

Parabolic Solar Collector

Rotating Trough Design

The Problem

- To make a solar collection unit from \leq \$50
- To heat 0.5 Litres of water over 2 hours
- To make the design repeatable and manufacturable

Don't you wish you could help to counteract global warming?

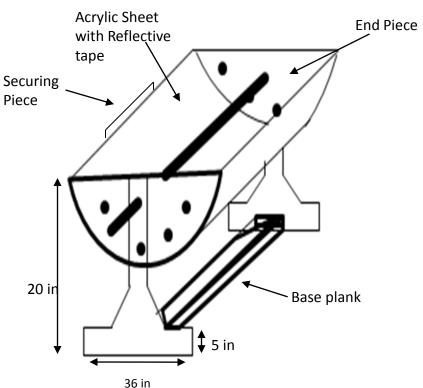
Background

- Types of reflective surfaces:
 - Lens, mirror, polished metal, foil tape
- Types of light-concentrating shapes:
 Parabola, catenary, 2D, 3D
- Types of frames:
 - Suspended, fixed stand

Our Solution

The Parabolic Solar Collector

- Parabolic trough
- Fixed stand
- Rotating trough
- Foil tape
- Focal line
- < \$50 per unit



Every household could have one

Progress

 Estimated to boil water in full sun and heat the water in cloudy conditions

