WORKSHOP

EXPANDING DOMESTIC FINANCING
FOR LOCAL SOLAR BUSINESSES

October 7, 2020
TEMARIN Project Team

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The **TEMARIN** Project

**UNEP DTU Partnership** is a UN Environment Programme and Technical University Denmark Collaborating Centre and a leading international research and advisory institution on energy, climate and sustainable development.

**TEMARIN: Technology, Markets and Investment for Low Carbon and Climate Resilient Development**

Strengthening markets for climate technologies in Kenya and Uganda
## Today’s Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:15 AM</td>
<td>Brief Round of Introductions</td>
<td>All attendees</td>
</tr>
<tr>
<td>11:15-11:20 AM</td>
<td>Purpose and Context Setting</td>
<td>UNEP-DTU Partnership</td>
</tr>
<tr>
<td>11:20-11:45 AM</td>
<td>Bank Portfolio and Experiences</td>
<td>Kenya Commercial Bank</td>
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<td>11:45-12:30 PM</td>
<td>Discussion Session</td>
<td>Open discussion by all participants and</td>
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<tr>
<td></td>
<td></td>
<td>concluding points</td>
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</tbody>
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Attending banks

Please introduce yourself…
Interviewed solar PV companies

Please introduce yourself…

Automax
Epicenter Africa
GoSolar
Harmonic Systems
Kensen
Knights Energy
Multilink

Mwangaza Light
Ofgen
PowerPoint Systems
Questworks
Skynotch
Solar Poa
Solafrica
Distinguished guests

Please introduce yourself…

Olufunso Somorin and Muthoni Nduhiu, African Development Bank

Shelmith Theuri, Power Africa Off-grid Project, supported by USAID

Mutisya Ndunda, SUNREF-French Development Agency & KAM

Maimuna Kabatesi, Hivos, Dutch Development Organization
A few **practical things** before we begin...

- The discussion points made during this workshop will be included in the final report in an anonymized form.

- Notes taken from this workshop will only be shared internally within the TEMARIN Project Team.

**And lastly, please remember to:**

- Mute yourself 🎤
- You can raise your hand in Zoom to ask questions 🙋
- You can always write your comments and inputs in the chat box 📣
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Purpose & Context setting

Lakshmi Bhamidipati
Research Fellow (Postdoc)
UNEP-DTU Partnership
Silicon Valley has deep pockets for African startups - if you’re not African

American venture capital and private equity is dominating Africa, but it’s mostly funding other white foreign founders as black entrepreneurs struggle to raise financing.

Source: G4A (for off-grid solar)
Commercial banks lend in local currency, at market rate or at a concessional rate

Commercial banks have the scope to better understand the needs, the risks and develop trust and a common language for the market

Commercial banks can tailor their offering to meet the growing market demands

... can play a critical role in boosting local entrepreneurs and indirectly the GDP
Limited supply of Investor Ready Projects / Limited Investment Readiness

- Limited supply of well-structured / profitable projects
- Lack of financial & commercial skills

- Traditional financial offering and risk assessment
- Low familiarity with technologies & business models
Local companies have and are still evolving...

- Companies with experience ranging from 5 to 20 years
- Companies with annual turnover between 100,000 USD to 5 million USD
- Companies have a strong awareness of local needs language, culture, behaviour

Range of different markets and specializations

- Distribution/Sale of Off-grid solar products and SHS
- Small-scale PV installations in schools and health centres
- Solar mini-grids for town centres, businesses, and villages
- Solar-based water pumps for irrigation
- Solar C&I Installations – grid-tied systems
- Utility-scale PV projects – project preparation and EPC
Commercial banks are evolving...

Commercial Banks offering traditional loans at market rate (limited knowhow)

Commercial Banks offering concessionary loans via donors + capacities enhanced at corporate banking level

Commercial banks starting to offer more tailored products...

- More concessional finance options
- Leasing finance
- Green bonds
Needs and expectations

Needs of the companies

- Loans for managing cash flows (short-term, long-term) - not project related
- Contract-based financing (alternate to collateral) (where customer contracts can serve as security)
- Inventory financing (where products/stock purchased is mortgaged)

Needs of the commercial banks

- Land based security (collateral)
- Guarantees by parent company
- Bankability - Cost, IRR, payback period, debt service ratio etc.
- Company structure - shareholders, tax compliance etc.
- Technical strength - work experience, track record, capabilities, partnerships
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Bank Portfolio & Experiences

Kenya Commercial Bank
Equity Bank
Co-operative Bank
Absa Bank
## Bank's Portfolio on Solar SME Lending

| Specific targeted market segments within Solar | • Independent Power Producers (IPP’s)  
• Commercial & Industrial Sector  
• Education Institutions  
• Hospitality Sector |
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<td>Businesses or Projects already supported (number of projects and/or funding volume)</td>
<td>• The Bank has disbursed Up to USD 37M toward Renewable Energy over the last 5 Years.</td>
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<tr>
<td>Supported any local solar MSMEs - If yes, how many?</td>
<td>• The Bank has financed small Solar Pv’s of less than 100Kwh.</td>
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| Future plans or anything else you want to add? | • Commercial and Industrial Sector Customer.  
• Domestic use-Roof Top Solar Pv’S and Solar water Heating solution  
• Agriculture-Solar water Pumps. |
**Case 1: - Positive Experience or Example of lending a local solar SME**

| What was the financing need of Company A? and for which PV market segment? | • The Company required financing for 600Kwh Solar PV plant.  
• The power generated was for their own use and excess was to supply to the national Grid. |
|---|---|
| Explain the example further in terms of the loan tenor, cost of finance, IRR, payback period, collateral | • Loan Tenor: 120 Months  
• Cost of finance-Subsidised funds from AFD  
• IRR: 12%  
• Pay Back period: 7 Years  
• Collateral: Legal Charge and Debenture over the Solar Equipment's |
| What were the technical strengths of this project or SME? And how did you assess the company or project for approval? | • The technical aspect of the project was approved by SUNREF/AFD |
## Case 2 - Negative Experience or Example lending a local solar SME (anonymous)

| What was the financing need of Company B? and for which PV market segment? | • 400Kwh Roof Top Solar PV  
| | • Total Project Cost: USD 429,000.00  
| | • Commercial Sector-Own consumption |

| What expectations/requirements did the Company B not fulfil to be eligible for funding? | • Collateral/Security : The customer did not have tangible security to cover the exposure.  
| | • Equity Contribution: The company was not willing to inject the upfront 30% Equity. |
Challenges lending to SME’s

| Challenges lending to SME’s | • Capacity to engage qualified Technical Providers who are able to access the Energy needs, sourcing of materials from credible suppliers with warranties and supervision that installation is done correctly  
| | • Owners’ Equity: The project sponsors are unable to mobilize the 20-40% equity as the Bank only finances 60-80% of the project cost.  
| | • Scope of Auxiliary Costs: In some projects other costs arise that have to be undertaken to make the project a success. A recurring case is of roof installation of solar PV panels; the bank &/or client has to incur an extra cost of refurbishing/ rebuilding the roof to enable it hold the weight of the PV panels which is not usually accounted for at the project implementation stage |
Discussion Session
**Situation 1**

**Issue of Collateral**

What are the alternatives?

Off-taker Agreement, Inventory Financing, Guarantee instruments (G4A, MoE)

**Situation 2**

**Issue of Small-sized projects**

Can projects be aggregated for debt finance?

What should be the model?

Joint Venture, SPV

**Situation 3**

**Issue of Weak Proposals**

Publicly sharing good examples on an accessible portal

Sharing examples of completed projects with financial close

Other avenues?

**Situation 4**

**Any other issues?**

High Interest rates?

Better data and information?

Rigidity in the banking system?
1. Issue of Collateral

Situation 1

Issue of Collateral

What are the alternatives?

Off-taker Agreement / Client Contract, Inventory Financing, Guarantee instruments (G4A, MoE)
2. Issue of Small-sized projects

Situation 2

Issue of Small-sized projects

Can projects be aggregated for debt finance?

What should be the model?

Joint Venture, SPV
3. Issue of Weak Proposals

Situation 3

**Issue of Weak Proposals**

Publicly sharing good examples on an accessible portal

Sharing completed projects with financial close
4. Other issues

Situation 4

Any other issues?
Thank you attending!

More information about the TEMARIN project [here](#).

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