

Green Electric Foundation: Lighting Planet, Brightening lives

Katihar, IndiaKatihar, India

Sourav Singh

<https://www.youtube.com/watch?v=S4kra4Ys0BA>

Year Founded:

2014

Organization type:

nonprofit/ngo/citizen sector

Project Stage:

Growth

Budget:

\$1,000 - \$10,000

Website:

<http://greenelectricfdn.org/>**Facebook:**<https://www.facebook.com/Greenelectricfoundation>

- [Solar Energy](#)
- [Energy conservation](#)
- [Renewable energy](#)
- [Rural](#)

Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

Green Electric Foundation is a start-up NGO focusing on eradication of energy poverty through solar energy awareness program. We have created an innovative and effective distribution channel to meet the challenge of 'last mile connectivity'. We helps people to adopt alternatives of kerosene lamps.

WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"

Our motto is to spread awareness about solar technology and its products from village to village, school to school and home to home and replace kerosene lamps. It works for the eradication of KBH (Kerosene lamps, Blackouts and Homemade cook stove).

About Project

Problem: What problem is this project trying to address?

In India over 400 million people don't have reliable source of electricity. People are dependent on toxic kerosene lamps and homemade cook stoves which are the major cause of indoor air pollution. The World Health Organization (WHO) has determined that individuals breathing kerosene fumes and soot inhale the equivalent of smoking two packs of cigarettes a day. Every year there are 1.6 million deaths due to indoor air pollution.

Solution: What is the proposed solution? Please be specific!

We conduct solar energy awareness campaigns in schools, panchayats and provide product awareness campaigns to solar product distributors, agents and self-help groups. We channelize our efforts to understand the needs of rural community and provide them with best alternative to tackle toxic kerosene lamps, blackouts and homemade cook stoves that affect their every aspect of life – personal and financial. We not only believe in linking smart products where they are needed the most but also strive to provide timely and efficient after-sales service to our customers. Our reach, awareness program and unique distribution channel helps us to provide solar products to hundreds of rural people at an affordable price.

Awards

Our efforts and initiatives have received coverage in media. We appreciate Media's participation to spread the campaign.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Through solar energy awareness program it's become easy for the people to select and adopt good quality solar products. We design solar system according to their need and budget. For an e.g. by installing a small 20 watt solar system to power 4 led bulbs in a home, the study hours of the children increased and it's also helped his father to run his shop in the night which increased the working hours hence increased the income. Earlier they were using four kerosene lamps which consume 1 litter kerosene/day which means 900 kg CO2 emission/year from one home. They spend Rs.960/month on kerosene i.e. Rs.11520/year. However by spending only Rs.3500 one time in solar it's saves 900 kg CO2/year, Rs.11520/year and considerable health risk.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

In Katihar district of Bihar, India around 1200 villages are living off-grid. Till now we have reached around 596 villages, conducted solar energy awareness program in 57 schools and trained 83 SHG. By doing all these we educated more than 15,000 people, some of the solar product retailers and successfully replace hundreds of kerosene lamps by installing 1267 solar systems or through solar products. By doing awareness program we also countered many wrong installations and we successfully corrected or replaced 631 wrong installations. This all helped us to save 170,820 liters of kerosene oil and 427,050 Kg of CO2 emission. We made smart communities that make smart choices to improve their lives through adoption of clean energy. Our future target is to spread solar energy awareness in the rest 600 off-grid villages of Katihar district by 2016 and then in the rest part of the Bihar, India.

Spread Strategies: Moving forward, what are the main strategies for scaling impact?

We are organizing events at four levels-for students in schools, for farmers in Gram-sabha, for women in SHG and for existing solar product users. SHG helps us to reach into the roots of the community. The direct interaction to the women of the villages helps us to understand their requirement of light in their home. In Gram-sabha we discuss about solar pump for irrigation and about solar drier and stress village head man to invest panchayat funds for renewable energy products. This approach of inform, educate and interact has been our successful mantra that has helped us achieve our goal.

Sustainability

Financial Sustainability Plan: What is this solution's plan to ensure financial sustainability?

With the help of family and friends I started GEF. Initially we partnered with TAPAN SOLAR ENERGY PVT. LTD (ELECSSOL) and done solar energy awareness program. To cater the rising demand of solar products GEF starts purchasing solar products from Company Warehouse and provide solar products at discounted price to the last mile. For sustainability we charge small percentage on purchasing cost and we also do solar installations in local community.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

Big players like D Light, Green light patent tie-up with micro finance groups like Jeevika, Bandhan, etc. and provide solar products in SHG with a provision to pay-back in installments. We provide products at discounted rate and women of SHG take money from micro-finance groups and save money by buying our products. We also design and install solar module according to their needs and budget. We gain trust through our awareness program and provide after sales service. And local market is flooded with cheap Chinese solar products to solve this problem we are conducting solar awareness program.

Team

Founding Story

Our funding story is quiet simple, before my engineering I started to plan to setup a NGO which will focus on energy crisis of our area. I illustrate my plan to my friends and family. Initially my father and brother oppose to support for this plan but gradually after doing pilot project and with rising solar product demand they release fund for GEF. We also get initial support from TAPAN SOLAR ENERGY PVT. LTD(ELECSSOL). They provide solar products at company warehouse price and also give 30 day grace period to pay back for their products. With the help of District Development Commissioner and District Educational Officer we are doing awareness program in schools and Gram-sabha.

Team

There are four full-time members in the team. Sourav Kr. Singh (Founder & Director): He has done Bachelors in Technology in electronics and communication and two solar training named "Stenbeis Solar PV Engineer Certificate Program" at Hyderabad, India from 17-22 Jun'13 and "International Training in Solar Installation & Cable Technique" at Renewable Energy Centre Mithradham, Aluva, Kerala, India, from 15thOct - 19thOct, 2012. He design, install solar module and deal with all technical aspects of solar energy. He is responsible for taking all managerial decisions of GEF. Jai Prakash Sing (Treasurer): He had done his graduation in commerce and has 36 year of experience. He maintains all the accounts of GEF. Bublun Kumar and Niranjana Kumar (Field officer): They are graduates and live in the rural area of Katihar district. They help us to locate the thrust areas where the solar awareness programme most needed. They are also responsible for after sales & service of solar products. They are Google map of GEF for Katihar district. There are two volunteers members in the Team Mohit Mishra (Web Designer): He did his Bachelors in Technology in computer & science in 2014 and founder of a Fibble, an IT company. He designed posters for camping and also did all design related work like design of logo, letter pad, visiting card, etc. Vishal Verma (Web Developer): He did his Bachelors in Technology in computer & science in 2008 and founder of a VKsoft, an IT company. He and his team made GEF website.

File attachments:

-  [awareness program at school.jpg](#)
-  [awareness program in gram sabha.jpg](#)
-  [children are dependent on toxic kerosene oil.jpg](#)
-  [energy poverty.jpg](#)
-  [lack of installation knowledge poor quality products.jpg](#)
-  [dead electricity line.jpg](#)

 [last mile connectivity.jpg](#)

 [solar installation.jpg](#)

 [in the news.jpg](#)

 [in the news.jpg](#)

Background

Please confirm how you heard about the Unilever Awards:

From facebook

Please confirm your role in the initiative (eg Founder/co-Founder) and your organisational title:

Founder & Director

Which of the 8 UN Global Goals (Sustainable Development Goals) pre-selected for this competition does your solution relate most closely to? [select all that apply]

Affordable and Clean Energy.

Leadership and the Unilever Awards

Please provide examples of any previous entrepreneurial initiatives you have pioneered.

Two solar training named "Stenbeis Solar PV Engineer Certificate Program" at Hyderabad, India from 17-22 Jun'13 and "International Training in Solar Installation & Cable Technique" at Renewable Energy Centre Mithradham, Aluva, Kerala, India, from 15thOct -19thOct, 2012 really helped me to think, work and build GEF. Technical knowledge of solar energy helps me to do right installation and design solar system according to the need of the people. It also helps me to detect wrong installations which was deteriorating the image of solar energy earlier and it also helps me to make people aware with the benefits solar energy.

Beyond your existing team, who else are you working with to achieve your objectives, eg partners, advisors, mentors?

We are working with Elecssl as solar product partner. We partner with Jeevika and with the help of Jeevika we conduct solar energy awareness programme in the SHG. SHG of Jeevika helps us to reach into the roots of the rural community. With the help of District Development Commissioner and District Educational Officer of Katihar we are doing awareness program in schools and Gram-sabha of Katihar district.

Source URL: <https://www.changemakers.com/globalgoals2015/entries/green-electric-foundation>