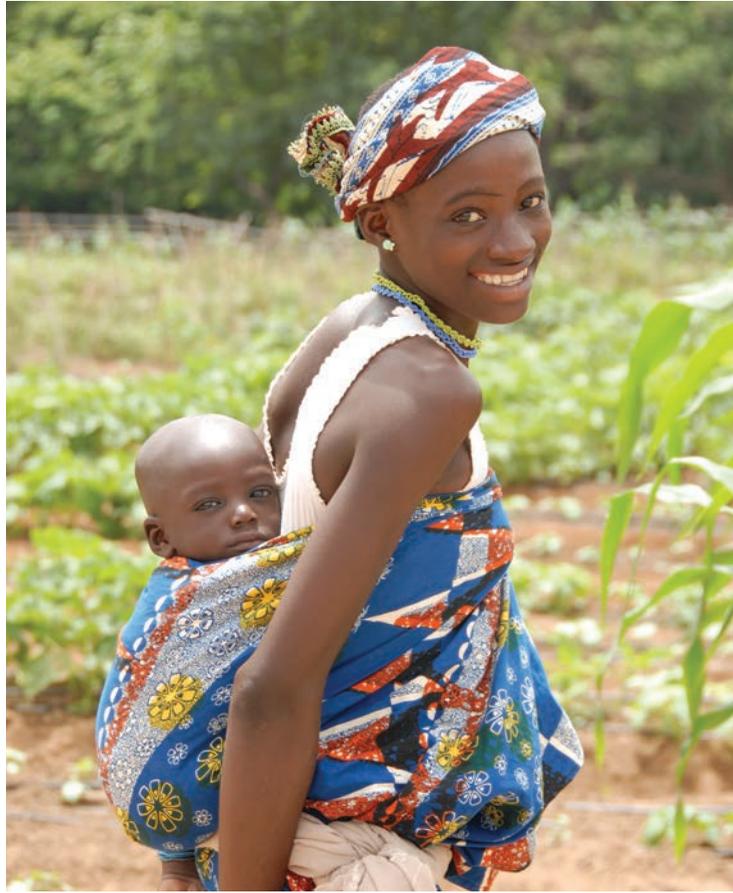




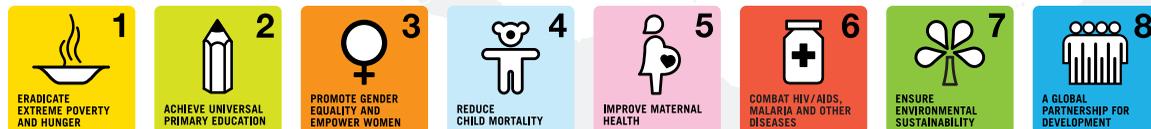
Solar Electric Light Fund



2010
ANNUAL REPORT

2010 ACCOMPLISHMENTS

- Results of a two-year study conducted by Stanford University's Program on Food Security and the Environment and published in the *Proceedings of the National Academy of Sciences* found that SELF's Solar Market Garden™ in Benin, "significantly augments both household income and nutritional intake, particularly during the dry season, and is cost effective compared to alternative technologies."
- In partnership with the International Center for AIDS Care and Treatment Programs (ICAP), SELF electrified four health clinics in Rwanda to power lights, vaccine refrigerators, microscopes, centrifuges, and computer systems.
- SELF's project with Free The Children to power the Kisaruni Girls School and the nearby Baraka Health Center in Kenya resulted in electricity for lights, laptop computers, a vaccine refrigerator, a defibrillator, and the first and only ultrasound machine used to provide prenatal care to the community.
- Together with Partners In Health, SELF developed the "Rebuilding Haiti Initiative," a \$1.1 million, 100 kilowatt (kW) plan designed to increase the solar power capacity at seven health centers to further improve the quality and amount of critical medical services needed to help with the nation's recovery.
- In Haiti, a 5 kW system was installed at the Hinche health clinic and a 10 kW system was installed at the Cerca la Source clinic, each providing enough electricity to meet the entire demands of the facilities and enable them to administer improved health services to thousands of people.
- SELF was the recipient of the prestigious ExxonMobil-sponsored Ashoka Changemakers "Women, Tools, Technology" award for advancing women's economic opportunities through technology.



ACHIEVING THE MILLENNIUM DEVELOPMENT GOALS

SELF believes that energy access is essential to achieving the Millennium Development Goals (MDGs). Its "Whole Village" development model takes an innovative approach to designing and implementing integrated solar energy systems to help rural communities in developing countries improve their health, education, economic development, and food and water security. The projects in this report reflect the MDGs they are helping to achieve, and validate SELF's approach in eliminating energy poverty.

LETTER FROM OUR EXECUTIVE DIRECTOR



Dear Friends,

As I look back upon the events of 2010, I am proud of and humbled by SELF's achievements and growth. At the same time, I can't help but think how fragile and fleeting life can be. The year was a defining one for our organization — we installed 17 solar energy systems for health clinics in Africa and Haiti, our solar irrigation work in Benin was validated, and, somewhat sadly, we added and accelerated projects to help the people of Haiti after the earthquake. We also lost Walt Ratterman, one of our senior project managers, who was among those who perished in the quake.

Our immediate response to the Haitian disaster was to plan for and begin solarizing seven health centers for Partners In Health (PIH) to provide the primary benefits of securing critical power loads, reducing fuel-based generator run times, and providing reliable sources of clean electricity, resulting in improved medical care for thousands of Haitians. This was followed by the launch of additional multi-year projects such as partnering with the Inter-American Development Bank to light transition camps and health clinics, and with NRG Energy, Inc. to power a fish farm, schools, a Solar Market Garden, and other community services in the central plateau of Haiti. To make these initiatives a reality, our partners and donors graciously stepped forward to support our efforts, and to each of them I am very grateful.

In 2007, we installed three of our Solar Market Gardens for women farming collectives in northern Benin. I am happy to report that this year Stanford University published its assessment of them, which concluded that the gardens helped to increase household income and nutritional intake, and, when compared to alternative technologies, are cost-effective. In recognition of this success, SELF was honored to receive the prestigious Ashoka Changemakers "Women, Tools, Technology" award for advancing women's economic opportunities through technology. Our plan is to replicate the Solar Market Garden model throughout the world, a process we have now begun by securing the funding for the installation of eight more gardens in Benin.

Our work in 2011 will build on this progress. We will continue to demonstrate how energy from the sun can empower women farmers to create impactful change in their communities, increase the quality and amount of medical care our partners can deliver, and fight energy poverty in the remotest of villages. Our donors' support has changed the lives of those we serve, and on their behalf we extend deepest thanks.

Warm regards,

Robert A. Freling
Executive Director

2010



BENIN

In Benin, as in many other parts of Africa that experience a prolonged dry season, solar energy has an enormous, yet largely untapped, potential to increase food security by providing a cost-effective and environmentally friendly way to pump water for irrigation from nearby rivers and underground aquifers. In 2007, SELF installed three of its Solar Market Gardens™ (SMG), an innovative, unique solar-powered drip irrigation system, for women farming collectives in Dunkassa and Bessassi, two villages in the arid, northern part of the country. Since then, residents have witnessed the transformative power that this simple and effective technology can have on their lives, as it has resulted in a significant increase in food security among the women farmers who are now able to grow high-value fruits and vegetables year-round.

A two-year study conducted by Stanford University's Program on Food Security and the Environment department and published in 2010 in the *Proceedings of the National Academy of Sciences* found that SELF's SMG model, "significantly augments both household income and nutritional intake, particularly during the dry season, and is cost effective compared to alternative technologies." According to the study, each garden has supplied nearly two tons of produce per month; about 20 percent is kept for home consumption and the balance is sold at market, earning an extra \$7.50 per week for the women selling fresh produce. Not only has nutrition improved in Dunkassa and Bessassi, but income levels have also risen, helping to pay for other economic development initiatives, school fees, and medical treatment. It is during the six-month dry season that the use of these systems has

had the greatest impact. By virtue of their new found ability to pump water from rivers and underground aquifers, the women in Dunkassa and Bessassi have succeeded in breaking free from their historical dependency on rain-fed agriculture.

Such validation has led to increased support for SELF's work. This year, financial commitments from the Nordic Development Fund, ExxonMobil, the United States African Development Foundation and others totaled more than \$1.1 million. Additionally, in June, SELF won the prestigious ExxonMobil-sponsored Ashoka Changemakers "Women, Tools, Technology" award for advancing women's economic opportunities through technology. Such new sources of funding will enable SELF to install eight more SMGs over the next two years.

SELF rounded out 2010 with the installation of three solar-powered water wells. A pre-project survey found that 58 percent of children under five in Benin suffer from chronic diarrhea, and that communities typically only have access to contaminated or inconsistent water supplies. Now, each well will provide the families in Dunkassa and Bessassi with safe, clean drinking water year-round.

SELF will provide solar power for health clinics, schools and community centers in the Kalalé District of northern Benin as the next step in implementing our "Whole Village" electrification model, which focuses on improving the health, education, agriculture, and economic well-being of entire communities. It is our hope that this integrated approach will serve as a development template for thousands of other rural villages in the developing world.

BENEFITS

Stanford University's Program on Food Security and the Environment study found that SELF's three Solar Market Gardens resulted in:

- > 1.9 metric tons of produce grown per garden, per month; vegetable intake increased to three to five servings per day
- > Daily standard of living increased \$0.69 per day; women are earning an extra \$7.50 per week from the sale of fresh produce at the local market
- > Increased household income contributed towards schooling, medical treatment and other economic development initiatives



"Thanks to solar power, the water we have for our crops is helping us to not only feed our families, but also to gain extra income to send our children to school."

— MEMBER OF THE BESSASSI WOMEN'S FARMING COLLECTIVE

"The garden saved me. I'm always in the garden. We didn't know that the sun could do all of this. Now we sell, we eat... we eat a lot here!"

— GANIGUI GUERA, "MADAME LA PRESIDENTE," DUNKASSA WOMEN'S FARMING COLLECTIVE

KENYA

Kisaruni Girls Secondary School

Kenya has maintained a relatively non-confrontational environment and stable government despite successive changes in its political system and a history of animosity between various ethnic groups. Free The Children (FTC), a nonprofit organization whose mission is to free children from poverty and exploitation, created the Kisaruni Girls Secondary School, designed to bring together young women from different tribes in a safe, educational environment, to interact for the first time and foster a foundation for healing and understanding.

In 2010, FTC expressed an interest in using renewable energy solutions to produce electricity for their projects in the field. To help them achieve this goal, SELF designed

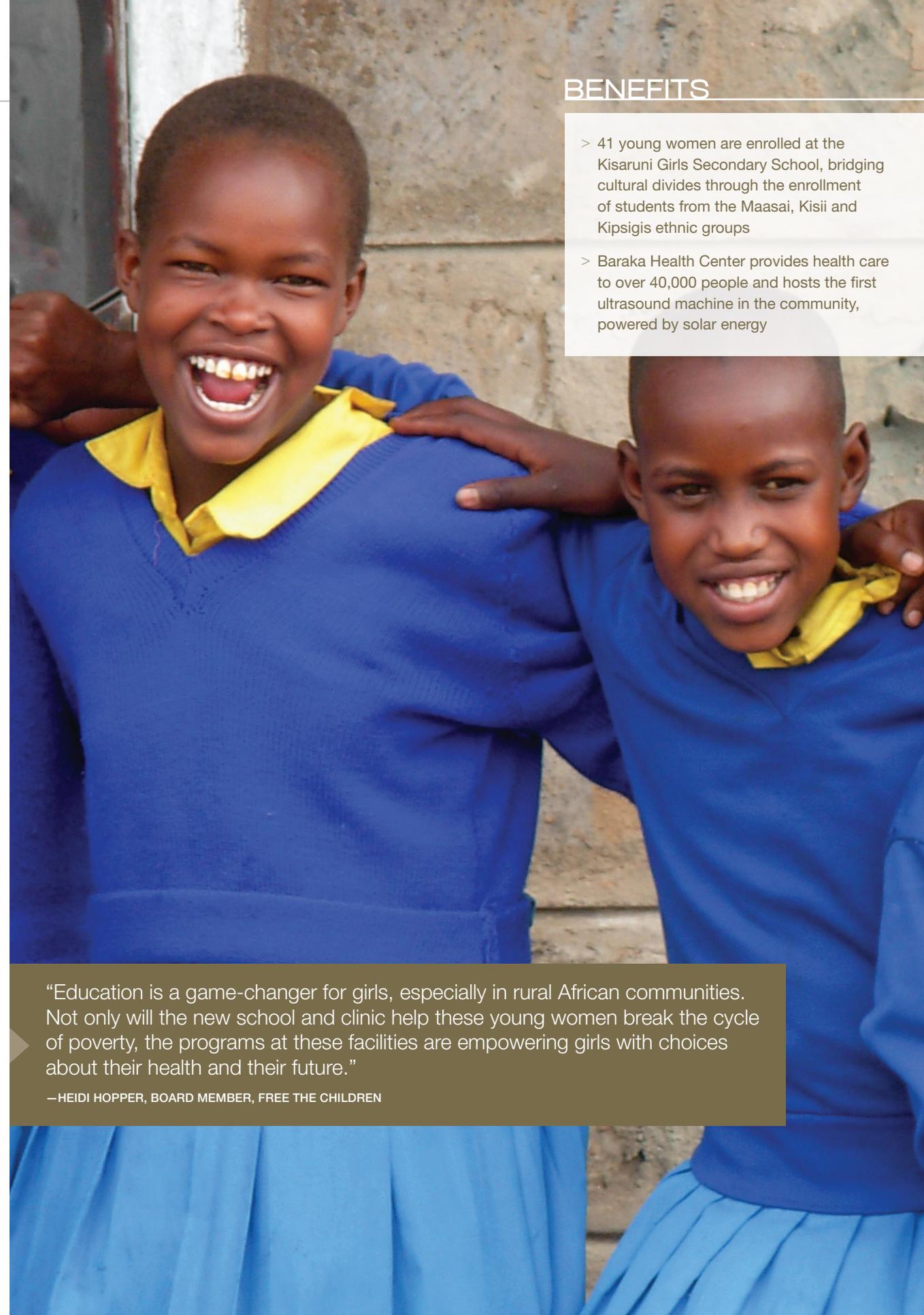
and installed an 8.4 kW solar-diesel hybrid system for the Kisaruni school and the nearby Baraka Health Center. The solar array provides electricity for lights in eight classrooms, ten laptops, a printer, a color television, VCR, and radio cassette player. The clinic has the first and only ultrasound machine used to provide prenatal care to the community, and solar energy is supplying the power for this unit as well as for a vaccine refrigerator, defibrillator, microscope, centrifuge, examination lights and computers.

SELF looks forward to continuing its partnership with Free The Children and using the power of solar energy to provide educational and social opportunities for Kenya's youth.



BENEFITS

- > 41 young women are enrolled at the Kisaruni Girls Secondary School, bridging cultural divides through the enrollment of students from the Maasai, Kisii and Kipsigis ethnic groups
- > Baraka Health Center provides health care to over 40,000 people and hosts the first ultrasound machine in the community, powered by solar energy



“Education is a game-changer for girls, especially in rural African communities. Not only will the new school and clinic help these young women break the cycle of poverty, the programs at these facilities are empowering girls with choices about their health and their future.”

—HEIDI HOPPER, BOARD MEMBER, FREE THE CHILDREN

Photo courtesy of Free The Children

LESOTHO

The small, mountainous nation of Lesotho is heavily afflicted by the HIV/AIDS epidemic; approximately 23 percent of its population suffers from the virus and other infectious diseases that can stem from it, such as tuberculosis.

Medical personnel, working with as few as five physicians per 100,000 people, are faced with enormous challenges when providing health care services. The ability to access online medical records, perform health assessments using advanced medical equipment, and provide around the clock care are critical in diagnosing and treating patients that often seek care from clinics in different locations.

In 2008, SELF teamed with Partners In Health (PIH), an international medical organization committed to improving the health of the poor and marginalized, to incorporate solar power into its health clinics to provide the additional electricity needed to power a network of computers connected by VSAT (Very Small Aperture Terminal) satellites that reliably transfer video, voice and data. This first phase of the partnership led to the installation of 2 kW solar electric systems at each of four PIH clinics.

Phase two of the project was implemented in 2010, adding 3 kW of power to each of the phase one systems and installed new, 2 kW solar systems at each of three additional PIH clinics. This was made possible in large part by support from the SunPower Foundation, a nonprofit organization created by the SunPower Corporation to work with global partners to accelerate the adoption of renewable energy.



The results of these projects — new communications systems, improved access to health records, installation of new x-ray machines to diagnose tuberculosis, extended run-time of medical equipment, and the implementation of critical lighting — not only contribute to the success of the PIH medical staff in providing long-term, quality medical services that are faster and more accurate, but also provide certainty to the women, men and children of Lesotho that they have access to the types of health care needed to combat disease.



BENEFITS

- > Solar power supporting new communications systems, x-ray machines to diagnose tuberculosis, and VSAT communications systems
- > Clinics serve a combined population of over 175,000

“I can’t overstate how important having X-ray machines at our clinics is to our ability to diagnose tuberculosis in our HIV-positive patients, and we couldn’t use them until we had the solar power to run them.”

—JENNIE RILEY, PIH COUNTRY COORDINATOR FOR LESOTHO

RWANDA



ICAP

A small country that continues to recover and rebuild from genocide and civil war, Rwanda is one of the most densely populated countries in Africa with a population of 11.2 million people in an area that is roughly the size of the state of Maryland.

In 2006, Rwanda reorganized its government's structure by combining the 154 communes throughout the country into 12 provinces, then reducing them further into five; the 106 districts within those were in turn reduced to 30, and each district was then divided into individual sectors. This new structure was intended to mobilize communities to help improve the democratic process and establish better access to government services, yet, lack of access to dependable health care services continues to plague the country as the people seek to reconcile their differences.

International Center for AIDS Care and Treatment Programs

Rwanda has one of the highest in country HIV/AIDS rates in the world. Approximately three percent of the adult population is infected with the virus and as a result, an estimated 210,000 children have been orphaned. Additionally, the country's chronic shortage of physicians and nurses, combined with poor clinical and laboratory infrastructure, compounds the problem of providing adequate diagnostic and treatment services that can help fight the disease.

The International Center for AIDS Care and Treatment Programs (ICAP), part of Columbia University's Mailman School of Public Health, works with governments to address healthcare issues through the development of infrastructure and medical staff to carry out HIV/AIDS prevention, care, and treatment programs. Since 2002, ICAP has been working with the Rwandan government to improve healthcare services and systems, and to increase the number of medical professionals in the field.

Seeing the results of SELF's work with Partners In Health to improve clinics in Rwanda, ICAP approached SELF to design and implement solar power systems for the clinics it operates in to provide power for lights, vaccine refrigerators, lab equipment such as microscopes and centrifuges, and computer systems. Toward this end, in 2008, SELF installed 2.4 kW solar power systems at each of 15 ICAP supported hospitals and healthcare centers, and in 2010, SELF electrified an additional four clinics — Nyange A, Nyange B, Nyabirasi and Nayakiriba — with approximately 2.4 kW of solar power each.

In total, over 45 kW of solar power is providing medical staffs with the electricity needed to use lifesaving equipment and continue their training, so that they may improve the overall well-being of Rwanda's communities.

BENEFITS

ICAP

- > Since 2008, SELF has installed solar systems at 19 of ICAP's 56 supported sites in Rwanda
- > SELF has trained 30 technicians at the Kigali Institute of Science and Technology on the installation and maintenance of the systems
- > SELF's 2010 installations will provide power for lights, vaccine refrigerators, microscopes, centrifuges, and computer systems



"We are now strengthening the HIV services...they are really seeing hope. That's the most important part."

—ICAP PHYSICIAN

RWANDA



IHANGANE

Ihangane

The Gakenke District in the Northern Province of Rwanda is sparsely populated, yet the impact of HIV/AIDS on its community has been enormous. The Ihangane Project (TIP), a nonprofit focused on providing funding and technical support to community-initiated projects that specifically address improving HIV prevention, education, diagnosis, and treatment in local communities, is committed to improving the conditions that fuel the HIV epidemic in Gakenke.

In 2010, SELF was contacted by Dr. Wendy Leonard of TIP to discuss the solar electrification of two health clinics and three remote health posts; SELF took a two-phase approach in implementing the solutions required to achieve those goals. The first

was undertaken in July at the Nyange Health Center; a decade-old, inoperable 500 Wp solar system was replaced with a new 1.6 kW solar array. The new system was designed to provide power to computer and communication systems, new lighting, and diagnostic equipment. Phase two of the project will begin in 2011 with the installation of solar power at the second health clinic and three health posts, enabling TIP to further extend its care and education programs into additional communities.

As a result of these initiatives, clinic personnel are better able to address the medical issues facing the community and provide education about HIV/AIDS prevention and treatment.



BENEFITS

IHANGANE

- > 20,000 community members in Gakenke District are able to receive health care services at The Ihangane Project sites
- > Nyange Health Center provides 31 beds, 10 located in the maternity ward
- > 1.6 kW solar system powers lights for maternity ward, computers and diagnostic equipment



“Without power we had to deliver babies and perform other procedures with candles, kerosene lamps, or in the dark...we couldn’t see if a baby was in distress. I no longer have to leave the room in search of a light source or kerosene runs in the middle of delivering a baby. The deliveries will be safer, and patients happier.”

—HARELIMANA ASSOUMPTA, SENIOR NURSE



HAITI

SELF first teamed with Partners In Health (PIH) in 2006 to demonstrate how incorporating solar energy systems into its operations would enable the organization to improve the delivery of its health care services while supplying the additional amounts of electricity needed to help secure critical power loads, reduce fuel-based generator run times, reduce operating costs, and curtail PIH's overall carbon footprint. Building upon the initial installations of photovoltaic (PV) systems in Rwanda and Lesotho, the partnership was extended in 2009 to include projects in Haiti. SELF completed preliminary assessments at ten of PIH's health facilities there, and planned to implement 10 kW systems at each clinic. In August 2009, in the remote, mountainous central highlands of Haiti, SELF implemented a 10 kW solar system at PIH's Zanmi Lasante clinic located in Boucan Carré.

In the aftermath of the Haitian earthquake in January 2010, SELF and PIH reassessed their original plans and decided to implement larger PV systems averaging 17 kW in size, a 70 percent increase in capacity, at seven health centers to increase the quality and amount of critical medical services needed to help with the nation's recovery. As a result, a \$1.1 million, 100 kW plan, referred to as the "Rebuilding Haiti Initiative" was developed to achieve this goal.

SELF committed to raise the funds through financial and in-kind support. Thanks to a \$500,000 grant from The Schmidt Family Foundation through its 11th Hour Project, along with numerous and generous in-kind contributions from the solar industry such as a donation of 100 kW from SolarWorld, a total

of 141 kW could now be installed at the seven clinics, enabling several facilities to have all of their electricity provided by the sun.

In the spring of 2010, a 5 kW system was installed at the clinic located in Hinche and a 10 kW system was installed at Cerca la Source, each providing enough electricity to meet the entire demands of the facilities and enable them to administer improved health services to thousands of people.

Simultaneously, energy load assessments were conducted at the five remaining clinics located in Thomonde, La Colline, Lascahobas, Petite Riviere and Verettes to determine appropriate sizing of systems, according to each clinic's energy consumption profile.

Expanding Our Work

Through the summer and into fall, support from both the public and private sectors continued to advance SELF's other work in Haiti. The Inter-American Development Bank provided a \$1.5 million award to SELF to provide solar powered street lighting for two transition camps in Port-au-Prince, and to install solar systems at 12 health clinics on the south coast of Haiti. And NRG Energy, Inc., a Fortune 500 company that owns and operates one of the United States' largest non-utility power generation and retail electricity businesses, announced its partnership with SELF to fulfill its \$1 million commitment to the Clinton Global Initiative to implement solar systems that will power a fish farm, a Solar Market Garden, a micro-enterprise center, and eleven rural schools in the Boucan Carré region of Haiti.

BENEFITS

- > Boucan Carré solar system secured and stabilized critical energy loads, contributing to the consistent delivery of health care services
- > Solar significantly reduced power created by diesel generator; monthly fuel consumption at Boucan Carré dropped by seven barrels per month
- > SELF's Rebuilding Haiti Initiative has been made possible by the 11th Hour Project and numerous in-kind contributions from the solar industry



"There's no question for me, as a doctor, as a teacher, as someone who's been working in very difficult conditions, that solar energy can save lives."

—DR. PAUL FARMER, PARTNERS IN HEALTH

HAITI

In October, SELF's Project Director Jeff Lahl traveled to PIH's headquarters in Boston to present a set of energy efficiency recommendations to help maximize the power from its solar systems in the field, such as:

- replacing lights, fans, air conditioners, and other equipment with more energy efficient models;
- installing timed power switches on all non-critical lights and fans; and,
- conducting ongoing training of personnel to learn how to use and balance the system so that it is providing maximum power output.

As 2010 came to a close, projects were undertaken at the Thomonde, La Colline and Lascahobas PIH sites and are to be completed in 2011.

The benefits of solar energy at all of these clinics will be felt for years to come. From saving money by reducing the consumption of diesel fuel each month, to curtailing PIH's carbon footprint, to improving overall patient care by providing medical staffs with access to the equipment they need, solar power is helping to save lives while lighting the way toward a new model of sustainable health care in the developing world.

Premier Partners

11th Hour Project	Clinton Bush Haiti Fund
Inter-American Development Bank	NRG Energy, Inc.

Sustaining Partners

Alstom Foundation	Solar World
Outback Power Systems	

Supporting Partners

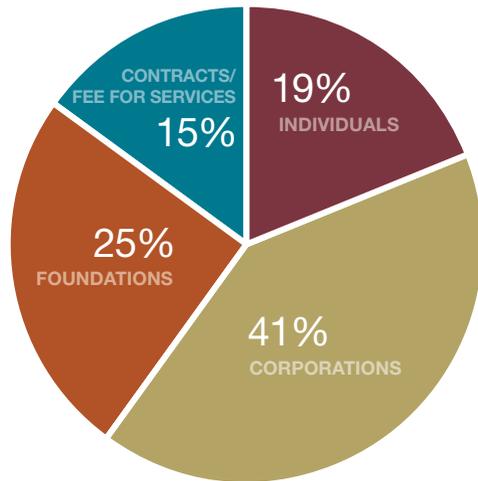
BP Solar	Main Street Power
Canadian Solar	Power Freight Systems
Charitable Foundation of the Energy Bar Association	Q-Cells SE
Chadbourne and Parke LLP Foundation	SOL
Dow Corning	Solar Liberty Foundation
East Penn	Standard Solar
General Cable	Sunsense Solar
Good Energies Foundation	Suntech Power
Hemlock Semiconductor	Trojan Battery
International Copper Association	U.N. Office of the Special Envoy for Haiti



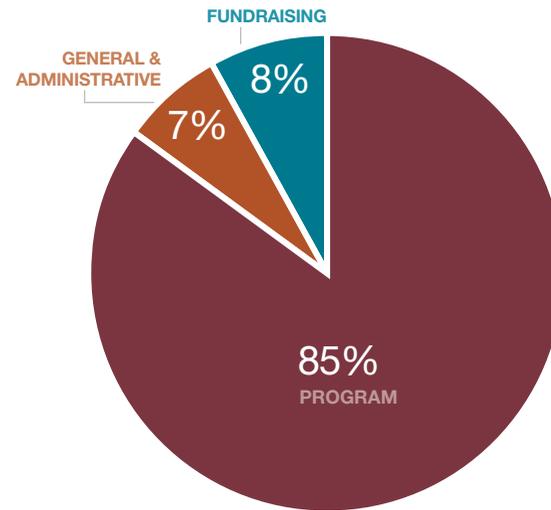
Photo © Nadia Todres

FINANCIAL HIGHLIGHTS

SELF Revenue in FY10



Program Efficiency in FY10



Financially, 2010 was a year of significant growth, with revenue exceeding \$3.5 million, more than double that of the previous year. SELF was able to capitalize on the capacity building made in recent years to advance its mission, expand upon its core programs, and begin implementation of new programs. As a result, SELF has developed strong relationships with new partners and multilateral organizations that set the stage for continued significant growth in the coming years.

With the new revenues, SELF was able to increase its program activities to over \$1.9 million with continued increases expected into 2011. With total expenses of \$2.2 million, this increase in program activity raised program efficiency to better than 85 percent.

The financial results depicted are derived from the audited December 31, 2010 consolidated financial statements, which received an unqualified opinion. SELF's complete, audited financial statements can be obtained by calling (202) 234-7265.

FINANCIAL HIGHLIGHTS

STATEMENT OF ACTIVITIES For the Year Ended December 31, 2010

(With Summarized Financial Information for the Year Ended December 31, 2009)

	UNRESTRICTED	TEMPORARILY RESTRICTED	2010 TOTAL	2009 TOTAL
REVENUE				
Grants and donations	\$ 781,361	\$ 2,605,768	\$ 3,387,129	\$ 1,028,094
Contracts	-	173,286	173,286	503,895
Investment income	1,344	-	1,344	1,504
Other income	-	-	-	7,802
Net assets released from restrictions:				
Satisfaction of program restrictions	1,467,872	\$(1,467,872)	-	-
TOTAL REVENUE	2,250,577	1,311,182	3,561,759	1,541,295
EXPENSES				
Program services	1,904,850	-	1,904,850	1,383,124
Management and general	161,554	-	161,554	189,980
Fundraising	170,850	-	170,850	165,742
TOTAL EXPENSES	2,237,254	-	2,237,254	1,738,846
CHANGE IN NET ASSETS	13,323	1,311,182	1,324,505	(197,551)
NET ASSETS, BEGINNING OF YEAR	598,136	475,568	1,073,704	1,271,255
NET ASSETS, END OF YEAR	\$ 611,459	\$ 1,786,750	\$ 2,398,209	\$ 1,073,704



Solar Electric Light Fund

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