

Regional Off-Grid Electrification Project (ROGEP)

Context

More than 60 percent of the population in the Sahel and broader western Africa region do not have access to electricity. Of the 395 million people residing in this region, 244 million inhabitants do not have access to electricity and 70 percent of them live in rural areas. Only about 151 million people have access to electricity, of which 67 percent live in urban areas. While electricity access is limited and substantially confined to the urban areas, power utilities are struggling to expand access and improve reliability of their supply. The electrification rate of public institutions like schools and health centers, and water pumping and irrigation facilities are also low and efforts made to electrify them in a sustainable manner have been insufficient.

With advancement in solar PV technologies, standalone off-grid solar now has the potential to significantly transform electricity access in Sub-Saharan Africa, in particular for consumers who are far from the grid network. Even those who are expected to get access to grid network in couple of years, can use standalone solar systems and not burn kerosene and candles, or live in darkness as they wait for their grid connection.

Geographic Scope

The project will serve 15 ECOWAS member countries (Benin, Burkina Faso, Cabo Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal, and Togo) and 4 other countries (Cameroon, Central Africa Republic, Chad, and Mauritania).



Project Rationale

Penetration of off-grid electrification companies in West African markets is low. The objective of the Regional Off-Grid Electrification Project (ROGEP) is to provide West African countries with needed support to foster a sustainable and scalable off-grid electrification market to meet the electrification needs of unserved populations. Providing such support requires considering West African countries as a unified market with a more effective enabling environment. Aggregating the markets and uniformizing sectorial policies will help make the economies worthwhile for industry players to get involved in the off-grid sector in West Africa.

Milestones

- Concept Note Approved on November 23, 2016.
- Project Preparation Advance Agreement Approved for ECREEE on April 28, 2017.
- Market Assessment of Project Countries to be completed by April 2018.
- The Project is expected to be presented to Bank's Board of Executive Directors in September 2018.

Concept

The proposed \$200 million regional project aims to address the key barriers to attract private sector participation in promoting off-grid electrification in the project countries. Two major work streams will be supported under the project.

The first work stream consists in the development of a "Regional Market". This will be implemented by the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE) and will have about US\$ 60 million allocation. This will support (i) market assessment studies; (ii) policy barriers identification; (iii) support to countries to harmonize trade policies to promote a regional market of solar products; and (iv) support to countries' bureaus of standards with the adoption of a regional quality standard of standalone solar products to help create a regional market of solar products in the 19 project countries. The project will also ensure (v) provision of an entrepreneurship development facility; (vi) provision of seed funding to local startup entrepreneurs; (vii) incentives to attract impact investors through provision of matching grants; and (viii) a guarantee fund to reduce risk exposure of commercial banks that enter the solar market and to reduce the payment risk from public institutions to the private electricity service providers.

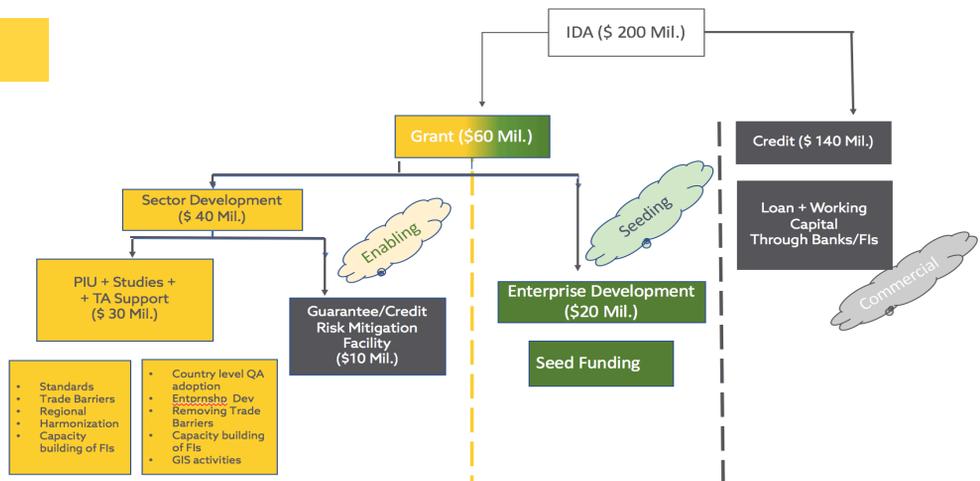
The second work stream focuses on mitigating the "Access to Finance" barrier for private enterprises. This work stream follows a Financial Intermediary approach and will be implemented through Regional Development Banks (RDBs). The RDBs will create lines of credit which can be accessed by commercial banks, debt funds, micro finance institutions, leasing companies, securitization firms, and others.

The World Bank and ECREEE will coordinate with relevant development partners and stakeholders in designing the risk mitigation and access to finance facilities under the project.

Lessons Learned

Successful lessons from existing Lighting Africa supported projects will be scaled up under ROGEP to extend electricity to households and commercial enterprises following a market based model. Two pilot initiatives are ongoing in Niger and Nigeria to identify suitable mechanisms, including technical specifications and commercial arrangements, to electrify public institutions under the project. Lessons from these pilots will inform the project design.

Funds Allocation



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