Regional Off-Grid Electrification Project
ROGEP

Implemented by: ECREEE

Funded by: WORLD BANK GROUP

Nicola Bugatti, Project Coordinator
12th October 2017
Outline

• The Regional Off-Grid Electrification Project – ROGEP
• ROGEP’s preparation phase
ROGEP aims to support the efforts of West Africa and Sahel countries to accelerate the deployment of standalone PV systems for households, public services and productive uses.

- 15 ECOWAS countries + Chad, Central Africa Republic, Mauritania, Cameroon
- Focus on mobilizing private investment with a market based approach
ROGEP will support the deployment of a vast array of standalone PV systems for households, public services and productive uses.

- Pico solar/ solar lanterns, 10-40 $
- SHS, 70-500 $
- Public institutions, 1000-20,000 $
- Productive uses, 500-15,000 $
ROGEP is conceived to support the countries to achieve the targets they have established for standalone off-grid rural electrification.

<table>
<thead>
<tr>
<th></th>
<th>Population in millions inhabitants</th>
<th>Localities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2020</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>300.7</td>
<td>421.0</td>
</tr>
<tr>
<td>Off-grid rural</td>
<td>71.4</td>
<td>104.3</td>
</tr>
<tr>
<td>Stand-alone rural</td>
<td>21.0</td>
<td>47.2</td>
</tr>
<tr>
<td>Off-grid rural</td>
<td>0%</td>
<td>17%</td>
</tr>
<tr>
<td>Stand-alone rural</td>
<td>0%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: EREP

- Add non-ECOWAS
GIS analysis preliminary results show off-grid solutions are the least-cost option for thousands of villages in the region, up to 65% of rural population currently.
The off-grid solar investments are growing exponentially but West Africa is not yet among the most interesting markets

Investments in PAYGO Solar companies

Global and Regional Sales Volumes and Revenues

- **World:** 3.77 million
  - US$ 113.9 million (cash sales revenues)
  - US$ 41.5 million (PAYGO revenues)

- **Latin America & Caribbean:** 50,372
  - US$ 1.5 million

- **Middle East & North Africa:** 240,738
  - US$ 16.81 million

- **South Asia:** 1.41 million
  - US$ 35.52 million

- **Sub-Saharan Africa:** 1.87 million
  - US$ 53.26 million

- **East Asia & Pacific:** 96,456
  - US$ 4.33 million

- **East Africa:** 1.49 million
  - US$ 44.07 million

- **West Africa:** 330,561
  - US$ 8.06 million

*Source: Global Off-Grid Solar Market Report Semi-Annual Sales and Impact Data JULY-DECEMBER 2016, PUBLIC REPORT*

*Source: REN21 2017 Global Status Report*
ROGEP aims at targeting finance and non-finance barriers companies are facing along the business growth cycle.

Source: Off-grid solar market trends report 2016
For Start-ups ROGEP will scale-up and expand the services of the ECOWAS RE&EE entrepreneurship Facility

- Trainings
- Technical assistance for projects refinement and transaction advisory services
- Seed funding
- Network of incubation centers
For mature companies ROGEP will facilitate access to debt capital through the establishment of lines of credit in financial institutions.

- working capital loan
- debt capital to support companies with “Pay as you go” sales schemes
- financing for productive uses
- Mitigate payment risks when providing electricity to public institutions

Source: Off-grid solar market trends report 2016
Ample opportunities for equity investors to partner with ROGEP exist.
ROGEP aims to support the improvement of conditions for investment and attract local and international companies to the business in a harmonized regional market.

| Regional quality market harmonization | • Minimum quality and service standards  
• Trade and customs conditions  
• ECOWAS certification scheme for PV installers |
|----------------------------------------|-----------------------------------------------------------------------------------|
| Improvement of national policy and regulatory framework and its operationalization | • National quality and technical standards, custom regulations, etc.  
• Legal framework for PAYG businesses i.e. Banking and utility  
• National electrification plan and strategy  
• Training and TA to public institutions |
| Commercial support | • Awareness campaign for potential customers and consumers education  
• Market intelligence, research and analysis  
• B2B support services  
• Facilitate access to information through [www.ecowrex.org](http://www.ecowrex.org) |
The first phase of ROGEP will have an overall budget of approx. 200M$ over the period 04/17 - 08/22

Component 1: Support public and private sector for the improvement of the enabling environment for private investment at regional and national level

Component 2: Facilitate access to finance to service providers to electrify Households and Commercial Enterprises through a financial intermediary

Component 3: Promote private sector investment in electrification of public facilities in rural areas
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A small PIU has been set-up at ECREEE to serve you better

- Coordinator: Nicola Bugatti
- Technical Coordinator: Yuri Handem
- Technical Specialist area 1: Hamadou Tchiemogo
- GIS Expert: Daniel Paco
- Financial Manager: Richard Boamah
- Accountant: Bintu Nambaah

Technical Specialist area 2: Kwabena Adom-Opare

Technical Specialist area 3: Seini NOUHOU AMADOU
Preparation phase (04/17 - 07/18) aims at creating opportunities of participation for all the stakeholders to define the project while starting at the same time implementation of some activities

• At least three regional events:
  • October 2017
  • March 2018
  • June 2018

• Two multistakeholders meetings in each country to promote dialogue among private and public sector and finance institutions

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The most critical activity of preparation phase is the completion of the market assessment of all the countries

- It will build as much as possible on already existing studies and be carried out in strict coordination with the countries
- Expected to start in December, the first study ever done on the regional market as a whole
- Discussion on regional technical standards at the second regional workshop
- Technical assistance based on demand of the countries can be provided already in the preparation phase for the improvement of the enabling environment
- ECOWAS RE&EE entrepreneurship facility is boosting its activities
  - regional trainings in August 2017 (Dakar, Abuja) and November 2017 in Praia for entrepreneurs selected under the 3\textsuperscript{rd} call
  - Business plan refinement in 2018 for selected entrepreneurs
The selection of financial intermediaries for implementation of lines of credit will be the most important activity for component 2 during preparation phase.
Installation of pilot projects for health and education facilities and water pumping in Niger and Nigeria will start during the preparation phase.

- Pilot projects in Niger and Nigeria to:
  - Test innovative business models and ecosystems to attract investment
  - Collect technical data for international quality standard
  - Creation of risk mitigation instrument (if needed)
  - Lessons learnt to be used to scale up investment in the region during the implementation phase
Partnership is in the DNA of ROGEP

- Promotion of dialogue among private and public sector and finance institutions
- Involvement of industry associations (GOGLA, ARE, ECOWAS Solar Professionals Association, etc.)
- Active participation of civil society
- Coordination and synergies with other projects and initiatives
The use of the different instruments of ROGEP by the countries will depend on the interest, enabling environment and market situation in each of them.

- Demand driven technical assistance to countries for the improvement of the enabling environment is available already in the preparation phase.
- Requests are welcome!
Time to open the discussion now!

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