

# Solar-Power Innovations Helping Haiti



By [Jace Shoemaker-Galloway](#) | January 21st, 2010

The 7.0-magnitude earthquake that struck Haiti on January 12th, caused not only a tremendous loss of life, but considerable damage to the nation's infrastructure. As people around the world watch the heart-wrenching images coming out of the earthquake ravaged nation, donations are pouring in.

But getting aid into Haiti has been a slow-going process, especially when the lines of communication are interrupted. Communication is critical in getting humanitarian aid, services and information into the disaster area.

But despite the overwhelming obstacles and destruction, Haiti does have one bright spot – the sun. Besides food, water, shelter and medical supplies, solar-powered devices are also being distributed – many of which will have long lasting benefits beyond the immediate crisis. Solar lighting, water purification systems, mobile phones, laptops and even Audio Bibles powered by the sun, are all being donated.



## Solar-Powered Sun Ovens

On January 28th, [Sun Ovens International](#), partnering with [Friends of Haiti Organization](#) (FOHO) and [Feed My Starving Children](#), will send nearly 300,000 meals and stand-alone solar-powered Sun Ovens to Port-au-Prince.

Sun Ovens, insulated boxes surrounded by panels of highly polished aluminum, get hot enough to boil, steam, roast or bake food at temperatures up to 360 degrees F. One commercial-sized solar oven, which can make 1,200 meals every eight hours, is already in place with two more commercial ovens en route.

A [donation of \\$40](#) will purchase one solar cooker kit for a family. One hundred percent of all donations are used to send the ovens to Haiti – no expenses are deducted. Additional shipments of the Sun Ovens are being planned.

## Solar-Powered Water Purification Systems

After the earthquake, a solar-powered mobile water pumping and purification system was pulled from the rubble of a collapsed building and moved to the International Red Cross base. The [Mobile MaxPure](#) system has been converting 30,000 gallons of contaminated water into drinkable water every day. The mobile system, from [WorldWater & Solar Technologies, Inc.](#), also supplies 3.3 kW of electric power for lights, tools or satellite communication systems and takes less than 30 minutes for two people to set up.

And in an effort to send more solar-powered water purification systems to Haiti, WorldWater launched its non-profit [WorldWater for Haiti campaign](#) Wednesday.

### **Solar-Powered Cell Phones**

Communication is critical in a crisis. [Intivation](#), which developed solar power systems for mobile devices, and mobile network operator [Digicel Group](#), are sending 1,000 solar-powered mobile phones to Haiti. The phones, equipped with built-in solar chargers, can operate in locations without any electricity. The phones will be distributed to aid workers and survivors. More than half a million of the phones have been sold since launching in June.

According to the company website, Digicel, the largest mobile network operator in the Caribbean, has donated \$5 million in cash towards the relief effort. The company will use two of its private planes to transport the phones and other goods to the area.

### **Solar-Powered Lighting**

Florida-based [Sol Inc.](#), is donating more than \$300,000 in solar lighting to Haiti. The solar-lights will provide much needed lighting for relief workers who work day or night and will provide additional security as well. The first shipment of lights will be installed at a medical clinic and orphanage. The lighting systems will also be installed at food distribution centers, relief camps and hospitals. The Tropical Solar Light Systems (TSL), take less than an hour to install and can withstand hurricane force winds.

For each donated TSL, the company will donate a second light as part of the [Sol's Haiti Earthquake Relief Matching Program](#).

### **XO Laptops**

According to the [One Laptop per Child](#) (OLPC) blog, the non-profit organization will be sending a consignment of free, ruggedized [XO laptops](#) to aid and reconstruction groups in Haiti. Free solar-charging backpacks are available.

### **Solar-Powered Audio Bibles**

Many of the survivors have lost everything and many thousands are sleeping on the street. [Faith Comes by Hearing](#), a provider of audio Bibles, is offering its own form of hope and comfort to the millions of people affected by the disaster. It is partnering with disaster relief organization Convoy of Hope to distribute 600 portable, solar-powered Audio Bibles. This device, called The Proclaimer, has a built-in generator and solar panel to charge the battery, which can play for 15 hours. The organization is hoping to donate another 2,500 solar-powered devices.