Making energy access through mini-grids affordable:
The role of governments and international climate finance

African Mini-grids Community of Practice
Meeting 7
16 April 2020
LEDS GP Finance Working Group

The LEDS GP Finance Working Group (FWG) supports developing countries in accelerating investment into low emission development through:

- Peer learning & collaboration
- Targeted technical resources & support
- Innovative public - private partnerships
Session Overview

This session will:

• Explore the current mini-grid climate finance landscape in Africa

• Introduce the new LEDS GP ‘Mini-grid Funding Sources in Africa” resource

• Showcase an innovative financing platform- the Renewable Energy Performance Platform

• Hear directly from a private sector developer, ACOB Lighting Inc, their views on the role of finance in minigrid development
# Agenda

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Activity</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3</td>
<td>Welcome and Overview</td>
<td>Alexia Kelly, CEO &amp; Co-Chair Electric Capital Management &amp; LEDS GP FWG</td>
</tr>
<tr>
<td>3 - 15</td>
<td>Mini-grid Financing Landscape in Africa</td>
<td>Alexia Kelly</td>
</tr>
<tr>
<td>15 - 25</td>
<td>Mini-grid Finance Deep Dive: ACOB LIGHTING TECHNOLOGY LIMITED</td>
<td>Alexander Obiechina, CEO ACOB LIGHTING TECHNOLOGY LIMITED</td>
</tr>
<tr>
<td>25 - 40</td>
<td>Mini-grid Finance Deep Dive: Camco Clean Energy / REPP</td>
<td>Geoff Sinclair, Managing Director Camco Clean Energy / REPP</td>
</tr>
<tr>
<td>40 - 50</td>
<td>Q &amp; A and Wrap-up</td>
<td>Alexia Kelly</td>
</tr>
</tbody>
</table>
Financial Flows & Access to Electricity

• ~ 840 million people worldwide still lack access to electricity\(^1\)
• International financial flows to developing countries in support of clean and renewable energy reached $18.6 billion in 2016\(^2\)
• According to the IEA Energy Outlook Report for Africa – 2019\(^3\):
  • In 2030 there are still 530 million Africans without access to energy
  • Despite being home to 17% of the world’s population, Africa currently accounts for just 4% of global power supply investment
  • Achieving reliable electricity supply would require ~ $120 billion/year through 2040

Source:  
1 sustainabledevelopment.un.org/sdg7  
2 undocs.org/E/2019/68  
3 iea.org/reports/africa-energy-outlook-2019
Understanding Capital Markets: the Difference Between Debt and Equity

**Debt**
- Capital that is borrowed for specific purposes and paid back at an agreed interest rate over a fixed period of time
- Can be issued at the corporate or the project level
- Considered “non-dilutive” because does not offer an ownership share
- Considered lower risk and usually only issued once a company or project is cash flow positive/profitable

**Equity**
- Capital that is invested under agreed terms at the corporate or project level
- Usually invested in exchange for an ownership (or rights to) share of a company or project
- Considered higher risk but also higher potential reward
- Generally used to finance early stage/higher risk investments

Low Risk

High Risk
Understanding Capital Markets: Channels for Private Investment

**Corporate**

- Invest at the COMPANY level
- Both debt and equity
- Capital used for growth, productive development, marketing, personnel, equipment purchases, etc.

**Project**

- Invests at the PROJECT level or project group level (e.g. Special Purpose Vehicle established to hold a group of projects)
- Both debt and equity
- Capital used to finance specific costs associated with project (equipment purchase, land acquisition, construction, O&M, etc)
Understanding Capital Markets: Channels for Private Investment

95% of the microgrid market in Africa falls into these categories

**Stage 1**
Idea Stage
Product design/Development
Pre-cash flow

**Stage 2**
Product design/Development
Operations begin
Limited cash flow

**Stage 3**
Product testing
Generating revenue
But pre-profit

**Stage 4**
Business established
Generating sustainable profit
Ready to expand business/enter new markets

**Stage 5**
Operating profitably at scale
Can start acquiring other companies or looking at Initial Public Offering (IPO)

**Stage 6**
Business established
Generating sustainable profit
Ready to expand business/enter new markets

Shouldn’t be a problem for you to move in on Saturday and be there on Friday.

Higher Risk

Lower Risk
Understanding Capital Markets: Microgrid Investment Ecosystem

- Pre-Seed
- Seed
- Pilot
- Start Up
- Early Stage
- Growth Stage
- Mezzanine Stage

- Friends and Family
- Angel
- Venture Capital
- Family Offices/Impact Investors
- Local Financial Institutions
- Corporate Strategic Equity
- DFIs/MDBs/Institutional Investors

- $50K-$3M
- $150K-$500K
- $500K-$3M
- $3M-$10M
- $10 M+
- $150-350K
- $50-350K
- $500K-1M
- $1M-5M
- $5M-10M
- $10 M+
# What Flavor of Capital?

## Mini-grid Funding Sources in Africa: Most Prevalent Types of Funding Institutions

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank – Financial Institution</td>
<td>An institution licensed to receive deposits and make loans.</td>
</tr>
<tr>
<td>Family Office</td>
<td>Full-service private wealth management services, and typically offer a total outsourced solution to managing the financial and investment side of an affluent individual or family.</td>
</tr>
<tr>
<td>Private Equity</td>
<td>Alternative investment class that consists of capital that is not listed on a public exchange. It is composed of funds and investors that directly invest in private companies or that engage in buyouts of public companies, resulting in the delisting of public equity.</td>
</tr>
<tr>
<td>Multilateral Development Bank</td>
<td>International financial institution chartered by two or more countries for the purpose of encouraging economic development in poorer countries. MDBs do not seek to maximize profits for their shareholders and often lend at low or no interest of offer grants to fund projects.</td>
</tr>
</tbody>
</table>
Mini-grid Funding Sources in Africa

This mini-grid finance resource toolkit looks at existing investors / sources of finance, funding, and risk mitigation programs that either are or could be targeted at mini-grids.

You can access this resource on the Electric Capital Management and the LEDS GP AfLP website.
Mini-grid Finance Deep Dive

ACOB LIGHTING TECHNOLOGY LIMITED
Alexander Obiechina, CEO

Camco Clean Energy / REPP
Geoff Sinclair, Managing Director
Q & A from the Audience

Wrap-up and Next Steps
Alexia Kelly, alexia@electric.capital