



WEBSITE UPDATED

Since late in 2013 we have been working on updating our website and are now pleased to invite you to visit she-inc.org to see the outcome. We hope you will enjoy using the redesigned site and welcome your comments and recommendations.

Thank you to all those who helped with this project, especially our Web Developer, Jonathan Nash and a group of five MBA students from the University of Southern California Marshall School of Business. Introduced to SHE by Universal Giving, this group volunteered their time to help develop the initial design concept for the website.

Solar to feature at Berkeley symposium

SHE has provided support to India-based solar cooking activist and engineer Deepak Gadhia to facilitate his attendance at an upcoming symposium at the University of California, Berkeley: "Innovating Energy Access for Remote Areas: Discovering Untapped Resources." Gadhia will share his paper, "Case study of a decentralized energy project: The smoke-free village." Other energy technologies will dominate the event; Gadhia's invitation to attend marks an important milestone in broader interest in and acceptance of solar cooking in the total energy mix.

Our Mission: To unleash the potential of solar cooking to improve social, economic and environmental conditions in sun-rich areas around the world.

SHE in effort to create ISO standards for solar cooking device performance

The lack of widely accepted standards for solar cooking technology has been an impediment to the adoption of solar cooking, and the broad availability of high-quality devices.

To address that challenge, Solar Household Energy is actively supporting ongoing efforts to establish ISO (Organization for International Standards) benchmarks for solar ovens. Paul Arveson, a SHE board member and physicist, secured a seat for himself and a solar cooking expert on a new committee that is beginning the process of standard-setting for environmentally friendly cook stoves. The committee initially consisted only of experts on fuel-efficient stoves, and a standard-setting process for solar ovens had not been on the agenda.

SHE provided support for Paul Funk, Ph.D., a research engineer for the U.S. Department of Agriculture, to attend the plenary meeting of the ISO for "technical committee 285" in Nairobi in February. Asked why are ISO standards important? Dr. Funk explained it this way: *"People making decisions about regulation to protect their citizens from indoor air pollution, and people making decisions about where to spend relief and development funds, will be influenced by test results. A design or technology that scores high when tested by an accepted international standard will be favored."*

Development Expert Joins SHE Board

David Grossman, Director of International Programs for the International City/County Management Association (ICMA) joined SHE's Board of Directors in March. He brings over 30 years of experience in international development.

Organizations he has previously worked for include the United Nations Development Program (UNDP) and the United States Agency for International Development (USAID) with whom he spent six years as a foreign service officer in Honduras and Costa Rica, as well as in senior management positions in Washington.



DC Environmental Film Festival

In keeping with this year's theme of "Our Cities, Our Planet", the 2014 film festival featured a range of thought provoking films on the impact of urbanization and economic needs on the environment. As in previous years, Louise Meyer represented SHE and solar cooking at this event. The exhibition stand attracted attention before and after film screening. Details on the films are at

www.dcenvironmentalfilmfest.org



You can help by becoming a solar cook, an advocate for solar cooking or by donating to Solar Household Energy.

What your contribution can provide:

\$10 = Support organization focused on reducing environmental degradation, feeding rural communities, and reducing cooking related mortalities world-wide.

\$25 = Two days' worth of solar cooking instruction by a refugee camp resident, and the means to effect change within their community.

\$50 = Delivery of two Hot-Pot solar ovens to families in Africa, and a smoke free environment.

\$150 = A solar oven and training for a family, and a means to self-sustainability.

\$250 = One-week solar cooking demo/exhibit at relevant event in USA, and help increase global support.

\$500 = A month's salary for a refugee camp resident solar cooking project manager, and enhanced capacity and livelihood.

\$1,000 = Three months solar cooking instructions and lifelong skills.

\$2,500 = Start up solar cooking project pack for 10 families and improved life chances

\$25,000-\$100,000 = Pilot project to bring 100-250 solar ovens to rural community in need, setting stage for a self-sustaining "scale up"

SHE Collaboration, Meetings, and Communications

Our ongoing efforts to expand our ties to other organizations with similar missions are bearing fruit. For example, SHE collaborated with Solar Cookers International (SCI) to fund the attendance of a solar cooking expert at the first meeting, in Nairobi, of a technical meeting working on developing ISO standards for environmentally friendly cooking devices.

We also have had recent meetings with solar cooking advocates, David Whitfield of CEDSOL (a Bolivia-based NGO) and SCI board member Patricia McArdle.

At our annual Board of Directors' Meeting Cora Shaw was re-elected president, Louise Meyer was elected vice president and secretary, and Paul Arveson was elected treasurer. The Board added a new member, David Grossman (see story).

The recent re-launch of our website, she-inc.org, offers detailed information about our activities, as well as solar cooking resources. We hope you visit it regularly.

The GACC increases its efforts to promote solar cooking

by Sophie Brock

Solar Household Energy, in partnership with Bolivia Inti Sud-Soleil and Solar Cookers International, is leading a solar cooking advocacy project aimed at the Global Alliance for Clean Cookstoves (GACC). The Global Alliance's main focus has been on LPG (liquefied petroleum gas) and fuel-efficient biomass-burning stoves, and this project aims to raise awareness of the benefits and successes of solar cooking so that this technology can be considered alongside other options. The Global Alliance has recently taken some encouraging steps to support solar cooking initiatives. Among these:

- GoSun Stove was awarded \$75,000 from the Global Alliance's Pilot Innovation Fund to introduce their new evacuated tube solar cooker technology to the Guatemalan market.
- CEDESOL (the Center for Development with Solar Energy) received a women's empowerment grant in partnership with Solar Household Energy to enhance their work in distributing locally made solar box ovens and fuel-efficient stoves in Bolivia, with Global Alliance officials due to visit on-site.
- One Earth Designs, creator of the SolSource parabolic solar cooker, was recently featured in the Global Alliance's "Partner Spotlight" as an example of a Global Alliance partner providing clean energy for the 21st century.
- Dr. Paul Funk, a key solar cooking researcher whose work led to the publication of the solar cooking testing performance ASABE standards, was invited by the Global Alliance to be part of the U.S. delegation to the International Standards Organization Meeting in Nairobi last March.

This well-deserved recognition and support of solar cooking initiatives by the Global Alliance is a step in the right direction towards advancing the cause of solar cooking worldwide.

Requests and information on how to support the spread of solar cooking:

Share your story: We are looking for solar cooking experts and enthusiasts to expand our message. We receive inquiries from all over the world from people who want to start solar cooking projects in their communities, but they often lack the resources or the technical knowledge to do so. We would like to hear about the experiences from those of you who have taken advantage of the resources we provided, either directly or on our website. We also welcome stories about solar cooking projects you may have come across on your travels. Please contact us and we can share your story with others, who may be facing similar challenges or in need of guidance, by featuring it in our newsletter or web site.

Volunteer or Donate: Volunteers are integral to our work and you may decide to share your expertise. Also we occasionally have openings for qualified people to serve on our Board of Directors. For details about volunteer opportunities, how to volunteer or how to make a contribution, please see the [Get Involved](#) section of our website at she-inc.org.



SHE participating at the recent Montgomery County Volunteer Fair

SHE welcomes new volunteers

Esperanza Sanz Escudero: Based in Spain, Esperanza has taken on responsibility for updating our FaceBook page, amongst other tasks. She has already added many items of interest and we encourage you to visit and show your appreciation of those you enjoy by hitting the "like" or "share" button.

Andrea Gesumaria, Locally based and available to help with activities in the DC area as well as monitoring Twitter and writing research articles.

Jitendra Joshi, Based in India is assisting with uploading content to our new website.

There was the solar box cooker and now there is the solar box of power

By Andrea Gesumaria

Mansoor Hamayun is the 25-year-old British founder of BBOXX, a solar power firm that sells solar “boxes” to people in sub-Saharan Africa who can’t afford conventional electricity.

BBOXX provides solar energy “boxes” to people in sub-Saharan Africa who lack electricity. So far, BBOXX has sold over 33,000 units and provided over 120,000 people with electricity.

After traveling in the region, three friends recognized that the people of sub-Saharan Africa needed a cheap, renewable source of energy. They created a charity at their university called e.quinox and, through the charity, designed a portable solar battery box, which they shipped out to communities in Uganda. Their initial goal was to make 800 boxes, but soon, the demand was astonishing. By the end of 2013, they had sold 33,000 units. Each unit is capable of providing energy to five people. Some are capable of powering offices. At the end of 2013, the Silicon Valley Khosla Impact Fund pledged to finance BBOXX.

Mansoor feels confident that his goal of powering 20 million households with electricity will be reached by 2020. He says “that’s a promise I’m determined to keep.”

Article cited:
www.huffingtonpost.co.uk/2014/03/28/young-entrepreneur-of-the-mansoor-bbox_n_5007434.html

GLOBAL SOLAR COOKING SPOTLIGHT: David Whitfield in Bolivia

For more than two decades David Whitfield, Director of the Bolivian based CEDESOL (Centro de Desarrollo en Energía Solar) cedesol.org, has been a strong advocate and promoter of solar cooking. Since seeing firsthand the reality behind the statistics on the environmental damage and adverse impacts on health and quality of life related to cooking, he has resolved to make a difference. Since then he has pioneered new and innovative ways to increase renewable energy use.



Through his partnership with *Sobre la Roca* as well as his collaborative and advocacy work, he has developed and helped to spread an integrated cooking approach throughout Bolivia. This has contributed to local job creation as well as improvements in design and efficiency of ecological cookers. His integrated approach using efficient biomass, retained heat and solar cooking has been well received.

A participatory educational approach combining follow up training and monitoring has become part of the standard CEDESOL methodology.

David and his wife Ruth often travel to remote villages where they demonstrate the solar and fuel-efficient stoves. Once the villagers decide

that the technology is beneficial for them, projects are formalized whereby they pay a significant part of the cost of the equipment. When revisiting communities to monitor progress, it became evident to David how much the solar cookers have helped families. Spreading the message of this alternative technology to neighboring communities has increased interest and demand. Local schools and orphanages have adopted the technology and a solar cooking project with



Ruth Saavedra loading a solar cooker during a training

Source: cedesol.org

the Salvation Army has benefitted urban and rural communities in Cochabamba and La Paz.

Conscious of funding limitations and keen to foster sustainability, David has spearheaded CEDESOL’s collaboration with financial institutions to create microenterprises, providing affordable ways for people to acquire the stoves.

CEDESOL’s “*Ecological cookers for a better life*” is a recognized Gold Standard project aiming to deliver 50,000 stoves to rural areas. Such a large scale project, if successfully implemented, has the potential not only to earn carbon credits but to save an estimated 315,000 tCO_{2e} (tons of carbon dioxide equivalent) over the project’s lifetime.

During his visit to the U.S.A. in January, David on behalf of CEDESOL, received a women’s empowerment grant from the Global Alliance for Clean Cookstoves. He, along with his Bolivian colleague Paula Saldivias, participated in workshops in New York and Washington DC. SHE has been in contact with David for many years and occasionally provided assistance for his efforts. He is very optimistic about the future of solar cooking and the increasing interest it is receiving in Bolivia and globally.

Facts on File: 4.3 million deaths in 2012 were caused by household air pollution, caused by fires inside and outside the home; World Health Organization estimate. The figure represents 54% of all deaths caused by air pollution that year.

THE ART CORNER:

SHE's traveling exhibit "Environmental Education from a Refugee Camp" (<http://lundavincente.wordpress.com/my-artworks/>) has been in three high schools in the Washington metropolitan area this academic year. The exhibit aims to stimulate discussion in cross-cutting areas: climate change, deforestation, health, gender, social justice – by listening to the "voice" of an otherwise silenced environmental refugee.

In Wilson High School in Washington, D.C., the social studies and environmental education departments organized a one-day seminar 230 seniors attended, then published a thought-provoking article in the school's newspaper. Read it at <http://thewilsonbeacon.com/refugee-art-on-display-at-library/>

The exhibit fit perfectly into Georgetown Day School Teach-In on social justice, gender and global warming. GDS's Environmental Club taught lower school students how to make solar cookers, and organized an exhibit of solar cookers during the DC Environmental Film Festival film on biodiversity loss in Haiti. The exhibit coincided with Washington International School two-day conference on Global Issues which empowers students as global citizens to address environmental issues and mirrors the diversity of refugee drawings.



Louise Meyer at Wilson High School

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Solar Cooking Around the World:**Coimbatore Schools Plan Increase Use of Solar Cookers** *By Lousanna Cai*

Coimbatore, one of over forty cities designated a "solar city" in 2013, is aiming to reduce projected demand of conventional energy by 10% within five years. This past August of 2013 in Tamil Nadu, India, the Coimbatore Corporation installed two solar cookers at the North Coimbatore School. Receiving positive feedback, the corporation has decided to increase the number of Coimbatore schools that utilize solar cookers.

A meal center serving 100 children would require 4-5 liquefied petroleum gas cylinders a month. A commercial, 19-kg cylinder costs upwards of 2200 Rs, which equates to about 35 USD. Although 50 of the 77 Corporation schools with facility to cook using LPG were not doing so due to the high cost, the implementation of solar cookers would enable financial savings in those that were and in those buying wood. Corporation Commissioner G. Latha stated that alternative sources of energy would not only reduce reliance on conventional sources of energy, but also help meal organizers who had struggled with buying firewood and working in a smoke-filled environment.



Coimbatore 2013 - noon meal workers *Photo - S. Siva Saravanan*

After estimating that it could replace the need for LPG cylinders at 16 higher secondary schools, the corporation stated that it would extend solar cookers to [77 centers that served noon meals to 8,700 students](#). The 60% subsidy offered by the Ministry of New and Renewable Energy will be used to install the cookers. Coimbatore Corporation continues to search for ways to limit the money spent on fuel. In the next phase, the corporation intends to install solar cookers in all higher secondary schools and after that, all 86 schools in its jurisdiction.

Source: The Hindu Business Line

Korean university students develop new portable photovoltaic device

By Esperanza Sanz Escudero

Students of Industrial Design at the Seoul University in Korea have developed a very small and useful solar powered device. Referred to as the Window Socket due to the suction cup allowing it to be attached to any soft surface, such as a window exposed to sunlight, whether in a home, car or even the interior of an airplane window. Easily transportable, it can be used for charging a great variety of electrical devices in a sustainable way. More information about the device can be found at behance.net/gallery/Window-socket/9803275

Upcoming events:

April 25-27: SHE will be exhibiting at the EPA National Sustainable Design Expo taking place at the Washington Convention Center in DC. [See epa.gov/ncer/p3/nsde/index](http://epa.gov/ncer/p3/nsde/index) for details.

July 17-19: Solar Cookers International are holding the SCInet Solar Cooking Convention in Sacramento, California. For program and details, including registration information, see solarcookers.org/events/convention

If you would like to connect with Solar Household Energy, visit our website (she-inc.org) or email us at inquiries@she-inc.org.