

BUILDING SUSTAINABLE COMMUNITIES

We place the power to create, use and sell alternative energy into the hands of the worlds poorest people.

Energy for Off-Grid Populations



- Solution must be radically affordable
- Solution must scale rapidly
- Solution must be robust, designed to serve a rural population in varied terrain.

Sirona's Program brings light to 1,000 people per day at a cost of a penny per day per person.

Sirona's Background

- Started the Jatropha Program in Haiti in January of 2009
- Partnered with the IEEE in 2010 to design an energy solution for off-grid communities and culturally appropriate, sustainable business plan.
- □ Deployed the first 6 solar stations in 2011
- Today we operate 14 charging stations and can provide energy to 1400 homes. We are adding an additional 3100 homes with funding from UNEP/Government of Norway.

Sirona's Program is designed for the 80% of Rural Haitian households that lack access to basic energy.



- Brings communities to the first tier of energy access as defined in the UN Millennium Development Goals
- Empowers and encourages self-reliance
- Based upon a sound business strategy, not charity



Program Centers on Small Battery Kits "Ti Soley" Rented to Home Customers



Kits Includes:

- One Battery with 9 Usable Amp-Hours
- Two DC Power Outlets
- Two 4 Watt LED Lights and Bases
- One USB port
- 30' Wiring for Lights
- Flashlight
- Volt Meter
- Sturdy Plastic Case



Program Centers on Small Battery Kits "Ti Soley" Rented to Home Customers



On One Charge, the kits can:

- Run 1 Light for 31 Hours;
- Run all 3 Lights for 9 Hours;
- Charge 9 cell phones;
- Charge a laptop battery 1.5 times; or
- Run a Small Radio for two days



Batteries Are Recharged At 1.5 kW Solar Charging Stations





Sirona's Program

- □ Each solar station is run as an individual franchise.
- Franchisees select 100 customers and collect their deposits
- Customers pay a flat monthly fee for the ability to recharge their kits as needed (\$6.25)
- □ Franchisees pay Sirona a franchise fee each month (\$300) and the balance of customer payments stays with the franchisee.
- Sirona sends a technician monthly to monitor each station

How Sirona's Program Works:



- Customers pay on average less than they are paying for kerosene/cell phone charging to have electricity at home (\$6.25 monthly vs. \$10.50 monthly)
- Payments go toward:
 - Service and Maintenance
 - Additional Equipment (scale)
 - □ Community enhancement (revenue stream)



Branding

Sirona creates a culturally appropriate brand to ensure customer reception to the product





Partnership Brings Opportunity



National Level: Sirona's work enhances that of the national utility. We provide energy to communities that lack access to the grid, and we train customers to pay for energy. We compliment the national utility rather than compete with it.

Community Level: Sirona supports and enhances local programs. Through partnering we bring new possibilities: We Build Sustainable Communities





Scalability



Deployment of a solar station that serves 100 homes requires a pickup truck and a team of two.

- Equipment is unloaded and set up in an hour
- Franchisee is re-trained by the setup crew
- Customers begin receiving service immediately

A team of two can deploy two units per day to serve 200 homes, or 1,000 people

Radical Affordability



Sirona's equipment life is 10 years and is regularly maintained as part of our model. We assume a household of five for our calculations:

- Unit cost is \$22,500 including the solar station and 100 Ti Soley kits with lights
- The equipment cost per home is \$225
- Over ten years the cost is \$22.50/year
- Each month, the cost per home is \$1.88/month
- Each day, the cost per home is \$0.06/day
- Each day, the cost per person is \$0.01/day

The per person cost is a penny a day for access to energy



Sirona's Program Works

Sirona is using alternative energy to move people from charity into self-sufficiency

Jeremie, Haiti: Orphanage director is now able to support his 54 children through revenue generated as a Sirona franchise Operator. He has pride, he has dignity, he is providing a critical service for his community, and he is self-sufficient.







- Developed sustainable business plan
- Demonstrated viability and usability of technology
- Demonstrated Interest of Local Market in Product (current waiting list exceeds 2,000 homes)
- Demonstrated interest of local entrepreneurs in operating franchise businesses
- Successful 2 Year Pilot with 14 operating stations, zero theft
- Built foundational funding partner relationships: USAID, UNEP
- Developed relationships with solid manufacturing partners

Goals:



- □ Connect with new organizations
- Grow/Scale Sirona's program in Haiti and internationally
- Help serve the international need for energy: 1.4 billion people need access to affordable energy solutions

Through the practical application of technology and business principals we can build truly sustainable communities.

For more information



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Sirona Cares Foundation is a California corporation and a registered 501(c)3 nonprofit.