.8 billion of corporate funding was raised in H1 2022 for energy storage. In 2021, that figure stood at US$9.6 billion at the half-year mark and at US$17 billion at the end of the year. Mercom Capital’s full report can be seen here.

GlobalData Energy’s report, ‘Battery Energy Storage Market Size, Share and Trends Analysis by Technology, Installed Capacity, Generation, Drivers, Constraints, Key Players and Forecast, 2021-2026’ estimates that global battery energy storage will grow to US$10.84 billion by 2026. Driving factors for such growth include the fall in battery technology prices and the increasing need for grid stability and resilience of the integration of renewable power in the power market.

Goldman Sachs has invested US$250 million in long-duration energy storage provider Hydrostor

Hydrostor, Inc. has secured a US$250 million preferred equity financing commitment from the Private Equity and Sustainable Investing businesses within Goldman Sachs Asset Management. The investment will be used to support the development and construction of Hydrostor’s 1.1 GW / 8.6 GWh Advanced Compressed Air Energy Storage projects in Australia and California, and to expand Hydrostor’s project development pipeline globally.

KarmSolar secures US$2.4 million for Egypt solar-plus-storage project

KarmSolar has secured US$2.4 million in financing for a solar-plus-storage project in Egypt which will be Egypt’s first financed solar battery PPA project. Sungrow will provide the battery storage unit, and is similarly providing a 7.5 MW battery storage system to combine with 30 MW of solar PV during a project in Q4 2022. It is expected that the solar-plus-storage project will boost the deployment of battery solutions in Egypt but also across the region.

World Bank guarantees US$24m financing for Malawi solar-plus-storage