# **ISSUE 23 / JANUARY/ 2012**





# **IN FOCUS**

# Lighting Liberia is starting!

Lighting Africa is starting a new national program in Liberia! The Lighting Africa Liberia program seeks to create commercial markets for quality off-grid lighting products in a country where only 1.5% of the population is connected to the electricity grid and there is virtually no access to modern electricity outside of the capital city. The vast majority rely on expensive, inefficient and dangerous kerosene lanterns, battery-powered lights, or diesel generators.

The Rural and Renewable Energy Agency (RREA) of Liberia, which will implement the program, launched a competitive selection of retailers in the country.

Lighting Africa Liberia will first work to kick start the sales of quality off-grid products. The program will accomplish this initially by subsidizing the import of products. The subsidies are, however, a short term measure to gain acceptance in the market, and will thus be discontinued over time. The program will also provide trade finance to a range of retailers to help them enter the off-grid lighting markets. Lighting Africa Liberia will provide the retailers with business support, run a consumer education campaign to encourage consumers to surrender their low quality lighting devices, and work with the Liberian government to help lower the barriers to business development.

The program will then develop a lantern exchange program, supporting commercial marketing and sales of 100,000 solar lights to replace an equal number of polluting and low-quality products such as kerosene lamps and battery-powered lights. The program will effectively create a revolving working capital fund, using incoming payments from retail partners to import additional products and further support the expansion of the market.

The **Lighting Africa Liberia program** is funded by grants from the Global Environment Facility (GEF) and from the Africa Renewable Energy Access (AFREA) trust fund; both are administered by the World Bank. **Download the EOI**: http://www.lightingafrica.org/component/docman/doc\_do wnload/199-eoi-ssmf

# LIGHTING AFRICA NEWS

# **Three New Products Pass LA Quality Tests**

Products were tested for battery capacity, charge controller, run time, lighting service, charging behavior, mechanical durability, and long-term lumen degradation. We asked the manufacturers to say a few words about their products:

### Product: Nuru Lighting System

### Manufacturer: Nuru Lights



"Our 'single serve' lights make switching from kerosene an easy decision for rural households as they can purchase Nuru Lights (and recharging services) in a manner similar to the way they purchase kerosene (and other FMCG- fast moving consumer goods) today – in increments, as and when they have income." –Sameer Hajee, CEO, Nuru Eneray

# See how the Nuru Lighting System performed against Lighting Africa's quality

### Product: Desk Lamp Kit

Product: Superbright Room Light

# Manufacturer: ToughStuff



# See how the Desk Lamp Kit performed against Lighting Africa's quality tests

Manufacturer: ToughStuff



With the same focus on durability and versatility as our original lamp and panel, the Superbright Room Light was designed following feedback from customers for a product that had the ability to light up a whole room. Providing more than 40 lumens, ToughStuff's light and solar panel with 4m extension cable now supplies thousands of off grid families with vital access to light and has received a positive response from consumers across East Africa. We have designed a high performance, robust, and easy to use kit that is suitably priced for the BoP market. What's more, the modularity of the product means it has the ability to harness the sun to charge mobile phones, radios and batteries, offering not only lighting but connectivity and information as well." –ToughStuff

See how the Superbright Room Light performed against Lighting Africa's <u>quality tests</u>

# REMINDER: Quality Assurance Framework Web Conference- Feb 7/3PM GMT



You can help shape the Lighting Africa QA Framework

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Thank you to all who generously provided comments during the initial feedback period. The next opportunity to participate in the process to update the Lighting Africa Quality Assurance (QA) Framework is coming up: Join us **February 7<sup>th</sup>/3PM GMT** when Lighting Africa will present the draft recommendations. For more information, stay tuned at:

http://www.lightingafrica.org/qa-stakeholders

# ASSOCIATE NEWS

#### ToughStuff turns on the light in refugee camp



Women using the solar kits in Melkadida camp. ©ToughStuff.

The 40,000 refugees that made their way to the camp of Melkadida , Dolloa Ado, fleeing the Somali conflict and the worst famine to hit East Africa in 20 years, lack food, water, proper shelter and light.

**ToughStuff**, a social enterprise working to bring affordable energy products to people without access to electricity, has provided 6,000 solar panels and kits to 60% of the families in this camp at the Somali/Ethiopian border and will equip the remaining 40% by the end of February.

While scarcity of food, education and medical aid are familiar and well documented aspects of humanitarian crises, emergency responses do not usually address the lack of light in refugee camps.

In Melkadida, the sun goes down at 6pm, after which straightforward tasks become nearly impossible; children cannot study, adults cannot cook. Life stops. Other tasks – like collecting firewood or venturing to the toilet – become outright dangerous.

More menacingly, in Melkadida, over half the households are made up of only women and children, who are incredibly vulnerable in total darkness. Recognizing the impact energy, and particularly light, can have on people's lives, German NGO Humedica asked ToughStuff to visit Dollo Ado, in the Somali region of Ethiopia, late last year. Twenty refugees were selected to distribute lamps around the camp, each one trained in how to use the products and how to demonstrate them to others, and paid to do so.

Access to light once the sun has gone down means more time for these men, women and children to work, study, do chores, or meet up. It also contributes to increased safety and security.

Melkadida is the biggest refugee camp in the Dollo Ado region, which hosts a total of 135,000 refugees.

Two ToughStuff product packages have passed Lighting Africa's minimum quality standards and performance targets. More information about these products is available at http://www.lightingafrica.org/specs.

ToughStuff provides portable solar power for the developing world and for humanitarian crises. 1.4 billion people live without access to electricity, relying on expensive, unsafe and polluting alternatives. They supply affordable products and training for high-quality solar panels to charge lights, radios and mobile phones. These tools help communities cope with emergencies, and low-income people to not just save money but make money.

Visit ToughtStuff's website: http://www.toughstuffonline.com

# Two more awards for Barefoot Power!



**Barefoot Power** was named Small Company of the Year at the Australian Sustainability Awards. The awards, organized by Ethical Investor, took place in Melbourne, Australia, in December.

The judges recognized that Barefoot Power "has a simple technology-replacement business model that is on track to bring affordable renewable-energy lighting to five million of the world's poor, across 20 countries - replacing unsafe and high-emissions kerosene".

Ethical Investor is an Australian news outlet specializing in sustainability issues.

The same week, Barefoot Power also won the 2011 Katerva Energy & Power Award. The Katerva Awards are given annually to excellent sustainability ideas and initiatives in 10 categories, including Energy and Power. They promote and accelerate solutions to the world's greatest challenges, focusing on ingenuity, feasibility, scalability, and impact.



Katerva is a UK-registered charity organization which serves to identify, award & accelerate ingenious ideas that will enable the global community to live sustainably.

Barefoot Power is a Lighting Africa Associate. Go to Barefoot Power's products that have passed Lighting Africa quality tests: http://www.lightingafrica.org/specs

#### Learn more:

Barefoot Power: http://www.barefootpower.com Australian Sustainability Awards: http://www.ethicalinvestor.com.au/index.php?option=com content&task=blogsection&id=30&Itemid=420 Ethical Investor: http://www.ethicalinvestor.com.au/ Katerva Energy & Power Award: http://katerva.org/finalists-2011-energy-power/

#### Solux e.V. nominated for an Energy Globe Award



Solux e.V was nominated for a Energy Globe Award for its "**One-Child-One-Solar-Light**" project in Ghana. Since 2008, the project has been providing

portable solar lamps for school children who do not have access to the electrical grid in rural Ghana.

The Energy Globe Award recognizes projects which conserve and protect natural resources or that employ renewable energy in one of five categories – Earth, Fire, Water, Air or Youth. (cont. p3)

## Solux e.V. nominated for an Energy Globe Award (cont. from p2)

The Solux e.V project was nominated among over 1000 projects from 100 countries for the "Youth" category.

Solux e.V is a charity organization based in Germany which produces and sells eco-friendly solar lights for developing countries. In 2008, Solux e.V won a **Lighting Africa Development Marketplace Award** for its "One-Child-One-Solar-Light" project. Solux e.V is a Lighting Africa Associate.

## Learn more:

Go to the One-Child-One-Solar-Light Initiative's website: http://www.one-child-one-solarlight.org/ Visit Solux e.V's website: http://www.solux.org/ Learn more about the EnergyGlobe Awards: http://www.energyglobe.com/en/award/

# d.light and Nuru Energy nominated as finalists for prestigious global energy prize



d.light design, a Lighting Africa Associate, has been nominated finalist for this year's Zayed Future Energy Prize

d.light was selected from as many as 1,103 nominations and 425 submissions from participants in 71 countries. Nuru Energy, which has one product that passed Lighting Africa's minimum quality standards and recommended performance targets, was also nominated as a finalist.

The \$4 million dollar Zayed Future Energy Prize "recognizes and rewards innovation, leadership, and long-term vision in renewable energy and sustainability."

Managed by Masdar in Abu Dhabi, the prize was developed to "celebrate achievements that reflect impact innovation, long-term vision and leadership in renewable energy and sustainability." It is an annual award that is given to those who demonstrate a commitment to identify solutions that can meet the challenges of climate change, energy security, and the environment.

The Zayed Future Energy Prize was created to honor the legacy of environmental protection and concern for conservation established by Sheikh Zayed bin Sultan Al Nahyan, the late ruler of Abu Dhabi and the Founding Father of the United Arab Emirates.

# Learn more:

Go to the Zayed Future Energy Prize website: <u>http://www.zayedfutureenergyprize.com/</u> Visit d.light and Nuru's Standardized Specification Sheets on the Lighting Africa website: <u>http://www.lightingafrica.org/specs</u>

# **OFF-GRID LIGHTING SECTOR NEWS**

## Solanterns nominated as top 10 LAUNCH Energy Finalist

The **Solanterns Initiative** has been nominated by **LAUNCH** and its founding partners— NASA, USAID, US Department of State and NIKE— as one of this year's 10 LAUNCH "Energy Innovators". Selected from among 200 submissions reviewed by a diverse panel of experts from government, industry, investment and research sectors, Solanterns was among the ten finalists chosen for their "groundbreaking ideas for the provision of more sustainable energy sources and improved access to energy for both developed and developing world populations."

This year's LAUNCH focus was on energy, with a view that "sustaining quality of life requires transformative advances in energy science and technology, along with new models, programs and behaviors." LAUNCH identified 10 innovative "visionaries" — world-class ideas, technologies or programs — that showed the greatest promise for making tangible and impactful progress for society.

The LAUNCH program was formed in an effort to identify innovations poised to create transformational change in critical sustainability issues, and to connect innovators to thought leaders and advisors.

Solanterns is an initiative of **Renewable Energy Ventures (K) Ltd**., a renewable energy and energy efficiency project development and advisory firm headquartered in Kenya, with a presence in Washington DC metro area, USA.

The Solanterns Initiative was launched in response to the realization that "a significant number of Kenya's rural households will not have access to modern electricity in their lifetime, despite the very ambitious and well intentioned electrification efforts currently underway in the country. And yet, viable and affordable solutions exist in the market today that would enable even the poorest Kenyan to have clean, bright, reliable and affordable lighting."



Solanterns is also a 2010 **SEED Award Winner**. The award recognizes Solanterns' focus on job creation through engaging micro – entrepreneurs in renting out the **Sun King Solar lanterns** to families that wouldn't otherwise be able to purchase them.

#### Learn more:

Find out more about LAUNCH: http://www.launch.org/ Go to Solanterns website: http://www.solanterns.com/ Go to Renewable Energy Ventures (K) Ltd.'s website: http://www.africarenewables.com/ Read other Lighting Africa stories on Renewable Energy Ventures: http://www.lightingafrica.org/portable-solar-lanterns-donated-by-usaid-to-helpbreak-the-cycle-of-poverty.html

### **Solar Lamps for Disaster Relief**

**Elephant Energy**, a not-for-profit organization that works to increase access to energy in Namibia, distributed solar-powered lighting and charging technologies to flood victims in six regions of Namibia in July and August of 2011, as part of the Namibia Flood-Relief Energization Plan. Elephant Energy then assessed the benefits of these technologies in a disaster situation by conducting surveys with the lamps' users. The surveys show that clean energy technologies can provide great benefits in the disaster-relief context.

The 2010-2011 floods were unprecedented in their intensity and extent, displacing tens of thousands of people throughout six Northern Regions, including the Ohangwena, Omusati, Oshana, Oshikoto, Kavango and Caprivi Regions. Flood victims lacked access to modern energy sources in flood camps as well as when they were able to return to their homes. *(cont. p4)* 

#### Solar Lamps for Disaster Relief (cont. from p3)

Elephant Energy distributed a total of 2,280 energy products, from inexpensive solar-powered light bulbs to multifunctional solar-powered lamp/cell phone chargers, to flood victims in need. The project targeted the most vulnerable populations within the camps: school-going children; disabled people; children, adults and elderly people with special needs or circumstances; orphans; and child-headed households.

Elephant Energy conducted baseline surveys before the products were distributed and follow-up surveys at the end of the project. Testimonials from flood victims confirmed the staggering impact of these technologies on the daily lives of flood victims: children studied into the night, money was earned, snake attacks were prevented and hours of productive time were added to each day. Access to clean energy technologies fundamentally changed the lives of product recipients.

Elephant Energy received a grant from the United States Agency for International Development (USAID) to implement the **Namibia Flood-Relief Energization Plan**, with a goal to assess and address the energy needs of flood victims in Northern Namibia.

#### Learn more:

download the Namibia Flood-Relief Energization Plan report: http://www.elephantenergy.org/uploads/Final\_Report\_-\_Namibia\_Flood\_Relief\_Energization\_Plan\_\_2011\_.pdf See story on the Lumina Project Site blog, "Flood of Light": http://offgridlighting.posterous.com/84048173 Visit Elephant Energy's website: http://www.elephantenergy.org/

# Stay tuned for the Sustainable Energy Fund for Africa's seed funding!

The **Sustainable Energy Fund for Africa (SEFA)** will provide seed funding for up to a total of 8 million USD for innovative small/medium-scale clean energy and energy efficiency projects in Africa. SEFA will accept proposals in 2012.

The seed funding will provide grants of up to \$1 million USD to cover up-front development costs, from pre-feasibility studies and PPP preparation to assistance in achieving financial close.

With financing from the Danish government, SEFA is a vehicle to enhance the commercial viability, as well as bankability, of smaller, private sector-driven projects. It aims to support the implementation of the African Development Bank's (ADB) Private Sector Development (PSD) strategy.

A second financing window providing equity investments will be introduced in the second half of 2012 to address the lack of access to start-up and growth capital for SMEs, as well as the limited managerial and technical capability of small/medium-scale entrepreneurs.

#### Learn More:

### Application details on SEFA's website:

http://www.afdb.org/en/topics-and-sectors/initiativespartnerships/sustainable-energy-fund-for-africa/

# Take part in the G20 challenge!

In December **IFC** and the Group of 20 (**G20**) launched a new competition that will recognize emerging market companies that provide critical goods, services or livelihood opportunities to the 4 billion people living at the base of the pyramid (BoP).

The G20 has requested IFC to manage the competition.

The **G20 Challenge on Inclusive Business Innovation**, which was announced at the November G20 Summit in Cannes, will judge companies on their ability to demonstrate business model innovation, development results, and potential for growth, as well as social, environmental, and financial sustainability.

A judging panel consisting of representatives from the G20, private sector, academia, foundations, and international finance institutions will select up to 15 winners whose business models will be showcased at the **G20 Leaders Summit**, to take place June 18 – 19, 2012, in Mexico. The winners will be invited to peer-to-peer learning regional workshops following the summit.

The application period is open until **February 29, 2012**, so get your application in today!

#### Learn more:

Go to the G20 Challenge Website: <a href="http://www.G20challenge.com">www.G20challenge.com</a> Go to the application form: <a href="http://www.g20challenge.com/apply/">http://www.g20challenge.com/apply/</a>

#### Skoll Awards: Apply before March 1

The application process for the 2013 Skoll Awards is open from January 4 – March 1, 2012.

The Skoll Foundation presents the **Skoll Awards for Social Entrepreneurship** each year to a select few social entrepreneurs who are solving the world's most pressing problems. The Skoll Award includes a core support grant to the organization, to be paid over three years, and a non cash award to the social entrepreneur, to be presented at the Skoll World Forum on Social Entrepreneurship every spring.

To be considered, organizations must meet specific awards criteria including a tested and proven social innovation that addresses an issue of critical importance and is positioned for large-scale impact.

Learn more:

Skoll Awards Application preview: <u>http://www.skollfoundation.org/sase-preview/</u>

Skoll Awards- Overview and Application:

http://www.skollfoundation.org/about/skoll-awards/

# **LINKS & RESOURCES**

# Watch the Lighting Africa Video now in French!

**Available at**: http://www.lightingafrica.org/watch-the-lightingafrica-video-now-in-french

## **Two New GSMA Reports Released**

GSMA's **Green Power for Mobile (GPM)** program published its biannual report, with the support of the International Financial Corporation (IFC), and in partnership with the Government of the Netherlands. The fifth edition summarizes the developments within the program and the sector. It focuses on key trends for success within Green Power for Mobile; innovation from the Indian subcontinent and Community Power from Mobile (CPM). CPM and IFC also recently issued a white Paper: "*Harnessing The Full Potential of Mobile for Off-Grid Energy* (*December 2011*)," and have co-authored other reports in the past, such as "Using Mobile to Extend the Grid (January 2010)." The GSMA Development Fund launched the Green Power for Mobile (GPM) Program in September 2008 to "extend mobile beyond the grid" through the promotion of renewable energy technologies and energy efficient base stations. More recently, the Development Fund launched **Community Power from Mobile (CPM)** which supports mobile network operators (MNOs) and tower-sharing companies in developing countries to provide access to energy services to local, offgrid communities. Both programs are supported by IFC, an institution of the World Bank Group.



#### Learn more:

**Download GPM's December 2011 bi-annual report:** http://www.gsm.org/documents/GPM\_Bi-annual\_Report\_INTERACTIVE.pdf

Download GSMA's White paper: Harnessing the Full Potential of Mobile for Off-Grid Energy:

http://www.lightingafrica.org/component/docman/doc\_download/193cpwhitepaperinteractive

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!

Lighting Africa does not endorse the contents of the articles submitted by its members. To submit articles or for comments, questions, or suggestions, please contact our project team at: 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

