

## PROTOTYPE - FACT SHEET

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### TITLE:

**Public Investment in RE Mini-Grids for Private Sector Concessioning to Increase Rural Electricity Access. The Western Uganda Electrification Project**

#### Mission statement

The prototype aims at addressing the challenge of limited private sector investment in Rural Mini Grids. The proposed solution is for Government to invest in the Mini-Grid Infrastructure and afterwards concession the investments to the Private Sector for operation.

#### Briefly describe your prototype idea

Investment in Off-Grid rural energy solutions is capital intensive and perceived as high risk i.e requiring a lot of money without assured return on investment. This impedes private sector investment in the renewable energy mini-grids as the private sector is risk averse and profit driven.

The proposal is for Government to take over the initial investment and allow for private sector participation by way of running and maintaining established mini-Grids.

Current similar interventions in Uganda focus on Grid Extension programs which are not financially viable. Off-Grid Mini Grids can be financially viable if a higher tariff is set. But the Willingness to pay tariff for most households living far from the Grid is usually such that such investments will not be financially viable.

A concession management of mini-grids is more attractive for private sector as it removes the high infrastructure investment costs.

A pilot of construction of about ten such schemes will be done to test the viability of the interventions. The pilot scheme is expected to connect over 200,000 people to electricity.

The Schemes will be driven by hydro power plants of less than 500KW. Efforts will be made to minimise cost of investment. Financing will be sourced from development partners.

### Target group

The prototype targets increased access to electricity by Rural Households in far from Grid areas that have adequate renewable energy resources (specifically hydropower) in Uganda. The pilot will target electrification of over 200,000 people in Uganda.

### Potential partner(s) for implementation

Government, Development Banks, Development Institutions and Multi-Lateral Partners.

### Key challenges and opportunities

Investment in this kind of Solutions is perceived as high risk and high cost. The Government is not risk averse and can invest in solutions deemed too risky and low return by the private sector. Additionally the Government does not have a high requirement for return on investment. The Government can also leverage Risk capital from Development institutions with better bargaining power.

The private sector is better suited for efficient management of commercial solutions and will be attracted to participate in investments that are low risk and higher yielding. By having the Private sector participate in these solutions from a concession level they can later consider PPPs and even direct investment.

Tariffs can be reduced to cater only for operating costs as Government does not require return on investment. This meets the rural communities' willingness to pay.

The pilot will focus on developing small mini hydro schemes that are not as capital intensive as the larger schemes. The pilot will also identify and seek to address bottlenecks in this investment field. Bottlenecks like excessive regulation will be addressed through seeking policy and legislative reforms.

### Next steps

A group of 10 schemes is being studied to establish Feasibility. Upon completion of feasibility the necessary licensing will be sought.