UNEP Finance Activities for Clean Energy SMEs

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AGENDA

1. The Clean Energy Financing Challenge
2. UNEP Energy Finance Activities
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Clean Energy Finance Africa
The Clean Energy Financing Challenge

- **Huge capital investments required in the coming decades to meet the energy needs of developing countries.**

- **Finance industry will play crucial role.**

  - *UNEP’s Energy Sector response...*
    - **Partnering w/ first movers** to develop and implement new products, commercial strategies and investment approaches.
    - **Working through industry platforms** to share information and build capacities.
    - **Maximising leverage** of public funds w/ private capital.
## Clean Energy Challenge – SMEs vs. Traditional Utilities

<table>
<thead>
<tr>
<th>Traditional Utility Approach:</th>
<th>Energy Enterprise Approach:</th>
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<tbody>
<tr>
<td>1. Create energy infrastructure</td>
<td>1. Create energy enterprises</td>
</tr>
<tr>
<td>2. Infrastructure will foster enterprise</td>
<td>2. Energy entrepreneurs will create infrastructure</td>
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<tr>
<td>• Central utility not familiar with needs of rural populations.</td>
<td>• Local SMEs know their markets and are more reactive to their needs.</td>
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<td>• Too slow to reach rural Africa within the next decade.</td>
<td>• SMEs will always use the most efficient technology option available.</td>
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<td>• Too slow to capitalise on technological progress.</td>
<td>• <strong>BUT:</strong> SMEs need financial services to develop.</td>
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### Financing Energy SMEs – A sensible thing to do while waiting for capacity additions and rural electrification.
Common Barriers to SME Finance (I)

- Small projects/companies
- Higher real and/or perceived risk
- Absence of sound historical data
- Limited access to reliable technical information
- Lack of in-house banker skills to evaluate projects
- Increased transaction costs with initial investments
- Lack of internal rewards or incentives

Information/transaction cost barriers at the core…
Common Barriers to SME Finance (II)
SME Finance “Continuum”

Working to build a continuum of financial services to foster new technologies and business models.
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4 Key Activity Areas

1) Enterprise Development and Seed Capital
   – African Rural Energy Enterprise Development (AREED)
   – Seed Capital Access Facility (SCAF)

2) End-User Lending to Small Scale RETs
   – India/Indonesia Solar Loan Programme
   – Mediterranean Solar Water Heater Programme

3) Smart Subsidies and Public Finance Instruments
   – Mediterranean RE Programme (MEDREP)
   – GreenVillage Credit (China)

4) Scaling up the CDM
   – SME capacity building
   – Sharing the cost of project development

Addressing the key challenges of clean energy SMEs in emerging economies.
Implementation Example: Rural Energy Enterprise Development (REED)

- Enterprise development and seed financing to clean energy entrepreneurs in developing countries
- Operating in five countries of West and Southern Africa (AREED), Northeast Brazil (B-REED) and China’s Yunnan Province (CREED)
- Training, hands-on business development assistance and early-stage investment for energy enterprises
- Helping young enterprises attract commercial capital

Addressing the “risk capital gap” through enterprise development services and seed capital support.
Implementation Example: The Seed Capital Access Facility (SCAF)

Changing investment attitudes by supporting the creation of seed investment windows.
Barriers Example: Indonesian Market for Solar Home Systems

- Government promoting SHS aggressively
  ...but with heavy subsidies, limited commercial orientation.

- 3 major vendors competing to supply Govmt. programs
  ...but making little headway in selling directly to customers.

- Millions of rural homes using kerosene lamps
  ...willing to purchase SHS if only they had access to credit.

- Well capitalized banks spread across the country
  ...yet not coming forward to extend loans to SHS

Absence of credit solutions as key barrier.
Implementation Example: End-User Lending for Solar Home Systems

Leverage existing networks, build new market linkages.
Bridging Market Gaps: Proposed solutions for market transformation

(1) Encourage Banks to lend
   • Market intelligence: Helping understand the need, gaps and business potential
   • Help structuring competitive loan products
   • Facilitate Implementation

(2) Improve financial capacity of buyer
   • Reducing collateral requirements
   • Offering credit insurance
   • Extending load terms

(3) Build a commercial model
   • Help the market grow on its own, limit “soft support”
   • Replication through improving SET “bankability”

“Development with a business face “
Barriers Example: Carbon Finance in Africa

Non Africa-specific:
- Complex modalities & procedures, high transaction cost
- Heavy institutional requirements for project cycle
- Knowledge gap between ER buyers & sellers

Africa-specific:
- Limited access to finance by potential developers
- Financial intermediaries lack knowledge of CDM
- Lack of trained national CDM professionals
- Regulatory/legal framework, investment climate
- Large number of small projects, lack of entities capable of bundling

Need for comprehensive hands-on capacity building.
Implementation Example: UNEP’s CDM Activities in Africa

1) “Capacity Development for CDM” (CD4CDM):
   – U$12.5 million, Dutch funded project

2) “Carbon Finance for Sustainable Energy in Africa” (CF-SEA):
   – U$1 million, UNF-CDCF funded
   – Five SSA countries
   – Completion Dec. 2007

3) Energy-Sector CDM Capacity Building:
   – GTZ/BMZ funding. Five SSA francophone countries
   – Inception Sept. 2007

4) “Carbon finance for Agriculture, Silviculture, Conservation, and Action against Deforestation” (CASCADE):
   – U$3 million. French-funded
   – Focus on Forestry/Bioenergy projects
   – Seven SS African francophone countries
   – Inception March 2007

Close cooperation with partners of “Nairobi Framework”
Implementation Example: Integrated Approach of CDM Activities

**Track 1 Activities:**
Capacity Development

**Track 2 Activities:**
Project Development

**Track 3 Activities:**
Knowledge Management

3 interlacing activities performed in parallel…
Barriers Example: The Carbon Project Financing Challenge

Preferences of financial sector:

- Banks, equity investors, insurers prefer large scale projects to maximise absorption of transaction cost
- Carbon funds focus on compliant CERs
- ECA focus on “export benefits”

Needs of SMEs/project developers:

- Flexible and risk tolerant sources of capital
- Up-front carbon buyers
- Funding for small-scale projects

Large gap b/w supply and demand for funding.
The Carbon Project Financing Challenge - The SME’s Perspective

- **“Intellectual” Challenge**
  - Understanding what investors and lenders are looking for in a “bankable” project
  - “Thinking like a banker”, investor or buyer of CERs

- **“Sourcing” Challenge**
  - Seeking financing from a variety of local and international sources

- **“Packaging” Challenge**
  - Finding the right risk/reward balance for every financier

Cost of raising capital 20-30% higher compared to traditional project finance.
The Carbon Project Financing Challenge - The Financier’s Perspective

- **Investment environment concerns**
  - Traditional country risk + additional concerns about institutional/regulatory exposure

- **Project viability concerns**
  - Traditional project risk + additional concerns about new technologies, non-traditional feedstock, non-traditional purchasers, new stakeholders

- **Carbon revenue concerns**
  - Enhancement of revenue stream and ROI, but how volatile? How long into the future?

*Traditional Risk/Return Analysis insufficient.*
Implementation Example: UNEP approach to mobilising the finance community

- Project development support provided in close cooperation with leading carbon buyers
- Delegates of local financial institutions present at all capacity building activities
- Sponsoring of deal making opportunities to enhance interaction between investors and developers
- Supporting developers in providing sound financial data and analysis
- 3 major African events addressing the African banking community (May 07 - Anglophone Banker’s workshop; January 08 - Francophone Banker’s workshop); Sept. 08 African Carbon Expo.

Financial sector engagement key part of CDM capacity building approach.
Thank you!
Thank You!

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