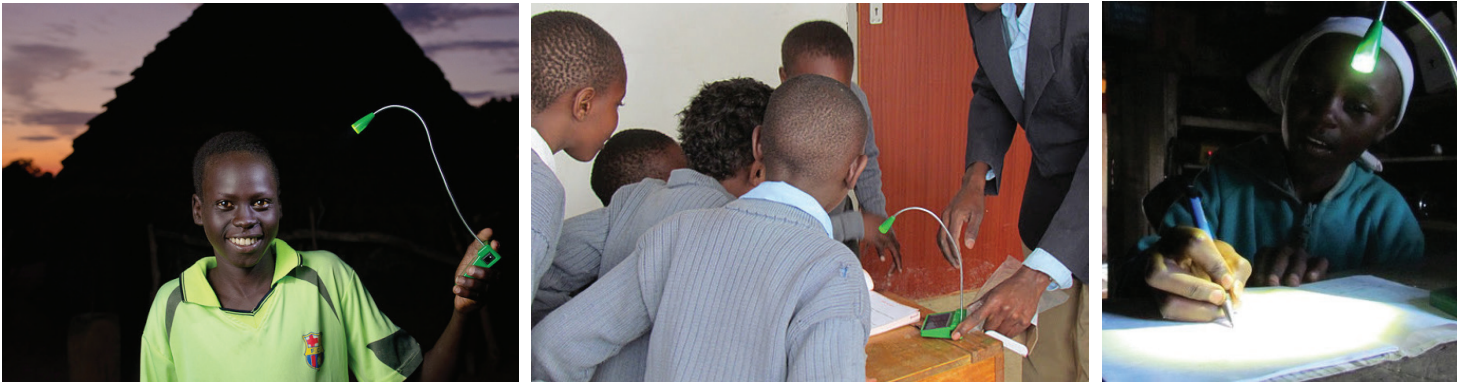


SUCCESS STORY: UNITE TO LIGHT



A non-profit created by Institute Faculty to provide high-quality, inexpensive, solar-powered lighting to those without electricity

THE SITUATION

One and a half billion people do not have direct access to electricity and rely on kerosene, candles or firewood for lighting. Kerosene is a triple threat – it's expensive, unhealthy, and dangerous. Many children face chronic, serious health problems from the constant exposure to kerosene lamps, which produce carbon soot and other pollutants.

THE CHALLENGE

The Unite to Light project started with a visit from Pastor Kofi Fosuhene and Osei Darkwa to Santa Barbara. They explained that many people in Africa who rely on kerosene for reading, suffer health problems and financial hardship. Aware of the work done at UC Santa Barbara's Institute for Energy Efficiency on high-efficiency LED lights and high-efficiency solar cells, Fosuhene and Darkwa asked if the Institute could design an affordable solar-powered reading light. Although many solar powered flashlights are available, they were interested in reading lights to address the problem as it relates to children's education.

With assistance from the Institute and Engineers without Borders, John Bowers, David Schmidt, Norm Gardner and Jock Bovington set out to solve this problem. They developed a simple, reliable solar-powered reading light, one that combined high-efficiency LEDs with low-cost solar cells and a rechargeable battery. And Unite to Light was formed, a non-profit organization dedicated to illuminating the dark corners of the world—one small, rugged, off-the-grid light at a time. Unite to Light produces these lights, and with the help of local partners the lights make their way into households in developing countries.

THE OBSTACLES

The biggest hurdle Unite to Light confronts is affordability. Currently, the light costs roughly \$6.00 to produce, and distribution costs depend on shipping. Unite to Light is continually re-engineering the light and looking for cheaper shipping options to improve quality while lowering the price. Keeping production and distribution costs down will make the light available to an even wider group of households.

Powered by Solutions The Campaign for the Institute for Energy Efficiency

THE BIG IDEAS

Unite to Light's mission is to greatly decrease (and eventually eliminate) the use of kerosene as the main source of lighting in developing countries. The organization also aims to provide a reliable, affordable, safe alternative to kerosene lamps. Reaching these goals will significantly improve the quality of life for individuals and families around the world, and help protect the environment by reducing the amount of air pollutants.

At first, the light was specifically designed to be a reading lamp, but it has proven significantly useful in many other situations. Today, the light is distributed in orphanages, disaster areas, medical clinics, and even included in birthing kits around the world.

WHAT'S NEXT?

As Unite to Light continues to refine its product, it is also providing a valuable new business to the local communities who order the lights. The business model is financially sound for Unite to Light as the developer of the lights, and for the local distributors and customers. The distributors must purchase the lights from Unite to Light at a price that covers the cost of production and shipping. Then they can re-sell the lights to local customers at a price that is less than what the customer would spend on kerosene for the same amount of light. So Unite to Light is providing an affordable alternative to kerosene and creating jobs for local distributors.

John Bowers sees a bright future for Unite to Light, "Our goal is to distribute one million lights." Today, the non-profit has sent more than 20,000 lights to more than 45 countries on 4 continents. All of this has been accomplished in less than two years, and Unite to Light continues to look for new ways to produce and distribute lights wherever there is a need.

To learn more, visit www.unite-to-light.org.