

Energy Storage in Power Utilities as an emerging opportunity- Is Africa Ready?

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Energy Storage will attract more than \$600 Billion by 2040 owing to the rapidly falling costs of the batteries, increased uptake of renewable energy and the increased importance of storage batteries as a way of retiring unclean fossil fuel fired generators. This will translate to a total of 942GW or the equivalent of 10% of the total installed power capacity globally. Energy storage systems are critical to modernization of the power grids and will become a practical alternative to building new generation or network reinforcements. Storage enhances network predictability, reliability and stability by creating buffer reserves of electricity for frequency support among other roles.

By 2020, California's three investor-owned utilities are required to procure at least 1,325MW of storage to replace gas fired plants. New York state recently issued a [roadmap](#) to achieve a target of 1500MW of energy storage by 2025. Australia and Japan already have such projects with capacities of 100MW and 50MW respectively.

In the United States of America, a coalition of energy and climate change lobby groups is putting pressure on the congress to make energy storage projects eligible for tax/holidays, removal of barriers to participation by energy storage resources in bulk power markets and other incentives.

Currently, the challenge is to understand the storage technology, business models and other determinants such as infrastructure investment deferral, peak system load management, frequency regulation, energy price arbitrage, customer demand-charge management, backup power, cost-benefit analysis and many others.

To help utilities and storage developers navigate the new obligations, utilities and governments need to create the necessary laws, policies, incentives, [energy storage roadmaps](#) and targets. African and other developing economies utilities and governments cannot afford to be left behind in tapping the benefits of this emerging frontier of business opportunities.