

Lighting Africa is implemented in partnership with: the Global Environment Facility (GEF), the Energy Sector Management Assistance Program (ESMAP), Good Energies Inc., the United Kingdom, Luxembourg, the Netherlands, Norway, the Public-Private Infrastructure Advisory Facility (PPIAF), the Renewable Energy & Energy Efficiency Partnership (REEEP) and the Asia Sustainable and Alternative Energy Program (ASTAE). For more information: www.lightingafrica.org

Lighting Africa Newsletter – November & December 2009



The Lighting Africa newsletter is a briefing on the latest developments in the program and in the off-grid lighting market. It is provided to all member organizations and individuals in the Lighting Africa network. Help us help you tell your story by sending us your articles. However, Lighting Africa does not endorse the contents of the articles sent by its members. For comments, questions, or suggestions, please contact the Lighting Africa Project Team at support@lightingafrica.org



Season's Greetings

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Top stories

Lighting Africa welcomes the announcement of additional funding by the US Government

Lighting Africa welcomes the announcement by the US Government to support a new initiative to promote clean energy technologies in developing countries. The funding announced on 14 December at the Copenhagen climate conference by Energy Secretary Steven Chu, on behalf of President Obama, may contribute to a significant scale up of Lighting Africa within Africa and beyond, and benefit millions of consumers at the bottom of the pyramid. [Read more.](#)



See other links to the story: [White House website](#); [US DOE website](#); [Washington Post website](#)

AC Nielsen selected to provide market audit updates to Lighting Africa

AC Nielsen has been appointed as the retail market auditor for Lighting Africa. The firm will monitor market trends and insights in Ghana and Kenya and provide a baseline data for performance and program evaluation. With AC Nielsen's assistance, Lighting Africa will be in a position to provide regular and timely updates and feedback to distributors and manufacturers on market trends and developments that will be instrumental in informing and enhancing the design and quality of stakeholders marketing and sales activities.



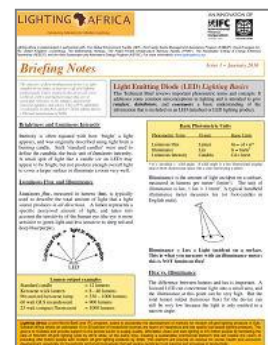
Chinese NLTC will conduct quality tests for products found on African markets

The National Lighting Test Centre of China (NLTC) has been contracted to conduct products testing in an effort to increase Lighting Africa's capacity to conduct quality tests and safeguard the market against market spoilage. The additional laboratory is expected to expedite the product testing process that was previously handled solely by the Fraunhofer Institute for Solar Energy (FISE) in Germany.

LIGHTING AFRICA BRIEFING NOTES – ISSUE N°1 – The first issue of this new series launched by Lighting Africa covers LED basics

Lighting Africa launches its new Briefing Notes series with the objective to provide insights, practical guidance and advice on key issues of interest to off-grid lighting professionals. Topics treated in this series will cover technical, policy and business issues that are of particular relevance to the industry. This first edition explores two topics: "LED Lighting Basics" and "Thermal management of LEDs".

- **Light Emitting Diode (LED) Lighting Basics:** This article reviews important photometric terms and concepts such as brightness and luminous intensity, color (chromaticity), efficacy, glare and PCB Design (printed circuit board). It



addresses some common misconceptions in lighting and is intended to give retailers, distributors, and consumers a basic understanding of the information that is included on an LED datasheet or LED lighting product.

- **Thermal Management for LEDs;** Poor thermal management can lead to early LED product failure. Fortunately, these types of failures can be avoided in the design phase with the use of simple and inexpensive thermal management techniques. This article discusses these techniques and is intended to give manufacturers, engineers and product managers some basic tools for good LED thermal system design. Note that LED manufacturer guidelines should serve as the primary guide for thermal management of their LEDs. [Read more.](#) [Enjoy your reading!](#)

Other news

Market presence survey of off-grid lighting products in three Kenyan towns – Study findings

Lighting Africa has finalized a market presence survey in Kericho, Brooke and Talek, three towns located in Kenya's Rift Valley Province. The survey aimed to establish the availability, price and other characteristics of off-grid electric lighting products in each town. Data analysis and field observations show that the off-grid lighting product market consists primarily of torches, with very few task or ambient lights currently available for purchase. Products are most widely available through markets and at very low costs (110- 150 Kenyan Shillings i.e. \$US1.50 – US\$2.00). The estimation of the market size for low-cost off-grid lighting products in Kericho is 30,000 to 40,000 units annually and in excess one million units per year for the national market. Sellers of the products have indicated that many customers are dissatisfied with LED product quality while field observations indicate that LED torches provide the only experience that most end-users have had with LED products. This suggests that market spoiling for LED-based lighting products is certainly already occurring on a significant scale. [Read more.](#)



Lighting Rural Tanzania Competition 2010 - Two weeks to go - Apply now!

Lighting Rural Tanzania Competition (LRTC 2010) is a grant program seeking to support private enterprises in developing and delivering a wide array of modern lighting products for rural households and businesses. The competition will build upon the base of lighting technologies that exist today, seeking market solutions to provide an array of products with the quality, applications, costs or configurations needed by the low-income market segment of the population. The energy for these lights could be from renewable energy, mechanical or other non-fossil fuel sources. The objective of LRTC 2010 is to recognize and support innovative initiatives that increase access to sustainable and affordable energy services for people in rural Tanzania, with credible potential for replication and scaling-up. The Lighting Rural Tanzania is supported by the World Bank and Lighting Africa. [Read more](#) or [more details](#).



Off-grid lighting news from around the world

Lighting Africa extends its wings to Port-au-Prince, Haiti

Lighting Africa is reaching beyond Africa to the Caribbean Islands. SAFICO, a distributor of off-grid lighting products based in Port-au-Prince, Haiti called on Lighting Africa to assist in preparing its exhibition at the recently held Fair for Energy, Environment and Technology in Port-au-Prince, Haiti - E2Tech. Lighting Africa provided SAFICO with photos of off-grid lighting products used in the distributor's booth and brochure. At the fair, there was quite a bit of interest in SAFICO's products, especially those provided by Barefoot Power, a Lighting Africa network member. SAFICO and Lighting Africa's collaboration illustrates the universality of the importance of off-grid lighting products and highlights the role both institutions play in developing the off-



grid lighting market in their respective areas. It also indicates LA's increasingly central place as a catalyst of that market worldwide. [More details](#).

Philips donates four prototype solar floodlights to underprivileged children

Lighting Africa witnessed the donation of four pairs of Philips' new high-powered LED solar floodlights to the Mathari Youth Sports Center in Nairobi, Kenya. The donation occurred after a football tournament during which the floodlights were tested for the first time ever in the field. The floodlights lit the tournament to the satisfaction of players and spectators and showed great potential for social and economic change in the area.



Philips, a Lighting Africa member, plans to launch the product at a later date but donated these prototype models as part their build up to the 2010 Football World Cup in South Africa. Philips has offered to avail the products during the Lighting Africa consumer education campaign set to be launched in the first quarter of 2010.

SolarAid is supporting the expansion off-grid lighting devices in Malawi

SolarAid has been selling small solar lighting kits that power a hanging LED bulb that provides enough light for a room. The panels can store up to seven hours when fully charged. This is changing the lives of many people in Malawi. "When I saw them, it was the answer to my dreams," said Mr Halawa. He quickly adapted his sprayer so it could use the solar device. He took out a micro-loan for 4,500 Malawian kwacha (about £18) and bought a unit to power his sprayer. "Without the need for batteries, I was able to cut my prices. In no time, I had 65 regular clients, and a thriving business," he said. [Read more](#).

Resources & useful links

New standards for the performance of flashlights and fire safety of LEDs

The American National Standards Institute (ANSI) and the National Electrical Manufacturers Association published "ANSI/NEMA FL-1: Flashlight Basic Performance Standard," which "covers basic performance of hand-held/portable flashlights, spotlights and headlamps providing directional lighting." [Read more](#).



ANSI and Underwriters Laboratory have published a new electrical and fire safety standard for LEDs and LED system components: "ANSI/UL Light Emitting Diode (LED) Equipment for Use in Lighting Products UL 8750." The scope covers: "LED equipment that is an integral part of a luminaire or other lighting equipment and which operates in the visible light spectrum between 400 - 700 nm." [More details](#).

Glossary of useful lighting terms

The glossary of lighting terms available on the GE Lighting website covers terms from AC (Alternating Current) to more specific expressions like Working Distance (Typical). [Read more](#)

CREE achieves 186 lumens per watt from a high-power LED

Cree, Inc. announced that it has achieved industry-best reported R&D results of 186 lumens per watt for a white power LED. Cree's tests confirmed that the LED produced 197 lumens of light output and achieved 186 lumens per watt efficacy at a correlated color temperature of 4577K. The tests were conducted under standard LED test conditions at a drive current of 350mA, at room temperature. [Read more](#).

Update your agenda

➤ **Lighting Africa workshop for importers of off-grid lighting lanterns in Kenya – Jan 2010**

Lighting Africa is seeking to meet with importers of solar lanterns to provide them with technical insights on how to identify good quality solar lanterns during a workshop scheduled in January 2010. The workshop will also highlight the support that Lighting Africa will provide to importers and distributors of good quality off-grid lighting products.

➤ **Follow the Copenhagen conference through a dedicated IFC website**

IFC and S&P Launched the World's First Carbon-Efficient Index for Emerging Markets. [Read more.](#)

➤ **Follow the Copenhagen conference through the [UN website](#)**

Lighting Africa International Business Conference & Trade Fair 2010

Main attractions

- Conference and knowledge exchange sessions
- Off-grid lighting trade fair (exhibition)
- Lighting Africa Outstanding Product Awards ceremony
- Business-to-business networking opportunities

Side events

- Policy roundtables
- Product quality assurance sessions
- Discussions on carbon finance
- SME business training

Events information

- When: 18 – 21 May 2010
- Where: Nairobi, Kenya
- Participants: over 500 expected
- Main topic : *Coming in January 2010*
- Proposed agenda: *coming soon*

Contact details

- For registration to the conference
- More details

➤ [Read previous newsletter editions](#)