

BY VISION REPORTER

Before 1986, solar electricity in Uganda was a pipe dream. The technology was still being developed in the rest of the world and Uganda was at the bottom of the chain.

Today, Ugandans pride themselves in building homes in various places and they end up having scattered homes," Eng. Ziria Waako, the chief executive officer of the Electricity Regulatory Authority (ERA) said early last year.

This, Waako believes, makes it expensive for government to accelerate access to clean energy as extending the national grid would be expensive.

This demonstrates the significance of off-grid solutions as a way to supplement government efforts.

Off-grid electricity services comprise of electricity services based on renewable energy technologies, primarily solar photo-voltaic systems, and islanded min-distribution systems drawing electricity supply from decentralized power generation facilities.

A 2018 report by the Uganda Off-Grid Energy Market Accelerator (UOMA) notes that with an annual population growth of 3% and households growing from under eight million in 2016 to an expected 12 million by 2030, the energy market needs to connect over nine million unserved households by 2030 to achieve universal energy access.

The report assessed the tax and subsidy options to accelerate solar home systems in Uganda.

UOMA noted that though government has taken several efforts like 'free connections policy' and grid expansion to increase access, there is an unlikelihood that the grid shall reach a substantial proportion of the population.

"Current government estimates highlight that over 30% of the population

Off-grid solar systems boost government efforts



Solar panels in Namayuba

is unlikely to be reached for the next several decades. Off-grid solar, led predominantly by private sector solar home system (SHS) companies, has

been able to serve unconnected rural households more efficiently," the report stated. This was

alluded to by Dan Wellington, the chief executive officer of SolarNow, a dealer in off-grid solar solutions, during an interview late last year. Wellington said though government is making efforts towards accelerating access to clean energy through development of high voltage transmission lines, medium and low voltage lines to enable last mile connections.

However, he said they are aware that government efforts will not reach every citizen hence the need for off-grid solutions.

The energy minister Mary Kitutu in a recent



Installing solar panels at a residence

increase accessibility and connectivity," she said.

OFF-GRID PROJECTS IN OFFING

The Electricity Regulatory Authority (ERA) said early last year that it was in process of preparing up to 25 mini and off grid renewable projects across the country to serve areas that are isolated from the national grid.

This, according to Waako, is meant to unlock 'suffocated' demand for the utility that is usually held up in the targeted areas due to lack of a national grid.

The off grid projects are also expected to accelerate the government's access agenda through which it seeks to increase connectivity to the grid.

Waako explained to journalists that 15 of them shall be located in the central part of the country while the rest shall be developed preferably in the North.

She added that these are advantageous as they come in 'full packages' with generation and distribution components, further reducing investments costs that would come with extending the grid.

"Many times, we been entangled in games with international lenders when they want to extend



"We have to look for other options to increase accessibility and connectivity," said energy minister Mary Kitutu.

transmission lines to remote areas but end up rejecting government's requests on grounds of little and no demand in the targeted areas," she said.

During such situations, government has always believed that extension of the grid to such remote areas shall stimulate the economic activities like opening of small industries hence creating the demand.

She further explained that after unlocking the demand, government can approach the lenders in a better just

Despite having an installed generation capacity of about 1,200MW with surplus supply, Uganda continues to suffer with low access to electricity especially in remote areas.

Currently, about 24% of the population has access to electricity in Uganda but government is targeting increasing that number.

The Rural Electrification Agency (REA) in its 10-year strategic plan (2013-22) through which it seeks to increase access lists pursuance of off-grid as one of the initiatives towards achieving their targets.

Here, the agency is targeting to make up to 138,500 new connections from solar home systems and mini-grids over the 10-year period.

15

Off grid projects shall be located in the central part of the country while the rest shall be developed in the North

24%

Population that has access to electricity in Uganda