Energy

Two billon people worldwide lack access to affordable energy. The use of firewood and charcoal for cooking and heating has led to deforestation, health problems, and fire damage. The solar cooker is an inexpensive solution to these problems made from locally available materials and powered by a free energy source; the sun.

Solar Oven Prototype

Water

1.1 billion people worldwide lack access to potable water. The solution? The SODIS Water Farm. This water farm is constructed using the least expensive materials - plastic bottles and sunlight. The farm uses solar radiation to neutralize bacteria in contaminated water, stored in clear plastic bottles. The process takes one day (two under overcast skies) and is able to provide entire villages with access to clean water.

Water Farm Prototype

The Problem

3 billion people, half of the world's population, live on **less than $2/day.**

The Objectives

1. To develop two prototype solutions to water and energy problems faced by the world's poor
2. To increase IIT awareness of the problems of the world's poor

From left to right:
(Top Row) Danny Kim, Ricardo Gonzalez, Brain Schiller , Jeremy Locquiao, Nikola Baltadjev,
(Bottom Row) Tony Osborn, Jaime McClain, Justin Harris, Ray DeBoth, Sara Miller

Designing Extremely Affordable Products for the World's Poor

We spent the semester developing prototype solutions to acute problems facing the world's rural poor in the areas of water and energy. Based on testing of these prototypes and research about the geography and culture of people affected, we have developed concrete strategies for implementation. Because of the work of our team, these prototype solutions are ready to help those who so desperately need it.

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INTERNATIONAL DEVELOPMENT ENTERPRISES

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Designing Extremely Affordable Products for the World's Poor