



WE CARE SOLAR

Annual Report 2015

No woman should die during childbirth

More than 300,000 mothers die every year from complications of pregnancy and childbirth. The majority of these tragic deaths occur in countries with energy poverty – regions where front line health centers are forced to function without reliable electricity. Electricity is an essential component of effective, around-the-clock emergency obstetric care.

We Care Solar was founded in 2010 to support global efforts to eliminate preventable deaths in childbirth. Our goal is to improve the lives of mothers and newborns by providing maternal health clinics with reliable power. We developed a compact, rugged, easy-to-use solar electric kit – a Solar Suitcase – for rural health centers. And we began working with local and regional partners to ensure that these devices reach some of the most remote clinics in the world.

The Solar Suitcase replaces candles, kerosene lanterns, and lights from cell phones. It offers bright, LED lights, a fetal heart rate monitor, and a 12-volt DC charging station. When a health center has a Solar Suitcase, mothers are more likely to seek skilled care, and health workers are able to function more efficiently and effectively.


This Annual report reviews our key programs in 2015, and includes the words of midwives who are on the frontlines, caring for mothers and newborns, day after day. I am always humbled by their passion, courage and determination to save lives.

In addition to seeing images of our programs in Africa and Asia, you'll see another highlight of our year — receiving the "Powering the Future We Want" award by the United Nations Department of Social and Economic Affairs. We were thrilled to receive this award from Ban Ki-Moon, and to have the opportunity to advocate for safer maternal health care at the United Nations.

Thank you for joining with us to ensure that sustainable energy is part of the solution for improving global maternal health. You are helping us to support health workers around the world so that one day no women will die giving life.

In Gratitude,

Laura Stachel, MD, MPH
Executive Director, We Care Solar



Tanzanian midwife, holding a cell phone in her mouth as she provides care at night.

Our Goal:

To ensure that mothers and newborns are born in skilled healthcare facilities that have adequate lighting and power to save lives.

Our Impact To Date:

- 1,694 Solar Suitcases shipped to 30 countries
- 1,500 health centers equipped with solar lighting
- 614,000 mothers and newborns delivered in health centers using Solar Suitcases
- 5,082 health workers trained
- 2 million hours of nighttime medical lighting
- 28,920 tons of CO₂ averted by using energy from Solar Suitcase instead of fossil fuels
- 25+ partnerships with NGOs and leading development organizations





"To tell you the truth, there is nothing normal about attending a delivery in the dark. It is very stressful and confusing."

"There is always a risk of contamination, falling accidents, and we can't even call for an ambulance since our phone battery dies on us."

— Ethiopian Midwives

Ethiopia

Thanks to our Solar Suitcase program in Ethiopia, Hamlin College of Midwives now introduces the Solar Suitcase to midwifery students as part of their curriculum. The dedicated team of Hamlin College technicians we trained in 2014 worked for months to reach last-mile centers, often facing treacherous road conditions. Despite the challenges, they installed 145 Solar Suitcases in Amhara, SNNPR, Oromia and Tigray, sometimes arriving at off-grid health facilities by foot! Of the 25,173 deliveries in these health centers to date, nearly 60% of them occurred at night under the beam of our Solar Suitcase light. In addition to our work with Hamlin midwives, we also partnered with WEEMA international on a program to support 27 additional health centers in Hadiya.

"You have no idea what this means to us! We are very happy and thankful to you. Now it is like being born again."

— Ethiopian Midwife

Partners:
Hamlin College of Midwives
WEEMA International
Greenlamp Foundation
UBS Optimus Foundation

"It is hard to conduct a delivery at night with a kerosene lamp. It is hot, and does not even provide sufficient light, let alone a delivery. It is even harder to suture a patient or conduct an episiotomy without sufficient light."

—Ugandan Midwife

"The Solar Suitcase has done magic every time we use it because mothers are delivered well and that is magic to us."

—Ugandan Midwife

Uganda

To date, our programs with several agencies have brought more than 350 Solar Suitcases to health facilities in Uganda. The evaluation of the 100 health facilities that were included in our 2013 "Saving Lives at Birth" program with AMREF and White Ribbon Alliance in southwest Uganda showed a 66% increase in facility-based deliveries, and substantial decrease in perinatal deaths.

In 2015, we turned on the lights in 93 health centers in partnership with UNICEF, Save the Children and Pathfinder. Some of the Solar Suitcases were installed in refugee settlements in the Isingiro district to serve Burundi refugees.

Partners:
UNICEF
Save the Children
Pathfinder International
AMREF Health Africa
Music for Relief
Saving Lives at Birth

"Mothers are now attracted to come to the health center. We don't ask them to come with candles or kerosene to provide delivery lighting. We deliver them safely and the mothers are happy."

—Tanzanian Midwife

Tanzania

Pathfinder International enabled two regions of Tanzania to receive better maternal and newborn care. 78 Solar Suitcases brought light and hope to health centers in Sengerema district in Mwanza, and three districts in Kigoma. The Sengerema program addressed several factors that impact maternal mortality: the need to identify pregnancy risks and complications, the need for emergency transport, and the need for improvements at the health facilities. By educating community health workers, instituting an ambulance dispatch system, and equipping midwives with training and Solar Suitcases, maternal and newborn care were improved. Sengerema reported a 56% increase in facility-based deliveries within 6 – 10 months of the Solar Suitcase installation.

Partners:
Pathfinder International
Every Mother Counts
Global Health Foundation





Nepal

When a 7.8 magnitude earthquake devastated Nepal in April 2015, thousands of people died and up to 90% of health centers were damaged or completely destroyed. Yet 126,000 pregnant women were still in need of care. We received a photo from our partners at One Heart World-wide (OHW) showing logistician Suraj Shah carrying a Solar Suitcase over an avalanche to a remote clinic and we knew we had more to do. Our campaign for Nepal resulted in the shipment of 110 Solar Suitcases to OHW for health workers in Dhading, Sindhupalchok, Baglung and Bhojpur. Dozens were installed in emergency tents erected in villages to provide maternal health care; the rest were placed in health centers without reliable power.

Partners:
One Heart World-wide
Every Mother Counts
UBS Optimus Foundation
Direct Relief



"The health workers' reaction to the Solar Suitcase is amazing! You can see the joy in their eyes. They will be dancing. They will be shouting after installation. They will tell you after an installation, 'It's been a long time. We've been so many years without light.'"

—Aneal Hamilton, Program Solar Specialist



Sierra Leone

Sierra Leone has one of the highest maternal mortality rates in the world, and the Ebola epidemic added additional challenges. Many families became fearful of receiving care in health centers when the Ebola epidemic was active. In the wake of Ebola, we partnered with Medical Research Centre and Direct Relief on a program to bring better midwifery supplies and Solar Suitcases to health centers in need of electricity. 70 Solar Suitcases were shipped to Sierra Leone in 2015. Now that Sierra Leone has been declared Ebola free, we anticipate more mothers will be delivering safely in health centers equipped with Solar Suitcases.

Partners
Medical Research Centre
Direct Relief
UBS Optimus Foundation

"Before now the kerosene lamps were absolutely like working in darkness and sometimes we would send patients away. Our capacity to handle patients has increased, and [our care] is more efficient and effective."

—Filipino Health Worker

Philippines

The Philippines suffers more natural disasters than any other country in the world, and up to 75% of poor rural women deliver at home without skilled care. Through our partnership with Stiftung Solarenergie Foundation, we continued to light up health centers affected by Typhoon Haiyan, and other GIDA (geographically isolated and disadvantaged areas) health centers. The Solar Suitcase provided reliable lighting for childbirth in 135 facilities without grid power, and those that suffer frequent brown outs. In 2015, we launched a new emergency response repository based in Manila. This program allows emergency responders to access 25 mobile units that provide a portable source of power for lighting, charging communication devices, computers and small medical devices.

Partners:
UBS Optimus Foundation
Stiftung Solarenergie Foundation





"The Solar Suitcase fully met my charging needs, and I will not bring a generator on my next deployment."

— Dr. Ted Esguerra, Philippines

"I know I was pushing the devices way beyond their capacity but I was with a big team and everyone needed something charged: laptops, satellite phones, bgans, camera batteries... the Solar Suitcases really did help."

— Bob Stanton, AmeriCares



Emergency Response

Mobile Solar Suitcases supported health workers who responded to several natural disasters in 2015. They were used after the Nepal earthquakes, after typhoons Koppu and Melor in the Philippines, and in response to Cyclone Pam in Vanuatu, a Pacific Island nation. They powered emergency communication devices, computers, and nighttime lighting for emergency responders. They are also lighting maternity tents in longer term recovery efforts. We will seek feedback from emergency responders to refine our Solar Suitcase design.



We Share Solar®



We Share Solar is our innovative student education program that gives youth the opportunity to learn about energy poverty, assemble Solar Suitcases and donate them to underserved schools and orphanages. It's STEM (Science, Technology, Engineering and Math) learning with compassion. In 2015 We Share Solar launched a pilot program with SunPower Corporation, engaging 12 teachers and 259 students in Yolo County, California. The 60 Solar Suitcases they built were quality checked by SunPower volunteers before heading out to rural schools in the Philippines – where over 8,000 schools lack electricity. Our partners at Stiftung Solarenergie Foundation in the Philippines installed 22 Solar Suitcases in schools in 2015 and plan to triple that number in 2016.



Pacific Gas and Electric Company sponsored a comprehensive We Share Solar program in California. 18 high school teachers participated in a two-day professional development workshop at the San Francisco PG&E Energy Center. Equipped with a teacher instructional kit, curriculum, and Solar Suitcase student kits, they brought the project to their schools. Over 800 students learned about energy poverty and gained solar energy literacy and STEM skills. The 80 We Share Solar Suitcases they built were prepped for international deployment. Four of these suitcases were delivered to youth groups and Maasai community centers in Mwangaza and Oloonkerin during a PG&E sponsored trip for six students and three teachers in partnership with Free the Children Kenya. The remaining student-built Solar Suitcases will provide light and charging capacity for nearly 5,000 youth who live without access to energy in Kenya and Uganda.

We Share Solar

We Share Solar has joined with Lawrence Hall of Science to create the EPICC Program (Educational Pathways into College and Careers) in Oakland, California. This 3-year project uses We Share Solar curriculum to inspire students from under-resourced schools to pursue careers in STEM. 28 high school students participated in the 2015 Summer Academy program.



Karina Garbesi, a professor of environmental studies at Cal State University East Bay, along with Erik Helgren and Hal Aronson, designed a course around the We Share Solar Program, entitled Social Impact through Sustainable Solar Design. Students not only built Solar Suitcases but learned how to teach others to build systems. They formed a Solar Power Club and assembled Solar Suitcases with students and teachers at under-resourced secondary schools.



20 international interns from Princeton University led installations of 25 Solar Suitcases in 7 different countries during their summer internships in 2015. Together, they provided electricity for over 4,000 youth in Nicaragua, Zambia, Peru, Cambodia, Uganda, and Kenya. Many ranked it as the most meaningful aspect of their three month internship.



We Share Solar partners led two innovative programs in New Jersey. At TrentonWorks, female high school artists and scientists built Solar Suitcases for the all-girls Utaani Secondary School on Pemba Island of Zanzibar, where 70% of the population live without any access to electricity. The Lawrenceville School integrated WSS into its Honors Environmental Science curriculum. Lawrenceville built nine systems in 2015, deploying three through their own international travel program to The Orkeeswa School in Tanzania.

Solar Ambassadors

In 2012, we created the Solar Ambassador program to encourage women volunteers to take leadership roles in our international trainings and deployments. The participants came from five countries and received training in solar electricity, Solar Suitcases assembly and usage, installation techniques, teaching pedagogy, and maternal healthcare. Over the last three years, Solar Ambassadors successfully led many capacity-building workshops in Africa and Asia, and helped in our We Share Solar professional development workshops in the United States. In 2015, we hosted a refresher workshop for our international Solar Ambassador trainers, and provided updates on our improved technology and curriculum. Now these women are ready to lead our programs going forward.



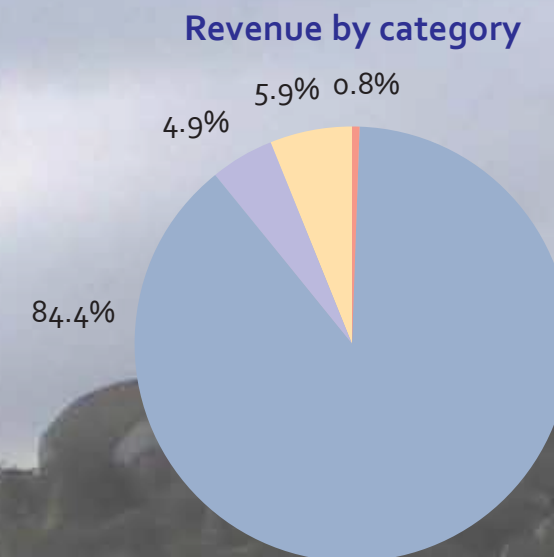
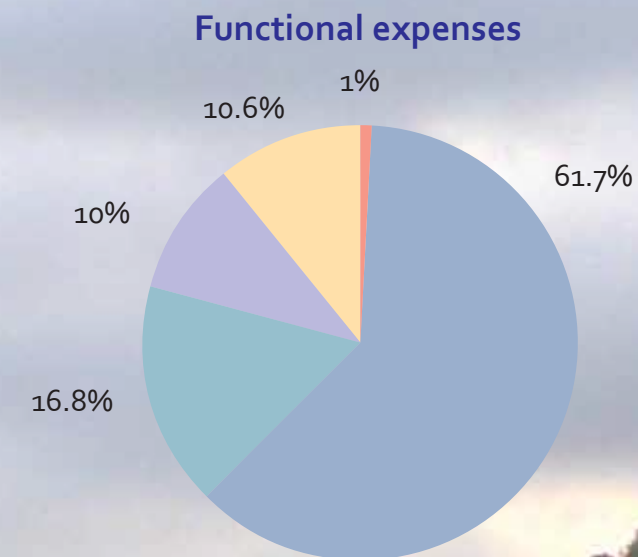
"Truthfully, I was pretty much in awe every day. Whether it be the generous and caring people we met, the students in our class, living with the reality of unreliable electricity, the grateful expectant mothers at the clinics, the children who were amazed to see a blond white woman doing electrical work...every day was an adventure and every day was a thrill."

— Laura Walters, Solar Ambassador

Statement of Activities for the Year Ended December 31, 2015 (Audited)

	Unrestricted	Temporarily Restricted	2015 Total	2014 Total
REVENUE				
Grants and donations	\$451,959	\$3,342,220	\$3,794,179	\$1,664,761
Program revenue	252,861	—	252,861	158,876
In-kind support	210,007	—	210,007	184,779
Contracts	—	—	—	431,158
Other income	35,728	—	35,728	20,438
Net assets released from restrictions:				
Satisfaction of program restrictions	2,126,806	(2,126,806)		
TOTAL REVENUE	\$3,077,361	\$1,215,414	\$4,292,775	\$2,460,012
EXPENSES				
Program services	2,407,930	—	2,407,930	1,746,576
Management and general	288,685	—	288,685	146,390
Fundraising	25,944	—	25,944	22,915
TOTAL EXPENSES	\$2,722,559	—	\$2,722,559	\$1,915,881
CHANGE IN NET ASSETS	354,802	1,215,414	1,570,216	544,131
NET ASSETS, BEGINNING OF YEAR	804,106	1,026,429	1,830,535	1,286,404
NET ASSETS, END OF YEAR	\$1,158,908	\$2,241,843	\$3,400,751	\$1,830,535

Financials



Solar Suitcase programs
 Education programs
 Research & Development
 Management
 Fundraising

Grants and donations
 Program revenue
 In-kind support
 Other income

Awards



National Energy
Globe Award



UBS Optimus Prize



International Business
Development Alumni of
the Year Award



The Princeton YMCA
Centennial Social
Responsibility Award



Receiving the UN DESA "Powering the Future We Want"
Award from Secretary General Ban Ki-moon



UCSF Alumni
Excellence Award

In September, We Care Solar received the inaugural UN DESA "Power the Future We Want" award - a \$1 million grant to continue its pioneering work. WCS received the award from Secretary-General Ban Ki-Moon, who during his opening remarks described sustainable energy as the golden thread that connects economic growth, social equity, a stable climate and a healthy environment. Dr. Stachel called upon attendees to work together to improve maternal health care with sustainable energy. "We in this room know how to solve darkness—with light," Stachel said when accepting the award. "Our goal is to put that solution in a box and get it to every health care facility in the world."

Raising Awareness



Solar Suitcase display at
Skirball Cultural Center,
Los Angeles, CA



Music for Relief
benefit concert
by Linkin Park
Los Angeles, CA



Powering Healthcare,
UN Foundation,
Dar Es Salaam, Tanzania

Earth to Paris Hub
Paris, France



World Health Organization's Access to Energy
and Health Facilities Forum, Geneva



TEDWomen 2015 Monterey, CA

Thank you

We are grateful for the generous support of individual donors and the following institutions:

Lead Funders

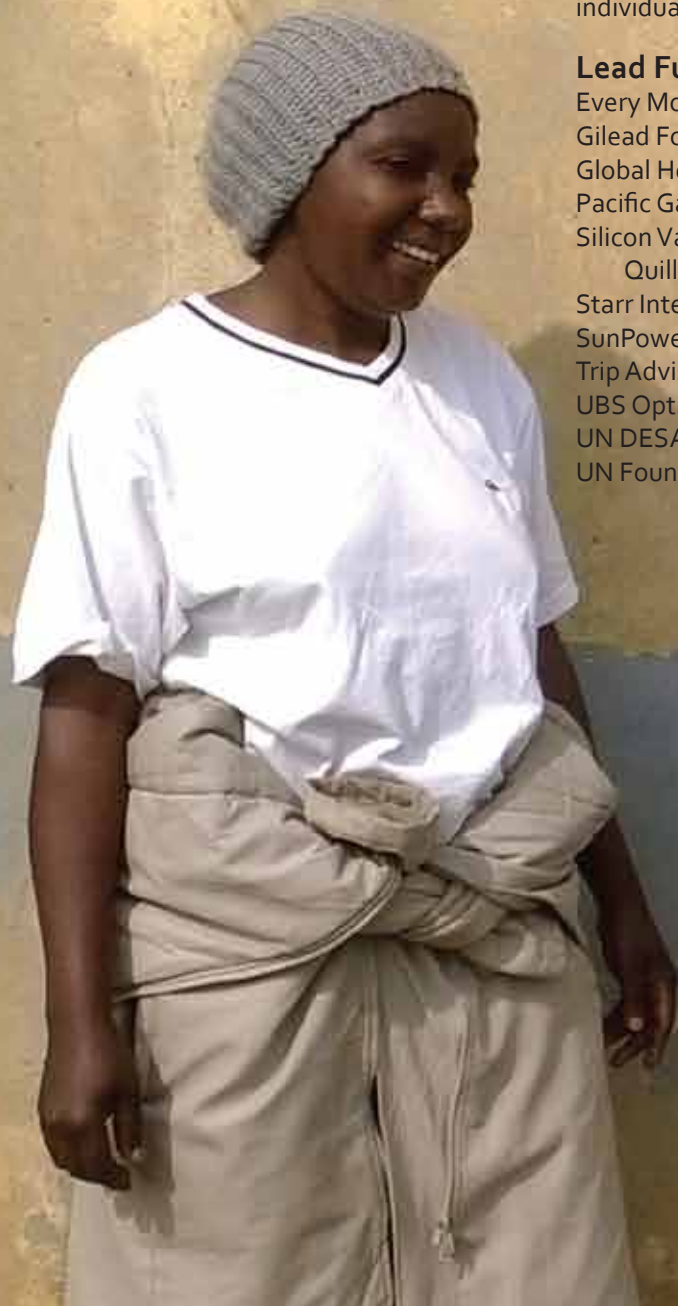
Every Mother Counts
Gilead Foundation
Global Health Foundation
Pacific Gas and Electric Foundation
Silicon Valley Community Foundation
Quillin/Hastings Fund
Starr International Foundation
SunPower Corporation
Trip Advisor Charitable Foundation
UBS Optimus Foundation
UN DESA
UN Foundation

Key Supporters

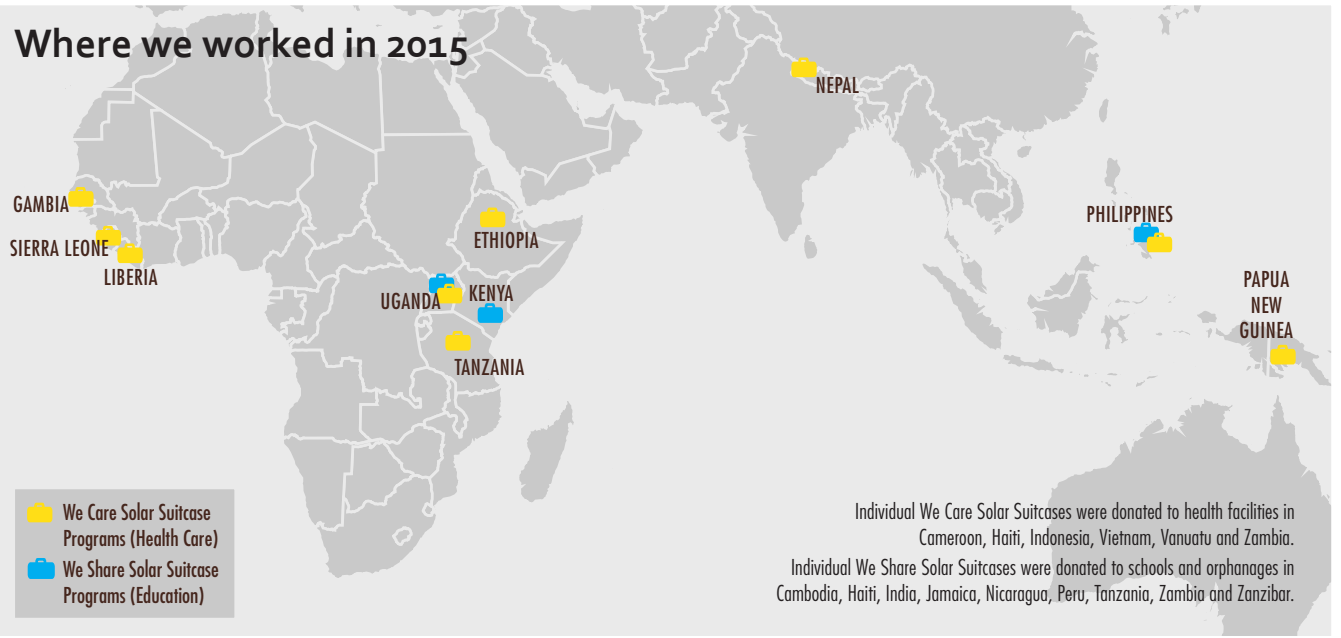
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Leslie Gutierrez
Philanthropic Fund
Montei Foundation
Music for Relief
One Heart Worldwide
Pathfinder International
Save the Children
Segal Family Foundation
Tides Foundation
Lili Ann Schad Fund
Wells Fargo Foundation

"This [Solar Suitcase] has always been the perfect partner. It has never let us down."

—Midwife, Malawi



Where we worked in 2015



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