

La Salida del Sol

The Grupo Fenix Newsletter

November 2007

Saludos from sunny Nicaragua. I'm proud to present the second official Grupo Fenix Newsletter, which is packed full of articles and pictures highlighting the exciting progress that has taken place over the past few months. Despite the incessant rains that inundated the entire country following Hurricane Felix, the first adobe building of the Solar Center is finished! Come join us on December 12th for the inauguration as we celebrate the thousands of hours of hard work that went into its construction. The Solar Women of Totogalpa, recently recognized at the national level for their work in solar cooker construction, were also busy completing their first mass production of solar cookers.

You will find other interesting articles about an innovative incentive system developed by one of our long term volunteers, a new scholarship program for local high school students and a glimpse into life as a Grupo Fenix volunteer. Lastly, don't forget to take a look at the course update and upcoming schedule to see how you can experience firsthand how renewable energy technologies are creating sustainable development in the rural community of Sabana Grande, Totogalpa.

Amanda Baran - *International Education Coordinator*

Inauguration of Noble Solar Production Center

Jenny Colavito

-Aero science Engineer/Long Term Volunteer

The construction of the first building at the CIPPER Solar Center is complete and Grupo Fenix is excited to announce that the inauguration will be held on December 12, 2007. The new building looks beautiful with clean white walls, red tile floor, teja roof, and solid wood doors of cedar and pine. The building is currently lit with two solar panels, but will soon be a fully functional solar cooker construction workshop run on photovoltaic energy.



The Noble Solar Production Center will house the Solar Cooker Workshop and provide a physical space for local research and capacity

In preparation for the inauguration, volunteer efforts have been focused on furnishing and securing the building, as well as maintaining and utilizing the campus for agriculture. In addition, a stone walkway has been built and a new iron gate and highway sign are on the way. Also going on this month, the construction of an adobe pump house will begin with the help of an international work brigade and volunteers from the local community.



The Solar Women unveil 22 brand new solar cookers at workshop in Estelí.

First Mass Solar Cooker Production

Noel Dekking

-Canadian Falls Brook Centre Intern

In an unprecedented show of dedication to the environment and future wellbeing of Nicaragua, the *Mujeres Solares de Totogalpa* delivered 22 solar cookers from their workshop in Sabana Grande to the city of Estelí this fall. The women's group is a long time affiliate of Grupo Fenix, and together they have been incorporating and promoting renewable energy in rural Nicaraguan communities for nearly a decade.

The opportunity for the women to spread their solar energy culture to

Estelí came by way of winning a solar cooker competition hosted by the Mayor of Estelí and the Universidad Nacional Autónoma Nicaragüense. The Mayor of Estelí then provided most of the funding for the Mujeres Solares to build the cookers, with essential funding also coming from The Body shop Inc.'s ongoing environmental program.

Four members of the Mujeres Solares de Totogalpa presented the solar cookers to the chosen recipients and the Mayor of Estelí September, 13. The women then hosted a solar empowerment workshop demonstrating how to use, care for and assimilate the solar cookers into their daily routines.

Solar cookers heat food using only direct energy of the sun, a fact that Nimia Lopez, President of the women's group, believes to have many advantages over conventional wood burning ovens that are used throughout Nicaragua. Use of the solar cookers displaces the burning firewood which helps families save money, puts less pressure on the deforestation and environment of Nicaragua, avoids the respiratory health risks associated with indoor fires, and has a positive overall effect in the worldwide effort to curtail climate change.

While the Mujeres Solar de Totogalpa have been building and using solar cookers for years, this is the first major order that the women's group has received. They hope that the event in Estelí will help spread the demand for renewable energy options throughout the country and that people around the world will be motivated to live more sustainably.



Nimia and CJ pose with check and trophy.

Solar Women Are Nationally Recognized

Amanda Baran

On the 25th of October ten of the Solar Women of Totogalpa along with CJ Colavito, one of our long term volunteers, travelled to Managua to participate in the 2007 Best Renewable Energy and Conservation Project Competition. Sponsors included Eurocentro, the National Ministry of Energy, and German and Austrian Technical Aid among other national and international organizations. The purpose of this annual competition is to recognize the people and institutions that invest time and money into changing the way we generate and use energy in Nicaragua.

The women won second place for their work with solar cookers, environmental education and conservation and were presented with a check for C\$8,000 to continue and expand upon these projects. Congratulations!

Tienda Verde Provides Sustainable Incentive System for Donated Goods

Charlotte Ross

-Economist/Long Term Volunteer

Since July 2007 the Tienda Verde (Green Store) has been open for business offering the Solar Women of Totogalpa way to reward themselves for their hard work and visionary commitment to the work of Grupo Fenix. This is a store of donated goods sent to Sabana Grande by friends of Grupo Fenix and is the first location that offers goods in exchange not for córdobas, but for "\$Horas", a currency derived from work contributed by each woman to the GF projects. In this way, the development here in Sabana Grande continues on its sustainable path as the women do not simply receive handouts, but take pride in what they have earned as hard workers and dedicated participants to the betterment of their community.



Women shop at Green Store "spending" their hard earned volunteer hours.

On the second Saturday of every month, between 9am and 1pm, the TV opens at the Solar Center. The women, arriving with their \$Horas bankbook in hand, first receive a deposit of the \$Horas they earned with Grupo Fenix the previous month, and then begin their shopping. As the store is dependant on donations, and so has a limited supply, the women can choose a maximum of three things paid for in \$Horas, and another 3 which they may buy with córdobas. The córdobas that are earned at each TV are then used to buy a special good for the next TV, to keep things exciting and to give the women something to look forward to after each hard day's work in the hot Nicaraguan sun. We have seen a real surge in morale and dedication among the Solar Women of late and can't help but trust that it is due in part to the incentives and reward systems that have recently been put into place, the TV among them.

These days, the women see that not only do they have the opening of the Solar Center to look forward to, but the immediate thrill and "payment" of the Tienda Verde each month to keep them motivated and proud of the part they play, hard at work with Grupo Fenix. We need all the help we can get in order to keep this store going, and to see it grow both in size and frequency. If you have any goods that you are interested in sending, or know of anyone making a trip to Nicaragua, please pack them up and send them down to us!

Marcos Antonio Perez
Apartado Postal #30
Ocotal, NS
NICARAGUA

Secondary School Scholarships

CJ Colavito

-Mechanical Engineer/Long term Volunteer

A beca is a grant or scholarship, and thanks to a former course participant and his friends we will begin offering scholarships to the children of the solar women starting with the 2008 school year. Sabana Grande has its own primary school in town that provides the education for students through age 12. After primary school the students must travel to Totogalpa, the nearest city with a secondary school. For many local families the daily round trip bus fare is a significant financial burden. In addition to the bus fare other costs such as uniforms, shoes, and school supplies also contribute to the tab. The new scholarships beginning in February will help assuage the cost of continuing education and hopefully give an opportunity to some students that otherwise couldn't afford it.

A small group of women from the Mujeres Solares de Totogalpa have formed the education committee and with my help they have been developing the scholarship program including an impartial selection method. After a month of regular meetings and several drafts we have a set of policies that are fair and objective for everyone.

Over two thousand dollars have already been raised and we are hoping to have even more before choosing the number of scholarships that will be given. According to estimates put together by the education committee a student from Sabana Grande can attend secondary school for a year with all expenses paid for about US\$260. This is very encouraging because even though it is a lot of money for a Nicaraguan, it is a manageable amount to ask from an international donor. Our goal is to have a sustainable scholarship program that raises about US\$4,000 a year, which could provide full secondary school scholarships to 15 students.

Life as a Volunteer

Noel Dekking

-Canadian Falls Brook Centre Intern

When out of school and actually working in the field of international development - when no longer lost in the forests of theory, the muddied layers of political contradictions and personal hypocrisies, and shed of the weight of trying to save the entire world from a classroom - you may just find yourself packed into the back of an old truck

with about ten other people and a homemade solar panel, hurtling along a Nicaraguan dirt road and taking hair pin turns by cliff's edge. These kinds of situations will not only test your personal mettle and dedication to the job, but may just help remind you as to why you got into this deviant career in the first place.



Noel teaches host brother Angel how to play the air guitar .

So there we were, Julio Angulo Garetá, a physicist from Spain, Edwin Pérez and Edwin González, brothers in law from Sabana Grande de Totogalpa, Nicaragua, and myself, hitching a ride to the mountain pueblo of Quilali to install a solar powered electrical system for a family that lives high up in the mountain range.

The solar panel that we brought with us was built by two landmine survivors, Marco Pérez and Mauro Pérez - latent victims of a U.S. sponsored civil war. Before working with Grupo Fenix, Sr. Pérez was uncertain as to how he was even going to get by. Now, the solar electric business has not only helped provide for his family, but it is also involved with many renewable energy options within the community, including an off-grid solar workshop that is to be completed within the next year.

Getting from the Marco's workshop to the installation sites is just one of the operational hazards for the fragile photovoltaic cells that are used in the solar panels. For instance, the cells I brought with me were rejected from a manufacturer for aesthetic reasons, purchased in the United States, driven into Canada where they became luggage for a flight to Nicaragua, held for three days at the customs in Managua, let go for free because they were bound for an NGO, and then hurled onto a bus for a ride to Sabana Grande where they were finally received by Grupo Fenix. These cells were later built into a series of panels that we installed for a Nicaraguan organization called "Yo Si Puedo," or "Yes I Can." The organization runs a get-back-in-the-classroom program aimed at teaching less-educated adults to read and write. The adult students generally have to work all day and can only study at night, so the program needed an off-grid energy option to light up the rural schools after dark. The result: another adventure into the Nicaraguan mountain range for volunteers and employees of the workshop.

Aside from affording Grupo Fenix staff with exciting journeys into little-known communities of the country, solar installations in rural areas will provide many advantages for individual households, schools and businesses.

This is especially true for the family from Quilali, who had been relying on a petroleum fueled generator being run inside of their home. Respiratory and other health risks associated with the fumes from petroleum burning are no longer a hazard. The danger of relying on petroleum for their electricity - a volatile fuel source that will continue to increase in price and some day render it unaffordable to many around the world - has been replaced by a newer and more reliable energy source. The solar panel will last up to 25 years or more and can actually save the family money in the long run. This is because the energy system will only require a fraction of their yearly fuel cost for new batteries and maintenance. Solar energy systems also help to battle climate change: Less petroleum being burned equals less ancient CO₂ being emitted into the atmosphere. While the petroleum industry was certainly relied upon for the delivery of the solar energy system, the entire endeavor not only utilized, but actually stretched the my prior understanding of "carpooling."

After the Quilali installation, being that a ride home was never considered in the "plans," we jumped on a four hour bus ride home after finishing the work the morning of the second day. A few days later, back in the comfort of an internet café, I was reading through some international development Websites and came across one of their new catch words: "holistic." I don't think that it is necessary to include more words in the ever-growing dictionary of development, and I'm not yet sure how to translate "holistic, post-conflict relief, climate change averting, natural resource management, participatory, sustainable, grassroots development" for the Nicaraguans involved with Grupo Fenix. Regardless of all the jargon, and for the sake of simplicity and sanity, I would rather just think of it all as an honest attempt at positive change.



The 2007 SEI participants.

GRUPO FENIX COURSE UPDATE

Amanda Baran

In the second week of November Grupo Fenix collaborated with Laurie Stone from SEI (Solar Energy International) to offer a Renewable Energy in the Developing World Workshop. We had a very productive and fun week learning about PV systems, solar thermal technologies and the social and cultural challenges of implementing renewable energy applications in countries like Nicaragua. The hands on component of the workshop included the

construction of two solar cookers, solar battery chargers and the installation of a solar panel and 4 lights in the Noble Solar Production Center. Participants also brushed up on their Spanish and Nicaraguan culture while staying with our wonderful host families.

The Adobe Building and Renewable Energy Trip immediately followed the SEI workshop and was just as successful. Thanks to Nancy, Denise and Ruben we were able to make over 100 adobe blocks, which will be used in the construction of the pump house. Thank you to all of our participants!

Upcoming 2008 Courses....

Solar Culture Course

January 3rd - 13th

CELL Study Abroad Program

www.celloneonline.org

February 1st - 29th

Solar Culture Alternative Spring Break

March 9th - 15th

Solar Culture Course

July 21st - 31st



Women price solar coffee, pine baskets and dried fruit to be sold during the SEI "despedida".



Nancy, Denise and Ruben learn how to make adobe bricks.

Please feel free to contact us at thegrupofenix@gmail.com or visit our website at www.grupofenix.org.