

# LIGHTING AFRICA

N E W S L E T T E R

## IN FOCUS

### Faulu – Reaching the Base of the Pyramid with Off-Grid Lighting

By Faulu Advisory

*“The police had come to arrest me because they thought I had stolen electricity cables to light my house. When they arrived, I showed them my solar lamp. They were very surprised and impressed and they said they will also purchase one.” – Shabaan, Malindi.*

Faulu Advisory Services (FAS), a subsidiary of Faulu Kenya Deposit Taking Microfinance Institution (FKDTM), provides advisory and consulting services to catalyze growth of micro, small and medium enterprises and the institutions that serve them. Serving its mission to “empower people and businesses to excel” FAS is supporting marginalized communities in Kenya to purchase solar portable lamps that have passed Lighting Africa quality tests. Through its nationwide microfinance schemes, families, schools, businesses and whole communities are able to afford clean, modern off grid lighting products for the first time.

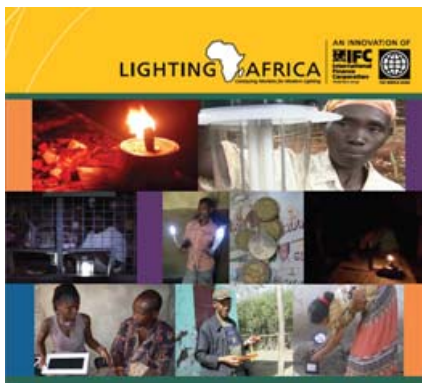
FAS established its energy division in partnership with Arc Finance to pilot solar lighting products almost two years ago. In less than one year, they have distributed over 3000 solar products to communities in need.

For example, students from a school in Webuye had been using kerosene lamps for their evening and early morning studies (with each lamp consuming about 300 kshs per month, equivalent to approximately four US dollars). FAS provided a classroom with a solar lamp to replace some of the kerosene lamps and the students have been able to extend their study time by several hours every day, benefiting from superior quality light which is also maintenance free and non-hazardous. The school plans to purchase additional lamps to extend to other classrooms.

(Cont. page 2)

## LIGHTING AFRICA NEWS

### New research report will help new players enter Africa’s off-grid lighting market



*Lighting Africa recently released a comprehensive report on the off-grid lighting market in Sub-Saharan Africa. It features a wealth of information on consumer behaviour and the latest market trends.*

*The Off-Grid Lighting Market in Sub-Saharan Africa: Market Research Synthesis Report* provides lighting manufacturers, assemblers and distributors with the in-depth knowledge they need to enter the market, tailor their products to consumers, and make informed market development decisions.

Specifically, the report provides data on consumer characteristics as well as consumer feedback on lighting products. It also includes market size estimates and makes recommendations for manufacturers and distributors who are new to the African market.

The report compiles the findings of extensive consumer studies undertaken in Ethiopia, Ghana, Kenya, Tanzania, and Zambia. Lighting Africa interviewed 10,000 potential off-grid lighting consumers and conducted the following studies in each country:

- i. A qualitative study to understand opportunities and test modern lighting products
- ii. A quantitative usage and attitude study among consumer households and traders
- iii. A product home trial study

Go to [www.lightingafrica.org](http://www.lightingafrica.org) to:

-Download the *Off-Grid Lighting Market in Sub-Saharan Africa: Market Research Synthesis Report*

-Download the [full length 5 country research reports](#) and [raw research data](#)

The raw research data is available for download on the Lighting Africa website (you will be required to login or create a user account to gain entry to the documents). We welcome the use of the data for new research. Should you decide to use the data, we encourage you to contact us so that we can disseminate the findings through the Lighting Africa website! For more information, contact us at [qualityassurance@lightingafrica.org](mailto:qualityassurance@lightingafrica.org)



**Top:** Students studying under a kerosene lamp  
**Bottom:** The same students studying under a portable solar lamp  
 ©Wilkins/Lighting Africa

For more information: [fased@faulu-advisory.com](mailto:fased@faulu-advisory.com)

FAS empowers clients at the base of the pyramid (BoP). Through its work, both small business and households are benefitting from an improved quality of life, increased productivity and income levels

*"I have a business in Lodwar and I realized that the landlord was ineffective in paying electricity bills so there were frequent blackouts. Through FAS I was able to buy a lamp for my business. Nowadays I don't pay bills and I have influenced three of my friends in Lodwar. Thanks so much for the technology"*— Gladys, Lodwar.

*"I took the lamp against my husband's wishes and gave it to my children to use it for studies because kerosene was more expensive for me. After some time he realized something strange in the children's room. When he learnt about the product he advised me to go for another one, which I did. Nowadays, 'sinawasiwasi' (I don't worry) because the lantern, which uses kerosene, was sent packing and I don't switch off my phone as I used to. I now have two lamps and my children enjoy reading for more hours. "Maishani bora nahizitaa." – Chepkoech, Kitale.*

FAS has a nationwide network in Kenya.

## STORIES FROM THE FIELD



A trader at a night market in Africa, with a kerosene lamp  
 © Wilkins/Lighting Africa

### How much does kerosene really cost?

*"My children use the kerosene lamp to study at night, but on the days when I can only afford to buy a very small amount of kerosene my children do not get to study very long and cannot learn. When the kerosene runs out there is only darkness."*

- Rural villager from Fatick, Senegal.

**New Lighting Africa research on kerosene pricing in Mali, Senegal, Tanzania, Ghana and Kenya suggests that the amount users *actually* pay per liter is likely to be quite a bit more than the documented expenditures claim.**

Previous estimates indicate that Africans spend \$10.5 billion a year on kerosene for lighting but new evidence suggests that this figure may be an underestimate. Trying to validate this figure is a challenge to begin with because the actual price rural users pay for kerosene has only recently been incorporated into national census records. Moreover, *"the available data on kerosene expenditures rely on the price per liter to estimate the cost of lighting for kerosene-based lighting sources,"* says Jennifer Tracy, research consultant for Lighting Africa.

*"People in rural areas rarely purchase by the liter since often times they can only afford to buy kerosene in smaller quantities, on an incremental basis; for example from the village shopkeeper, who has brought back the fuel from a nearby town."*

**This new research could indicate that switching to clean off-grid lighting could be even more economically beneficial than presupposed.**

(cont. page 3)

## OFF-GRID LIGHTING SECTOR NEWS

### Kick-off meeting of the Global Off-grid Lighting Stakeholder's Association held in New Delhi

Twelve international companies congregated in New Delhi, India, in February to attend the Global Off-Grid Lighting Stakeholder's Association 'kick-off meeting'. The meeting marked the beginning of a united industry voice dedicated to advance and develop clean off-grid lighting solutions for developing countries. All companies involved at the meeting signed a Memorandum of Understanding that could form the basis to set up the Association.

The signatories' primary intention is to support and promote the sustainable development of clean off-grid lighting solutions in developing nations, enabling economic, ecological, and social benefits for all stakeholders. They also seek to address climate change by mitigating emissions of greenhouse gasses.

The Memorandum of Understanding builds on the 'Green Paper / Letter of Intent to Create an International Off-Grid Lighting Stakeholder Association' initially signed by 24 organizations in Nairobi, Kenya on May 18, 2010, during the Lighting Africa International Conference and Trade Fair.

The Association is an important first step in moving the Lighting Africa program towards a self-sustaining operation, and provides an "exit strategy" for the World Bank Group, which has served to jumpstart the off-grid lighting industry and marketplace.

For further information on details and forthcoming membership opportunities, please contact Rodd Eddy: [rodd@GlobalOff-GridLightingAssociation.org](mailto:rodd@GlobalOff-GridLightingAssociation.org)

## STORIES FROM THE FIELD

(Cont. from page 2)

People in rural areas spend an average of 30% more for kerosene than people who live in urban centers. In the most extreme cases, the price of kerosene in rural areas can be up to 130% more than in urban centers. This cost disparity is one preliminary finding of the study that Lighting Africa is conducting on kerosene pricing. This research will help Lighting Africa support existing research and offer new insight into actual kerosene expenses sustained in rural, off-grid households, for illumination.

**Stay tuned!** The results of the Lighting Africa kerosene expenditure study will be published in late summer 2011 on the Lighting Africa website: [www.lightingafrica.org](http://www.lightingafrica.org)

## ASSOCIATE NEWS

### Barefoot Power receives €1 million European Financial Assistance

Barefoot Power, a Lighting Africa Associate, received €1 million in financial assistance from the European Union via the European Investment Bank in 2010. The grant is supporting a number of initiatives to help more than 2,000,000 households switch from kerosene to more affordable, clean and efficient forms of energy by 2015.

These initiatives include:

- Developing and managing the internal operation of new business software
- Developing formal structures for the aggregation of angel investors
- Supporting revenue generation activities- for example raising angel investor capital and supporting the operation of the Okiocredit-Barefoot Power Trade Finance Fund to finance 2011 shipments
- Incorporating Barefoot Power's subsidiaries in the India and Pacific region
- Securing the engagement of additional microfinance institutions
- Facilitating increased training of entrepreneurs
- Assisting in further developing Barefoot Power's carbon initiative

**About Barefoot Power:** Barefoot Power is a global, social for-profit enterprise that manufactures and distributes solar phone charging, lighting products and business development services to people at the base of the global economic pyramid. Founded in 2005, Barefoot Power has impacted the lives of 1 million people in over 20 countries, while reducing the global carbon footprint.

Learn more about Barefoot Power's products, distribution models and investment opportunities at [www.barefootpower.com](http://www.barefootpower.com)

## Distribution of Quality Tested Products Ramps Up and Out



In August of 2010, only 30 retail outlets were selling products that passed Lighting Africa quality tests and 95% of the vendors were electrical shops. However, entrepreneurs were quick to realize that if they were to reach scale in distribution, they would need to engage many other kinds of distributors such as those that have achieved high levels of success in building volume in remote rural and other hard to reach markets that tend to operate in less conventional ways.

The net effect of these activities, and supported by Lighting Africa's consumer education campaign, roadshows and forums, has been a substantial increase in both distribution and geographical reach. There are now approximately 250 retail outlets in Kenya carrying off-grid lighting including supermarkets, rural consumer goods shops, and groceries. New and unconventional vendors for these products are springing up all over rural Kenya with surprising momentum.

To see which lighting products have passed Lighting Africa quality tests, visit [www.lightingafrica.org/our-associates](http://www.lightingafrica.org/our-associates)



Photos: The eight products that have passed Lighting Africa quality tests so far

## NEW RESOURCES

### Inclusive Business Solutions: Expanding Opportunity and Access at the Base of the Pyramid

IFC's new report, *Inclusive Business Solutions: Expanding Opportunity and Access at the Base of the Pyramid*, outlines IFC's business solutions that are designed to facilitate new opportunities for innovation, growth and competitiveness at the base of the pyramid (BoP).

Too often, people living at the BoP are unable to access key services and, when they can, they are often unaffordable and of insufficient quality to meet every day needs. For example, it may be difficult for people to acquire steady jobs; attract business opportunities; secure a reliable source of clean water and electrical power; access modern communications; and receive healthcare, educational opportunities, or financial services. Moreover, in the absence of efficient, formal markets, people often have to pay more for such services than those residing at higher levels of the economic pyramid — a phenomenon known as the “poverty penalty.”

Around the world, IFC clients are filling this gap through “inclusive business models” - offering goods, services, and livelihoods to the BoP with the (non-conventional) recognition that they are key players and viable entrepreneurs in the global commercial marketplace and supply chain mechanics- as consumers, producers, distributors, and retailers.

In fiscal year 2009 alone, IFC committed \$780 million to more than 35 clients that were implementing inclusive business models around the world. Now, there are more than 150 active clients with inclusive business models in IFC's portfolio, and growing- as fast as the realization of the BoP as a critical vehicle to stimulate development.

(cont. from page 3)



A small business in Africa  
© Guy Patrick Massoloka/Lighting Africa

The inclusive business solutions report serves as part of a broader effort to stimulate the flows of information and inspiration to other IFC clients that could greatly benefit from the incorporation of inclusive business into their mainstream operations, and to further support those implementing inclusive business models to achieve scale -faster and with even better results- a “win-win” value proposition for the private sector and the poor.

**Download the Inclusive Business Solutions Report:**

[www.lightingafrica.org/updates/off-grid-lighting-sector-news](http://www.lightingafrica.org/updates/off-grid-lighting-sector-news)

**New website: Register today!**

To get access to cutting-edge market trend analysis, market reports, quality assurance information, and other materials free of charge, kindly take a moment to re-create your account if you haven't yet done so:

<http://www.lightingafrica.org/register/join/register>

**Stay Connected**



The **Lighting Africa Newsletter** is a briefing on the latest developments in the Lighting Africa program and the off-grid lighting market. It is provided to all organizations and individuals in the Lighting Africa network. Help us help you tell your story by sending us your articles!

To submit articles or for comments, questions, or suggestions, contact: [support@lightingafrica.org](mailto:support@lightingafrica.org)

Lighting Africa, a joint IFC and World Bank program, seeks to accelerate the development of commercial off-grid lighting markets in Sub-Saharan Africa as part of the World Bank Group's wider efforts to improve access to energy. Lighting Africa is helping mobilize the private sector to build sustainable markets to provide 2.5 million people with safe, affordable, and modern off-grid lighting by 2012. The longer-term goal is to eliminate market barriers for the private sector to reach 250 million people in Africa without electricity, and using fuel based lighting, by 2030. Improved lighting provides significant socio-economic, health and environmental benefits such as new income generation opportunities for small businesses. Lighting Africa is a key element of the global Solar and LED Energy Access (SLED) program, an initiative of the Clean Energy Ministerial.

For more information, please visit <http://www.lightingafrica.org>

Lighting Africa is implemented in partnership with: The Africa Renewable Energy and Access Grants Program (AFREA) • The Asia Sustainable and Alternative Energy Program (ASTAE) • The Energy Sector Management Assistance Program (ESMAP) • The Global Environment Facility (GEF) • The Good Energies Inc. • Italy • Luxembourg • The Netherlands • Norway • The Public-Private Infrastructure Advisory Facility (PPIAF) • The Renewable Energy and Energy Efficiency Partnership (REEEP) • The United States.

[www.lightingafrica.org](http://www.lightingafrica.org)

