





Children with Flexiway Solar Muscle LED Lights^[2]

PROBLEM

It is difficult for children and adults to pursue an education and be productive during the night without proper lighting. A safe and sustainable alternative to burning dangerous kerosene is needed.

METHOD

- 1. Researched possible solutions technology, including wearable experimental renewable energy, bioluminescence and solar power
- 2. Contacted Seven Hills Global Outreach regarding implementation and Flexiway Solar Solutions for lighting options
- 3. Set up a crowd funding site through Indiegogo.com and sold stickers to spread awareness around campus

\$615 USD **RAISED OF \$500 GOAL**

LIGHT THE NIGHT

PABLE ABLE

123%

Screenshot from Indigogo fundraising site & sticker

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ACKNOWLEDGEMENTS

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LIGHT THE NIGHT: SIERRA LEONE Georges Gauthier (ECE), M. Paige Myatt (ME), Aaron Pepin (ME), John Ross (CS/IMGD)

Advisors: Professor Geoff Pfeifer (HUA) and Professor Derren Rosbach (CEE)

ABSTRACT

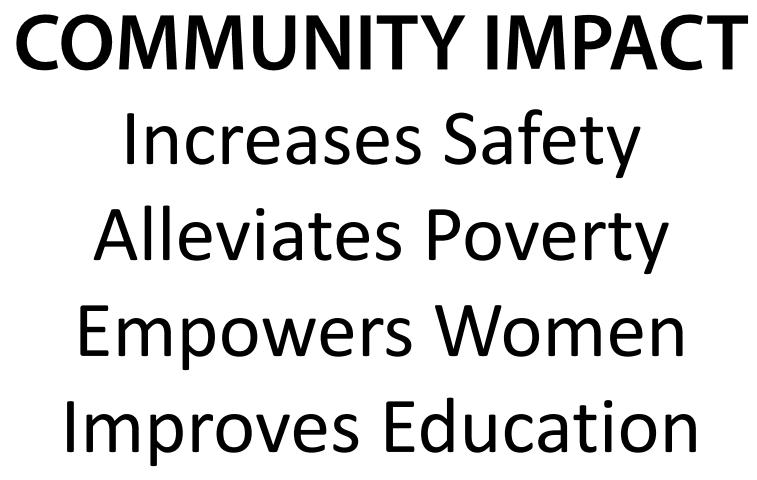
Our group values education and believes that everyone should have the ability to learn and improve themselves. 88% of people in Sierra Leone lack access to electricity, and face limited education and productivity as a result.^[3] We have concluded that solar lighting is an affordable, reliable solution to this problem that can be integrated into rural communities in Sierra Leone.

"...having electricity is directly related to the level of education and the level of income" – Agarwal, S., Barnes, D., & Cabraal, R.

SOLUTION

We chose to implement Flexiway's Solar Muscle LED Lights in two Pilot Communities. Our efforts provided enough funds to send 60 lights to Sierra Leone with Seven Hills Global Outreach at the end of May 2014.

BENEFITS OF SOLAR MUSCLE LED LIGHT



RELIABLE





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project will serve as a pilot Our program for Seven Hills Global Outreach. We will be maintaining contact with Seven Hills as they monitor the success of the project over the coming years.



http://flexiwaysolar.com/ 141_11_sierra_leone.pdf.





Flexiway

Children studying with Flexiway Solar Muscle LEDs^[2]

GOALS

lement a sustainable, costefficient lighting and ctive ition in two rural, off-grid munities in Sierra Leone to rove education, health, safety productivity.

sure and monitor the success of Light the Night Initiative ough Seven Hills Global Outreach

NEXT STEPS

School children in Sierra Leone in need of light^[5]

REFERENCES

[1] Agarwal, S., Barnes, D., & Cabraal, R. (2005). Productive Uses of Energy for Rural Development, 129. doi:10.1146/annurev.energy.30.050504.144228 [2] Flexiway Solar Solutions,. (2014). Flexiway Solar. Retrieved 28 April 2014, from

[3] Sen, S. (2014). Sierra Leone: Problems in Poverty. Presentation, http://electron.physics.buffalo.edu/sen/

[4] Sevenhillsglobaloutreach.org,. (2014). Seven Hills Global Outreach. Retrieved 28 April 2014, from http://www.sevenhillsglobaloutreach.org/

[5] Seven Hills Global Outreach, (2010). Seven Hills in Sierra Leone, January 2010. Retrieved from https://www.flickr.com/photos/sevenhillsfoundation/4322759988/in/set-72157623327850304/