"The Peoples Electricity Link"

RURAL ELECTRIFICATION AGENCY

Strategic Direction For Enhanced Demand Management-demand Growth And Accelerated Access To Clean Energy

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Approaches to Rural Electrification

- Extension of the Electricity Grid Network through construction of Medium Voltage (33kv and 11kv) and Low Voltage (415V, 240V) power networks.
- Development of Mini-grid Systems for island communities and isolated clusters
- Facilitating connections through Standalone Home Systems for scattered settlements
- Evacuation of Small Renewable Generation Plants

Progress registered so far-Grid extension

- Completion of 9,700Km of HV and 6,400Km of LV networks with 172 MVA transformer capacity
- On-going construction of 2,900Km of HV and 2,400Km of LV networks with 63 MVA transformer capacity
- On-going procurement of 2,400Km of HV and 2,000Km of LV networks with 96 MVA transformer capacity
- Securing of financing for 7,000Km of HV and 6,500Km networks under planned projects with 59 MVA transformer capacity
- Electrification of all District HQ’s with the exception of Kaabong, Kotido and Buyende which are under implementation and Buvuma that’s under feasibility study stage
- 62% of Sub Counties in the Country are electrified through REA efforts and those of other stakeholders such as Umeme, UEB
- Support to the development of 5 Off grid Mini Grids

Plans to accelerate access to clean energy–Grid densification

Densification Projects

Germany (kfW) Grid Densification: 8500 connections. Procurements of works contractor for other Service Provider's ongoing, Scheme selection for Umeme ongoing

Intensification-ERT III: 60,000 Service connections. Procurements of works contractor for other Service Provider's ongoing, Scheme selection for Umeme batch 1 and 2 ongoing

Plans to accelerate access to clean energy-last mile connections

Last Mile Connections

- **Electricity Connections Policy**

The Policy aims to achieve a 60% electricity access rate by 2027. Specifically the policy aims to provide access to electricity for 300,000 connections annually

Funding secured so far

REA has so far secured USD 94.4M under both loan and grant financing; USD 330M is under proposed financing. This is to fund installation of last mile connections under both the Umeme rural footprint and the other Service Providers

Plans to accelerate access -Funds secured so far under the Electricity Connections Policy

No.	Funding Source	Committed Amount US$ (Million)	Service
	For Last Mile Connections		
1	IDA – World Bank under ERT III	10	No Pole and Pole
2	African Development Bank (both loan and grant)	23	No Pole
3	French Development Agency	8	No Pole
4	World Bank - Ci-Dev (grant financing)	5	No Pole
5	GIZ – Endev (grant financing)	1.3	No Pole
6	KfW	11	No Pole
	Sub Total-1	58.3	
	Grid Densification Connections		
1	KfW	11.1	1 to 6 poles
2	IDA – World Bank under ERT III	25	1 to 6 poles
	Sub Total-2	**36.1**	
	Grand	**94.4**	

Plans to accelerate access to clean energy-Grid extension

- BADEA/OFID-2 Construction of 33kV distribution lines (MV 790km, LV 620km) Kayunga and Kamuli: 6,000 service connections
- IDB I (Karamoja region) Grid Rural Electrification projects: Kaabong and Kotido district headquarters connected to the grid (MV 710km, LV 140km): 2,000 Service connections
- IDB II (RE Projects in Mirama – Kabale and Teso-Karamoja sub-region (MV 1400km, LV 108km):19,653 Service connections
- IDB III funded Rural Electrification Projects in Northern, Central, Eastern, Western (MV 1767km, LV 1750 km): 9,772 Service connections

Plans to accelerate access to clean energy-Grid extension continued

- AfDB Uganda Rural Electrification Access Project (MV 1305km, LV 1112km):164, 077 connections
- AfD projects: Grid extensions in Mid-Western, Western, Rwenzori, Southern, North Western and South Western (MV 1379 km, LV 1485 km):41,620 connections
- World Bank ERT III (MV 1272km, LV 1220km): 24,000 connections
- Abu Dhabi Electricity Network in Kalungu (MV 400km, LV 160km)
- Kuwait rural electrification project(MV 256Km, LV 225):6,250 connections
- Chinese Exim Bank, Sub County electrification(287 Sub County HQs and their environs): 170,000 initial connections

Plans to accelerate access to clean energy-Off Grid Mini-grids

Under Implementation

- 25 Villages in Lamwor district in partnership with GIZ and EU
- 15 Villages in Rakai and Isingiro districts in partnership with GIZ
- 6 Villages in Kasese and Rubirizi districts in partnership with WWF
- 10 Villages in various districts in partnership with the private sector

Planned

- Off grid pre-feasibility study funded by KfW for a 15M project for mini-grids identified through the Master plan
- Master plan and feasibility studies of islands in Lake Victoria funded by AfDB
- Development of an Off-grid Strategy and Plan

Support to growth of demand

The Electricity Connections policy aims to access demand on the grid by 500MW by the year 2027

- Construction of distribution networks to load centers with potential for productivity
- Development of a productive use programme
- Connections to industrial and agricultural sites

Key Sub-Sector Issues

a) Power Reliability

i. Need for an increased capacity for service providers to respond to faults

ii. Timely restoration of power

- Framework contracts for supply of materials and maintenance

iii. Installation mini-SCADA systems in all service territories

iv. Sub-station planning and upgrading

- Installation of extra spare bays for future network expansion
- Long lines (>100km) to originate from substations

Key Sub-sector Issues (2)

c) Power Quality

   i. Network Refurbishment
   ii. Increase in number of transmission substations
   iii. Increase in number of interconnected mini-grid networks

2. Publicity and Information Sharing

   i. Increased marketing for service connections
   ii. Sectorial sharing of challenges
   iii. Approach to publicity

THANK YOU