

**USAID ECONOMIC GROWTH OFFICERS WORKSHOP  
OCTOBER 15-19, 2007  
WASHINGTON, D.C.**

Session Title: Lighting Africa: A World Bank Initiative

Date and Time: October 17, 2007, 1:30pm – 2:30pm

Type of Session: Breakout

Speaker(s): Fabio Nehme, International Finance Corporation (IFC)

Moderator: Gordon Weynand

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**Overview of Session:**

Fabio Nehme presented IFC's initiative on developing a market-based solution to off-grid lighting in Africa, and connected the effort to the Clean Energy Investment Framework and the global strategy to combat climate change. The main premise underlying "The Lighting Africa Project" (LAP) is that there is a large and effective demand in Africa for better solutions to off-grid lighting than are currently being marketed. Kerosene-based solutions, which account for most off-grid lighting, are inefficient from both a quality of lighting as well as an environmental perspective. Using the model of mobile telephony, IFC seeks to develop a functioning market for light emitting diode (LED)-based solutions to providing lighting to Africans who live where they are unlikely to soon be linked to any electrical grid.

**Speaker's Remarks:**

According to Fabio Nehme of the Lighting Africa Project, there is a huge market (500 million Africans) for off-grid lighting solutions that can be catered to by suppliers of better quality lighting solutions (in particular LED-based solutions) than the kerosene and other fuel-based solutions that dominate much of the market in Africa. The solutions that Lighting Africa seeks to support are grounded on the three pillars of the Clean Energy Investment Framework:

- Pillar 1: Access to Clean Energy
- Pillar 2: Mitigation of Environmental Effects
- Pillar 3: Adaptation

Specifically, with respect to Access to Clean Energy, which is the primary focus of this project (while other pillars are, of course, not ignored), there are three goals: 1) Electricity for growth, 2) Powering the MDGs (Millennium Development Goals), and 3) Meeting basic needs.

One talks of a digital divide, but night-time satellite pictures of the earth show that Africa is living on the dark



Fabio Nehme addresses workshop attendees. Photo by Paul Goodman.

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side of a “lighting divide.” Worldwide 1.6B people “live in the dark,” of which 500M are in Africa. Yet the average household spends \$50-\$100 each year on lighting, roughly 15% of disposable income. Small enterprises spend on average \$100-\$1000 on lighting each year. There is a huge demand for lighting that is being met by low quality solutions such as kerosene. Nehme estimated the global lighting market at \$38B per year. The current products meeting this market for off-grid lighting are expensive, of low quality, unsafe and unhealthy. It is not this assessment that makes The Lighting Africa Project new, it is the response which seeks to be different from traditional off-grid or mini-grid lighting projects. Most of these projects have been small in scale, have drawn “nice” lessons, but have had limited regional impact. LAP seeks to come up with a sustainable, market-led solution that can sweep through Africa much as mobile telephony has.

IFC is helping to get this market going by undertaking a set of activities aimed at 1) reducing market entry costs, 2) fostering competition and innovation, and 3) supporting long term market development. One thing the IFC will NOT do is to try to determine the business models or individual business “winners.”

To help businesses get into the market and reduce market entry costs IFC is helping to identify entry costs, consulting on the business pitch and consulting on how to keep the cash flow maintained. The basic up-front costs include 1) finding partners (consortia), 2) market intelligence, 3) access to distributors (IFC is lining up Coca-Cola, Nokia, Celtel and Safaricom, among others).

To foster competition and innovation, IFC has used a “Development Marketplace” approach that the World Bank has used before, which calls for proposals from around the world on how any company or consortium of companies or organizations would establish an LED-based lighting business. The deadline for the first round of proposals is late October of this year (2007).

A key approach to developing a long term market is to establish and enforce minimum performance standards, to plan for recycling of LEDs and batteries, and to avoid getting entangled in “cost buy-downs” or subsidies, which will jeopardize the market solution.

LAP is initially targeting 10 countries including Tanzania, Zambia, Kenya, Ghana and ultimately six others including Nigeria. It is a work in process, but at the time of the presentation, LAP had 400 participating companies, representing 40 countries and entrepreneurs from 15 African countries. They have established a business-to-business (B2B) web portal, have received 150 proposals in response to the Development Marketplace competition, which was launched on September 4, and have selected a market research company, which has begun its research.

As part of this initiative there will be a Global Off-Grid Lighting Meeting in Accra, Ghana in April 2008 (see [www.lightingafrica.org](http://www.lightingafrica.org)).

**Key Points Discussed During Question & Answer Segment:**

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- Importance of avoiding subsidies was reiterated during the Q&A session. That does not, of course, preclude establishing some sort of vendor financing such as dedicated loans to banks for on-lending to key sectors.
- Can the project be extended (will it) from off-grid lighting to clinics, schools, etc.? The WB wants to serve these sectors as well, but there is no defined program for clinics and schools as part of LAP.
- What role might LAP play in providing power solutions to ICT in places like Chad? These power needs are better served either by mini-grid solutions or access to the grid.
- There is a large need for slum areas that are often in the vicinity of grids, to gain access to those grids. What is the solution? Number one solution is always to extend the grid where possible. Note that 90% of people without access to the grid live within 10 kms of the grid. In other words, for most people access to the grid is the primary solution for lighting and other electricity power needs.
- There is great promise in pre-paid meter systems as a way of cost-effectively achieving a market solution to getting the poor onto the grid. The example was of the IRG project in Monrovia, Liberia. This is a good approach to slum electrification.
- Traditional power distributors must be understood and worked around to make sure projects like LAP will not be sabotaged by people with conflicting goals. Generally, distributors have been positive, but have not done much to develop the off-grid lighting market simply for lack of knowledge and awareness of the possibilities.