Private Investments Promotion Program

An Integrated Approach to Promote Low Carbon Technologies

Istanbul June 15, 2015
About RCREEE

- Independent regional intergovernmental organization
- 16 member states
- In operation since 2008
- Headquartered in Cairo, Egypt
Progress Towards Sustainable Energy Development
Renewable Energy

Energy Efficiency
Transition to Sustainable Energy
Although there are many profitable opportunities in sustainable energy in Arab countries, private investments have lagged
Low Awareness

Actors are not aware of the existence of a certain business model and/or financing option that would make this opportunity economically feasible.

Insufficient Capacity

Local businesses, banks and government agencies do not always have enough human capacity to assess the feasibility of a project.

Lack of Trust

Not enough practical experience of success stories to overcome initial distrust of new technologies and business models.
Program Objective

To translate *improved framework conditions* in Member States into concrete renewable energy and energy efficiency *actions by the private sector*, through *market-based transformative* interventions.
Integrated Approach to Promote Low Carbon Technologies
Conduct Rapid Market Assessment Study

Outreach to Companies to identify partners

Identification of possible business models for pilot projects

Dissemination of Successful Business Model

Targeted Technical Assistance and Capacity Building

Support for the Implementation of Business Model Demo Project

National standards and improved policies

More companies are involved – Business associations

Funds available for projects applying the business model
# Diesel to Solar (D2S)

## Objective

The project aims to achieve poverty alleviation and increased food and water security by demonstrating the technical, financial, and economic viability of solar PV energy hybridization of conventional (diesel) power generation for small and medium Off-grid power systems in the MENA region.

## Problems Addressed

- Low Awareness
- Insufficient Analytical Capacity
- Lack of Trust
- Lack of Finance

## Focus Countries

<table>
<thead>
<tr>
<th>Problems Addressed</th>
<th>Focus Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Awareness</td>
<td>Egypt, Sudan</td>
</tr>
<tr>
<td>Insufficient Analytical Capacity</td>
<td>Djibouti, Yemen</td>
</tr>
<tr>
<td>Lack of Trust</td>
<td></td>
</tr>
<tr>
<td>Lack of Finance</td>
<td></td>
</tr>
</tbody>
</table>

## Focus Area

Decentralized Solar PV

## Intervention Types

- Specialized research and analysis
- Promotion and awareness building
- Technical Assistance and Capacity Building

## Partners

![UNDP](UNDP.png)

*Empowered lives. Resilient nations.*
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Funds available for projects applying the business model
- Four countries: Egypt, Djibouti, Sudan and Yemen
- Mixed primary and secondary sources
- Identifies the most promising applications

<table>
<thead>
<tr>
<th>Category</th>
<th>Annual Diesel Consumption</th>
<th>Potential (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Electricity</td>
<td>130.99</td>
<td>178.7</td>
</tr>
<tr>
<td>Private Electricity</td>
<td>291.85</td>
<td>370.3</td>
</tr>
<tr>
<td>Irrigation/Agribusiness</td>
<td>5473.17</td>
<td>4468.5</td>
</tr>
<tr>
<td>Single-Activity Electricity</td>
<td>17.82</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5976.23</strong></td>
<td><strong>5022.6</strong></td>
</tr>
</tbody>
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Business Models for PV in Egypt

by
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submitted to the
Faculty of Electrical Engineering and Computer Science
University of Kassel, Germany
and the Faculty of Engineering
Cairo University, Giza Egypt

In partial fulfillment of the requirements for M.Sc. degree in
Renewable Energy and Energy Efficiency for the MENA Region
REMENA

15th of May 2015

Examiner: Prof. Dr. sc. techn. Dirk Dahlhaus University of Kassel, Germany
Examiner: Prof. Dr. Adei Khali University of Cairo, Egypt
Supervisor: Amer Barghouth RCREEE, Egypt
Supervisor: Dr. Benjamin Schulz Consultant, Germany
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RCREEE – Lahami Bay PV Site Visit

Report on PV Plant Installation Check of Lahami Bay Pilot Power Plant

on March the 19th, 2015

Site Visit & Report by Matthias Namgalies, Visiting Researcher at RCREEE

23rd of March 2015
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