

Promoting Energy Efficiency in Public Lighting and Supporting Adoption of Small Hydro Power

Background

Burundi's long term conflict has largely destroyed the country's generation, transmission and distribution systems. The country's installed generation capacity is very limited at about 50 MW. Domestic and regional hydro power resources account for about 90 percent of the country's electricity generation. However the country's domestic hydroelectric potential (about 1700 MW, thereof 300 MW economically exploitable) is still underdeveloped. Most of the country's electricity stems from seven hydroelectric plants operated by the national water and electricity utility REGIDESO.



Energy access in Burundi is among the lowest in Africa.

Only about 2 percent of the population in Burundi has access to electricity, compared with 16 percent for Sub-Saharan Africa and 41 percent for other low-income developing countries. The average per capita consumption of electricity in Burundi is among the lowest in Africa at 23 kWh/year.

Major electricity shortages occurred in the last years and are expected to continue in the short term. Providing energy to meet Burundi's demand is among the biggest challenges faced by the government. Major energy supply crisis occurred in the 2009, 2010, and 2011 dry-seasons, resulting in large scale and systematic load-shedding (reaching approximately 40-50% of existing demand during peak hours) and severe electricity shortages for all basic services (e.g. water supply, hospitals, administrative services), households and private businesses.

As a result of Burundi's long term conflict, energy efficiency is still at its early stages and facing barriers at all levels in Burundi. Burundi's long term civil conflict has had a devastating effect on its human resource capacity. Government agencies and private market players generally have very limited experience in designing, executing and monitoring investment programs. There is need to build capacity and establish frameworks both within and outside the government to facilitate the use and adoption of energy efficiency technologies and products.

Against this backdrop, the project will engage in robust set of initiatives to expand energy access and enhance energy efficiency in the pursuit of increased productivity and competitiveness.

Objective

To develop and adopt selected policy frameworks for energy efficiency and to selectively improve the energy efficiency of households and buildings in Bujumbura city.



Project Component Activities

- Rehabilitate the transmission and distribution network to reduce losses from 24.4% to 18%.
- Identify and finance priority investments in selected 110 kV and 70 kV transmission substations and in selected 30 kV distribution substations.
- Remove barriers to the adoption of small hydro power generation by conducting a scoping study of 6 to 8 prioritized sites, pre-feasibility studies of promising candidates, and full feasibility and bidding documentation for the two highest ranked candidate sites
- Increase revenue collection capacity for REGIDESO by installing prepayment meters, upgrading billing and client management information systems, and strengthening energy conservation.
- Distribute EE lighting products to electricity consumers, alongside a media communication and public awareness campaign for EE lighting, solar water heaters, and EE air conditioners.
- Provide EE advice to large public institutions, as well as commercial and industrial consumers.
- Develop national guidelines for application of EE technologies in new housing and commercial real estate.

Executing Partners/Agencies at National Level

The executing partner/agency in this project is REGIDESO, the national utility of Burundi.

Project Budget

GEF – US\$ 2 million (including PPG and agency fees); Co-financing – US\$ 23.3 million

Progress

- The project is ready and expected to begin implementation of activities on the ground by October 2012. Initial delay in the project preparation phase owing to setback in the co-financing commitments anticipated at the conceptualization stage.

Activities	Timeframe	
CEO Endorsement (FSP)	February	2012
Implementation Start	October	2012
Mid-term Evaluation	June	2013
Project Closing Date	June	2014

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