Upscaling Mini-grids for Least Cost and Timely Access to Electricity Services

SREP round table

Haiti

Myanmar, Feb 6, 2017

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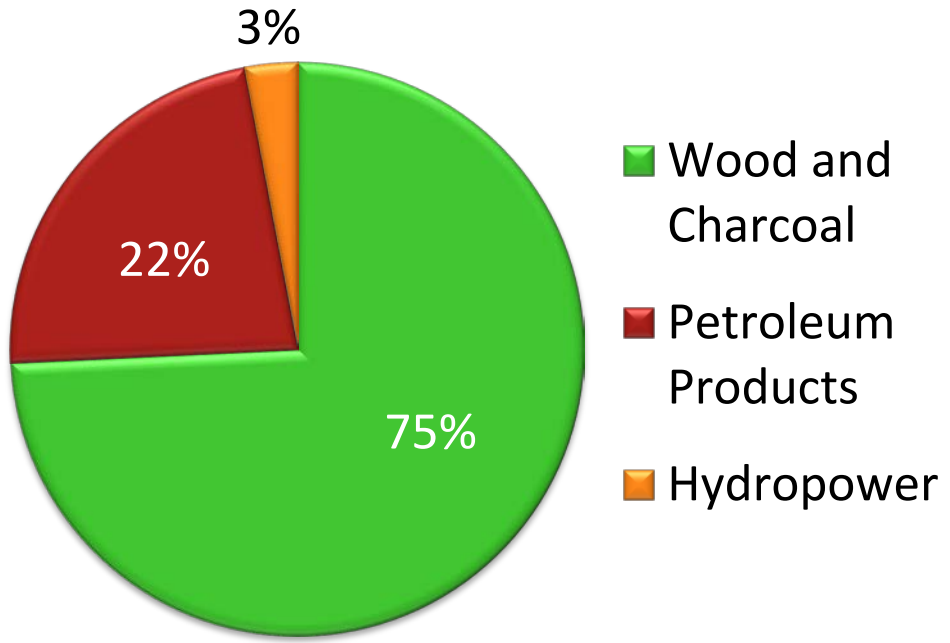
Country background

- Caribbean Country
- Population: 10.9 million
- GDP per capita: US$ 846 (2014)
- Widening poverty disparities between urban and rural areas
- Electrification rate of 30%
  (5% in rural areas)
- Intensive use of fuelwood and charcoal
- High dependence on fossil fuel–based electricity generation
- Aging and fragile infrastructure
- High technical and commercial losses
- Institutional, legal and regulatory framework limitations
- Economic and financial constraints
- Capacity and information constraints



Energy access is very low
while Haiti has an excellent but largely untapped RE potential (hydro, wind, solar, and biomass)

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Project outline

Project Development Objective

- Expand and improve the electricity services for Haitian households, businesses and institutions.

- Catalyze RE development and build local capacity in RE in order to fill the electricity demand gap reliably and cost-effectively— and to sustainably transform the country's oil-dependent energy mix.

Three components

i. Grid-connected variable renewable energy (SREP $14 million) – to deliver about 20 MW of variable
ii. Off-grid electricity for productive, social, and household uses
iii. Building an enabling environment, capacities, and skills for renewable energy scale-up

Component 1: Grid-connected variable renewable energy (SREP $14 million)

- Deliver about 15 MW of variable renewable energy (vRE) into the EDH grid on the South
- Support efforts to recover from hurricane Matthew
- Support the country's first grid-connected vRE project/s
- Use the experience to develop a suitable policy and regulatory framework to encourage larger investments (post-SREP scale-up)
- PPP, encouraging private investments (and adequate O&M), with SREP financing focused primarily on reducing the risk exposure of private developers through a guarantee (covering the off-taker risk – payment default or payment delays or both)
- Focus on solar technologies

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Project outline

Component 2: Off-grid electricity for productive, social and household uses (SREP $6 million)

- To scale up access to modern electricity services
- SREP support will be technology and business model neutral to incentivize private sector innovation
- Build upon current pilot projects
- Areas identified in the SREP investment plan as the most promising areas

  Hybridization and expansion of diesel-run isolated grid
  PPP for renewable energy mini-grids
  Energy for agri-businesses and other rural productive uses
  Energy for public institutions and community services

Component 3: Building an enabling environment, capacities, and skills for renewable energy scale - up (SREP $3 million)

- Support to develop an enabling regulatory framework for both on-grid and off-grid renewables, including development of quality assurance framework for PV products
- Capacity building – which will be gender-balanced and focus on three areas:
  - (i) professional education about RE (partnering with universities), e.g. improving curricula and supporting on-the-job training of RE professionals; (ii) vocational training, expanding on existing programs already in place; and (iii) provision of TA to the private sector entities involved in the implementation of the two investment components. .
- Development and implementation of gender-sensitive consumer awareness campaigns.

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Status

- Project Concept Note finalized
- PAD of each component under preparation and close to be finalized
    - Financial and Economic Analysis
    - Environmental and Social Management Guidelines
- Submission for March 2017

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Issues

i. Ensure appropriation of the project at high level with upcoming new administration
ii. Impact of utility financial situation on project design (Modification in design to mitigate risk)
iii. Weak and inconsistent regulatory framework for grid-connected and off- grid renewables (Component 3 of the project and current initiatives)
iv. Potential technical and financial risks
    i. Need to upgrade grid technologies to allow for integration of variables renewable energy

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Questions on moving forward

- What complementary financing opportunities are available and how to access them?
- What are approaches and methodologies to quickly build capacity of team who will be in charge of SREP project implementation (procurement, financial and technical)?
- How to prevent significant delay from contractual challenges and need for innovative financial mechanisms?
- How to ensure constant support from high level decision makers?

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