



# SunSaluter

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# Practical way to generate electricity

## The SunSaluter

An intuitive, gravity-powered device that helps solar panels follow the sun, while providing clean water.

- Produces 40% more electricity per day
- Powered by water displacement
- Filters at least four liters of water per day
- Easy assembly and maintenance
- Inexpensive

# Global – For Developing Countries

## Current Deployments

Mpala, Kenya



Nyakasimbi,  
Tanzania



Kirindi, Uganda



# The Goals!

- ▶ Aims to increase energy and clean drinking water accessibility to off-grid communities.
  - ▶ Drinking water can be contaminated
- ▶ Mitigate the environmental and health implications from traditional energy and water sources.
  - ▶ Families choose electricity instead of water
- ▶ Helps to eliminate the need for villagers to travel to areas with grid electricity.
  - ▶ Reducing fuel consumption and increasing quality of life.

# Profile – Eden Full, Founder

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- ▶ An aspiring product designer interested in human-centred appropriate technology
- ▶ Awarded \$100,000 by the Thiel Foundation
  - ▶ Full had to drop out of college.
- ▶ Tinkered with solar technologies since age ten.
- ▶ Inventor of the SunSaluter
- ▶ Junior in Mechanical Engineering at Princeton University
- ▶ Canadian Nationality
- ▶ To give back for all of the support she has received over the years, Eden tells her story with the SunSaluter in schools and youth programs everywhere from West Philadelphia to rural Indonesia



# The Social Problem

- ▶ Bring affordable electricity and clean water to impoverished areas.
- ▶ Often families must choose one or the other in remote/off-grid areas
- ▶ Water supplies are not generally safe; sanitation method must be low-cost and low-energy to also afford electricity

# Further Challenges

- ▶ Many off-grid areas still exist in developing world; limits energy sourcing options
- ▶ Fuel and time is saved by bringing solar energy (source) to these communities rather than traveling to 'on-grid' areas
- ▶ SunSaluter designs region/application specific products/ solutions.

# Step One: Morning

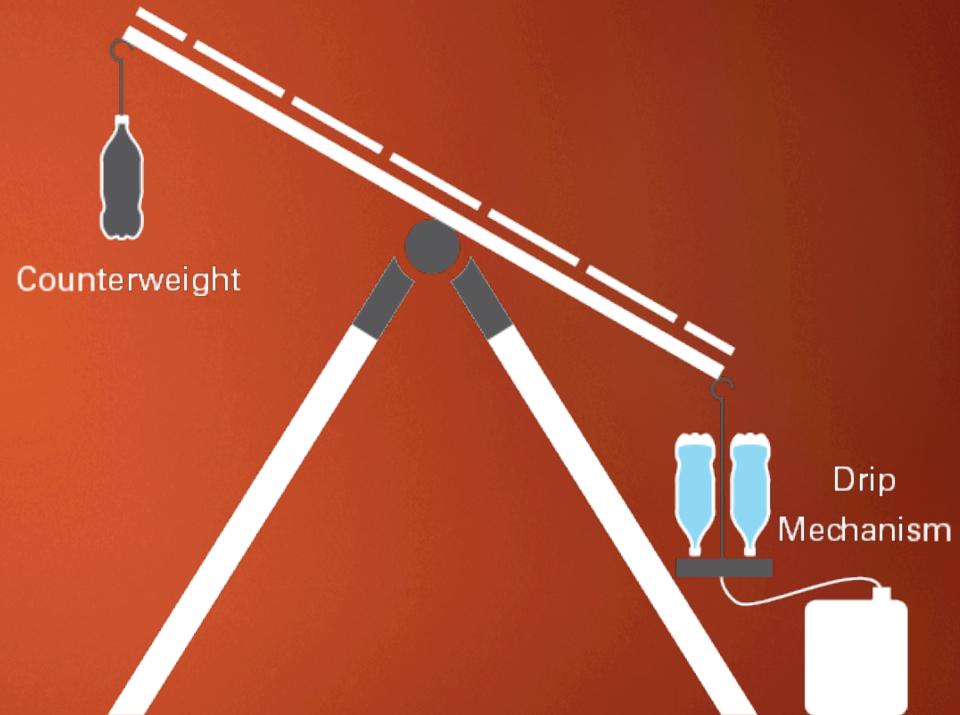
Collect four liters of water



## Step Two

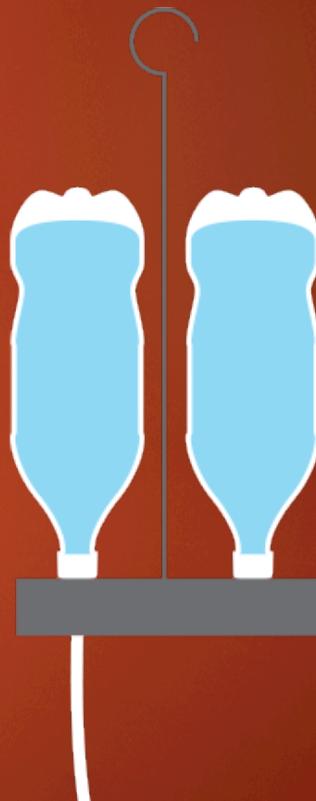
Set up water bottles in the drip mechanism. Adjust the flow rate.

Attach a counterweight to the other side.



# Step Three

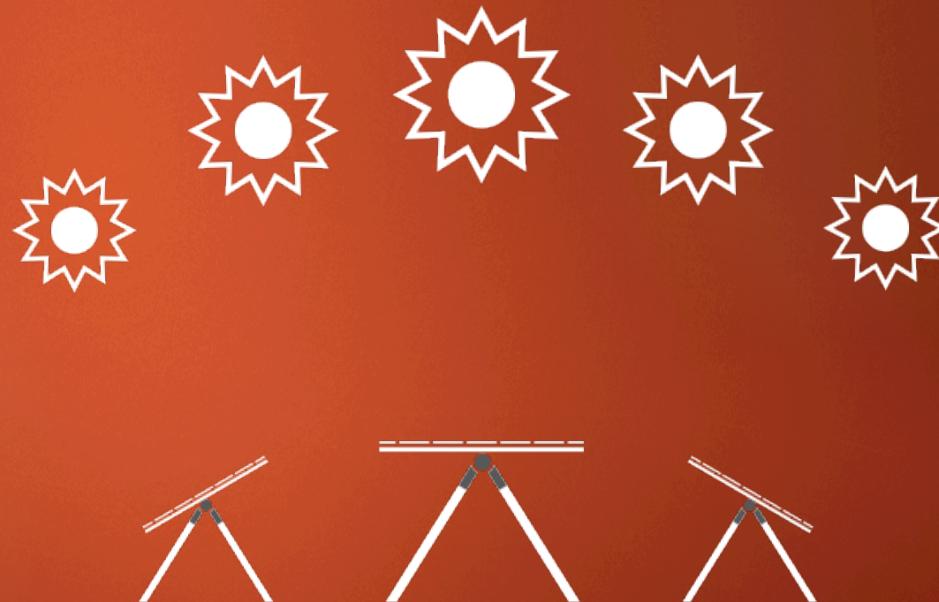
The water flows into a receiving container and is filtered



# Step Four: Mid-Day

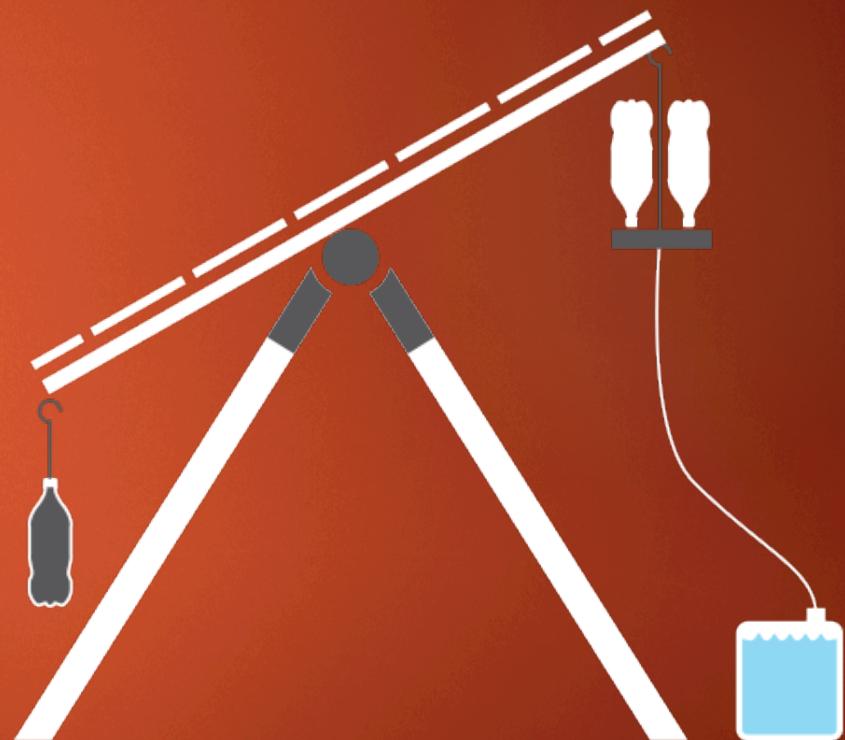
As the water is filtered, the SunSaluter rotates to follow the sun.

Filtered water can be collected for use at any time.



# Step Five: Sunset

At the end of the day, 40% more power and at least 4 liters of clean water are produced.



# Marketplace

## SunSaluter

1. Physical mechanics
2. Simplicity
3. Easy to setup
4. Easy to maintain
5. Targets the developing world

## Other Solar tracking companies

1. Highly mechanized
2. Computerized
3. Costly
4. Targets 1<sup>st</sup> world countries
5. Complex setup

# Business Models

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## Assembly Model

- High quality control
- Strong interactions with end-user
- Better understanding of locals

## Franchising Model

- Sell “SunSaluter business in a box” to local entrepreneurs
- SunSaluter takes a percentage of revenues
- High level of control

## Licensing Model

- Annual recurring revenue from license renewals
- Low level of control
- Low concern with brand

# Current Business Model

1. Create a joint venture with solar manufacturer, already in business in target area.
2. Initial funding by doing pilot projects for market testing and create customer demand. (*Assembly Model*)
3. Eventually manufacturer's will maintain operations while giving SunSaluter a small royalty fee. (*Franchising Model*)

# Scaling

- ▶ Two year goal : Expand the SunSaluter solution to India.
- ▶ Currently working with
  - Hatfield Engineers: Technical expertise to manufacture
  - Frontier Markets: Experience with target customers to execute their market plan.

Thank you