



Electricity for Granted

By Ross Kirshenbaum | November 6, 2012

Yesterday I returned home from my first assignment with AsoFenix. A co-worker and I traveled four hours by bus, and then hiked an hour and a half (in pouring rain) to a small village called La Guayaba, situated in the mountainous department of Boaco. La Guayaba is incredibly beautiful, but very rural. The families that live here make do with very little- adobe walls, dirt floors, and the women cook indoors over open flames. There is no infrastructure: no roads, no running water, and no electricity- well, there's some electricity... AsoFenix has trained a small group of solar technicians around the region of Boaco to bring electricity to families there. Our job was to train with one of these technicians and to assist in installing electricity into two homes. Although I have never worked with any sort of electrical installation, I found myself running cables along the walls, wiring lights and light switches.



It was quite a moving experience to help put the first electrical wires in a house. For the first time, after the sun went down, the family could navigate their bedroom and living room without a flashlight or candle. For the first time the women would not have to cook dinner in the dark... And what's more, their house is now lit by energy harnessed from the sun.



AsoFenix is not just giving electricity to people...the families are buying it. AsoFenix, with the assistance of Green Empowerment, has set up a revolving solar panel fund, which provides credit to a family. In other words, AsoFenix has purchased the solar panels and all the components needed for the system to function i.e. lights, cables, wires, etc. The family then buys the system from AsoFenix by making payments over a year or so. The payments include installation fees and a very small amount of interest. After the payments have been completed, the family owns the solar panel and all the components. I think this is a really great model because it provides a pathway for families to take ownership of their electricity. The solar panel has an average life of 60 years, whereas the battery has an average life of 1-5 years. After a day of charging, the battery can store enough energy to run one light bulb for four hours, all four light bulbs for one hour, or a television or radio for about one hour. In general, this amount of electricity is sufficient for the residents of La Guayaba. Families are very conservative with their electricity and often everyone is in bed a few hours after dark.



A major challenge AsoFenix and Green Empowerment struggle with is the need to use batteries in their solar systems. Batteries contain a whole host of harmful pollutants such as lead, mercury and cadmium to name a few. They are environmentally destructive both in their manufacturing and if they're not disposed of properly (very likely here). So how can solar panels be utilized without the use of a battery? AsoFenix has come up with some pretty creative ideas! I will be exploring these ideas in greater depth as my internship progresses.

