

La Salida del Sol

The Grupo Fenix Newsletter

May 2008

Welcome again to the bi-annual publication that keeps you up-to-date on Grupo Fenix projects, accomplishments, courses, volunteer experiences and much more. We had an extra busy six months as both the Solar Panel and Solar Cooker workshops as well as staff settled quite nicely into the new Solar Center, which is also home to the office, library, storeroom and meeting space. Grupo Fenix stakeholders met for 4 days in April during *Visión Solar* to develop a 5-year plan for the center and surrounding land.

I have the privilege of announcing that Grupo Fenix has been selected out of almost 400 international organizations as one of the 15 SEED (Supporting Entrepreneurs for Sustainable Development) Award finalists! The 5 winners will be chosen this summer. Just being named a finalist is a notable distinction and as a bonus the organization will gain more international exposure. Please see the SEED website for more information about the initiative and award at www.seedinit.org.

Amanda Baran - *International Education Coordinator*

First Solar Module Mass Production in the New Workshop

Martin Rolletschek

-RE Engineering Student/Long Term Volunteer

Solar panel manufacturing had a good start in the new workshop at the Solar Center. At the beginning of this year a Canadian Church group ordered fifty small solar panels that generate 5 Watts. After just 3 weeks of work we were able to deliver all 50 modules.

The group wanted the panels to run small LED-lighting systems, which they installed in homes in the region of Chinandega, which is located in northwest Nicaragua. To receive one of these systems a family had to make the effort of moving their woodstove outside of the house in order to improve the family's health situation.

The production of the 50 panels was a challenge for us. Not only because of the small size but also the quantity made it difficult to finish the job on time. A 5 watt panel might be small, but not less work. Luckily Mauro and Marcos, our Solar engineers, had already taught some skills to young people about making the modules, so we had hard working support.



Mauro and Marcos show off the 50 5 watt modules.



Photovoltaic assembly line.

For the manufacturing of the panels we set up a production line of five stations. Edwin G. and Edwin P. made the aluminum frames and glued them to the glass. Mauro and Marco were cutting the cells into the right size. Kenia and Xiomara soldered them into chains and tested them. Mauro and I encapsulated the chains with silicon on the glass. I finished and tested the panels.

Some of the problems during the production process were the lack of sufficient electricity. The photovoltaic system of the Center is not big enough to supply electricity continuously for all the tools we used. Furthermore we had some cloudy days, which made the quality check a bit tricky. In order to check the function of a panel it had to be checked at a high altitude and full strength of the sun.

After we delivered the panels some members of the Canadian Church group visited us in the Centro Solar. They wanted to see our workshop and the community. As a donation to the Green Store they brought along some LED-lamps, a battery and a charge controller for a lighting system. Now one of these systems is also installed in the community of Sabana Grande, in the house of my former host mom.

Visión Solar - The 5-Year Strategic Plan

Jamie Deming

-Fenix International



Staff, solar women, local NGO representatives, Fenix International and volunteers share ideas.

With the new *Centro Solar* (“Solar Center”) now complete in Sabana Grande, the time had come for a fresh look at the future. “Solar Visioning Week” in early April brought together Grupo Fenix stakeholders to outline goals for the next five years. Four days of meetings engaged the “Solar Women’s” group, Marco Antonio’s solar workshop, PFAE staff (Grupo Fenix’s university group), local NGO’s, community members, and foreign volunteers and international supporters. When all was said and done we had nearly complete drafts of mission and vision statements for the Centro Solar and preliminary work on the implementation process.

In keeping with the philosophy of making change sustainable through broad participation, the planning process was very thorough, inclusive and respectful of all groups. We engaged in numerous exercises, starting with each group presenting a SWOT (Strengths, Weaknesses, Opportunities and

Threats) on the first day. On the third day the Solar Women had a solar cooking contest under a fierce sun and served lunch to all the participants. Representatives from local NGOs judged the delicious offerings and awarded prizes. On the last day, PFAE staff members Amanda, Erica, and Suyen guided activities that led to drafts of the Centro Solar’s mission, vision and implementation process. The confidence and level of participation from each and every person, particularly the Solar Women, lent extraordinary authenticity to the plan.

Over the four days a few major directions were determined. First, due to the 7,000 hours of volunteer time for construction of the Centro Solar, the community demonstrated pride and ownership of the building and looked forward to becoming more self-sustainable.

Second, the advancement of renewable energy in developing rural communities remains an essential part of the goals of PFAE. PFAE will continue to work with the Centro and the Sabana Grande community toward these ends.

Third, the community clearly communicated interest in job creation and envisioned a future where several businesses can spin out of efforts currently underway. These would include a PV assembly and installation business, a store (selling solar cookers, solar coffee, solar dried fruits and herbs, crafts, plants, etc.), a solar café, and other possibilities. The Centro’s role would be to support these enterprises with training, consulting, communications, etc.

Fourth, the Centro and some of its surrounding property will serve as a community center with a playground and gathering place for recreation and education.

The next phase of the planning process will address specific objectives of this transition and determine how the satellite enterprises can incubate from the Centro Solar. The legal definition of the Centro also needs to be determined. In all these deliberations, the emphasis remains on creating a model of sustainable development using renewable energy as a centerpiece to environmental conservation and community advancement.



Yelba shows the judges of the Solar Cooking Competition her dish.

Local School Benefits from Donated Photovoltaic System

Deborah Bruns

-Fenix International



Sabana Grande elementary school building equipped with photovoltaic system.

I blew out the candles on my birthday cake, knowing that my wish had already come true. I was celebrating my 50th birthday with friends and neighbors in Davis, California who had come together in support of *Las Mujeres Solares de Totogalpa* and the teachers at the school in Sabana Grande. Instead of bringing birthday gifts, the guests had brought contributions towards a photovoltaic system to provide electricity for the school. Susan Kinne was on hand to inspire all of us with pictures and stories of the incredible community work in Sabana Grande. For me, it was wonderful to introduce my community here in California to the community in Sabana Grande through Susan.

I first visited the community of Sabana Grande in December 2006 when my family joined the very first work brigade to make adobe bricks for the solar center. I stayed with Rosa Amalia, the head teacher at the school and promised to return to work with the teachers at the elementary school to create lessons on the theme of science and alternative energy. My daughter and I returned the following summer and while we were working in the school, the teachers shared with us their vision: solar panels to provide electricity for a TV so that students could participate in a high school program at the local school site and not have to travel to another town to attend high school.

The birthday fundraiser was successful and this spring the solar panels were assembled in the workshop in Sabana Grande and installed at the school. I am looking forward to a trip to Nicaragua this summer to visit my friends and fellow teachers and bring back photos of the newly-installed system to share.

Single, I mean Solar Women

Robert Kerr

-Scottish Traveler and Experimenter

Hello all and welcome from the Centro Solar here in Nicaragua. My name is Bob Kerr and after volunteering in Granada for a school group called Esperanza Granada and a brief search on the internet I found Grupo Fenix and decided to travel up to Totogalpa to find out more. With my poor Spanish I would recommend that any new travellers ask for the Centro Solar and not the "Solar Women of Totogalpa" "Mujeres Solares" as I did. With my poor pronunciation I mistakenly said "mujeres solas" which meant I was looking for single women rather than solar women.

Once over my initial pronunciation embarrassment I found the center and enjoyed the one week Alternative Spring Break Course. After the course I decided to stay and settled into a very friendly community that produces some excellently constructed solar cookers and helped install a couple of solar panels at the local school which went into immediate use with a local retreat for the community and will shortly be used to start an Adult Education program. We will shortly be enabling the school to have 110 solar volts in every classroom. This will allow for the use of audio disks and televisions with DVDs, which will help our the hard working teachers a great deal. The food that I've had here is easily the best I've had in Central America, the solar cooking perfectly complementing the locally produced food.

As a wanderer I did have some personal projects that I wanted to try. I have been experimenting with "hay boxes" also known as fireless cooking or simply put, an insulated box. The concept is to put hot food in an insulated box and all the energy stays in the box and the food is slow cooked. This works very well and is cheap to make. I have also been introducing to Doña Carmen and Lupe the use of pressure cookers. The advantage of these is that they can cook



Roberto with his partially finished parabolic cooker.

frijoles or beans in 50 minutes instead of the 2 hours it usually takes on the fire.

Being 15 minutes by bus plus 10 minute walk to the nearest Internet cafe I realize that I am on the wrong side of the digital divide, however I know by experience that this is a gap that will be closed over the next couple of years. One of the many things that the people need here is information and information in Spanish so I would just like to ask that if any of you have any books that are available in Spanish could you please send them with someone already coming down for a course or to volunteer. If you have any information about appropriate technology the excellent appropedia website deserves your attention. Finally your support to this project is very valuable, the center is a greater inspiration to Nicaragua than even the people here believe.

GRUPO FENIX COURSE UPDATE

Amanda Baran



Soccer Game - Community vs. ETHOS

Luckily as Grupo Fenix continues to grow and improve in many different aspects, so does the number of courses and participants. In January we had 14 people come down for the Solar Culture Course including Dr. Richard Komp who shared his wealth of knowledge on RE. It was an eclectic group of undergraduate and graduate students, young professionals, adults and a very active older couple, which made for a fun and dynamic learning environment.

In February we welcomed the CELL Central America Study Abroad program led by David Oakes. The theme was "Sustainability Through Community" and Grupo Fenix was an ideal choice for their month stay in Nicaragua. The students received an intensive weeklong Spanish course in the colonial city of

León before heading up north to the Matagalpa region where we visited several communities moving towards sustainability as well as Selva Negra, a large organic coffee farm and Mecca of sustainable practices in Nicaragua. The students then spent 2 weeks in Sabana Grande. It was a pleasure working with such a vibrant, proactive group of college students who really want to see a change in the world. Please visit their website at www.cellone.org for more information on this and other innovative study abroad programs.

In March we had a small group come from the University of Bowdoin and Roberto from Scotland for the Alternative Spring Break course and less than two weeks ago a group of 12 University of Dayton ETHOS students joined us for their Spring Breakout Course. ETHOS stands for Engineers in Technical, Humanitarian Opportunities for Service-Learning. Students have the opportunity to immerse themselves in another culture while learning about appropriate technologies in developing countries.

Upcoming Courses...

Solar Culture Course

July 21st - 31st, 2008

Sustainable Communities through RE (New Course!)

October 12th - 19th, 2008

This course is a condensed version of the Solar Culture Course, but focuses more on community development and sustainable lifestyles. It is open to everyone and offers working professionals the chance to participate in a shorter course.

RE in the Developing World Workshop with Solar Energy International (SEI)

November 3rd - 8th, 2008

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