

Solar Recycl-o-Sort



Customer

The Solar Recycl-o-Sort will take part in a recycling awareness campaign put forth by Family, Inc. of Codman Square in Dorchester, MA and will also play into a city wide Anti-Litter campaign to be launched in the Fall. Codman Square residents have requested a fun and interactive recycling bin that can ameliorate the current trash overflow problem in the merchant district of Codman Square.

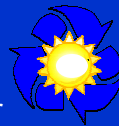
The average person uses over 300 plastic bottles in one year.

75 billion plastic bottles and aluminum cans are recycled in the US per year. That is enough to fill Codman Square's Commercial District over 20,000 times.

Recycled plastic can be made into items ranging from clothing to park benches, including carpets, school supplies, and children's toys.

Blue Team Members

Ellen Chen
Sam Jasinski
Barnett Koryan
Jack Vivian
Nancy Diaz
Joyce Gallagher
Ali Alhassani
Amanda Poteet



Diana Wang
Ben Pope
Kate Weston
David Kalk
Mark Spadafora
Rosita Rodriguez
Jon Schechter
Cynthia Lin

Special Thanks!

David Wallace
Doug Vincent
Maria Yang
Jane Connor

Dick Fenner
Joe Cronin
James Dudley
Bob Gertsen
Steve Haberek
Bob Nuttal

Cynthia Loesch, Family Inc.

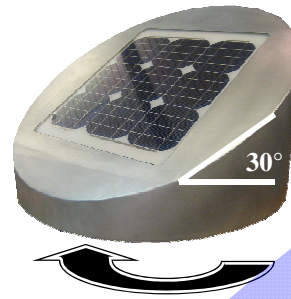


Promoting recycling...
one bottle at a time.

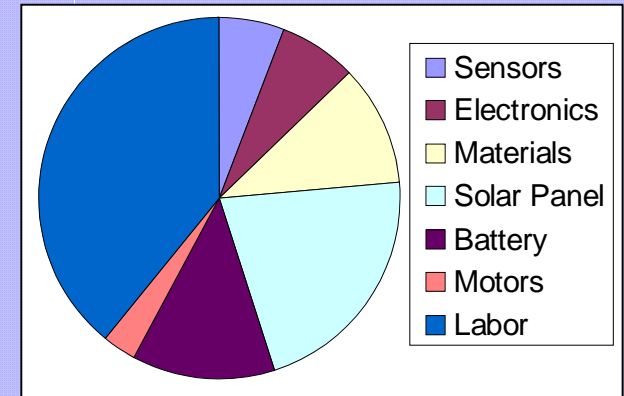
Team Blue

Power Usage

- 20-W solar panel: angled & adjustable for maximum efficiency
- 58 Amp-hr battery: stores power for use after dark



Cost Breakdown



Sorting

- Depression, induction, and light sensors distinguish between aluminum, glass and plastic beverage containers.

Distribution

- Separate storage for each material.
- Actuated by a turntable mounted on a motor.

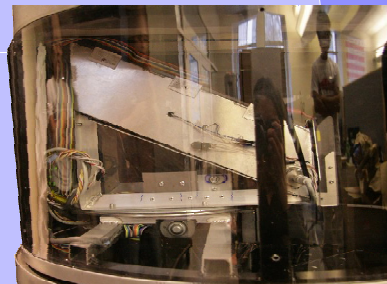
	Depression	Induction	Transparency
Aluminum	Yes	Yes	No
Glass	No	No	Yes
Plastic	Yes	No	Yes
Trash	Yes	No	No

Total Mfg Cost: \$700
Market Cost: \$2,100

- Customer's willingness to pay: \$1000-\$4000
- Sell 2-3 units to 1% of U.S. municipalities within 5 years
- Price comparison: Big Belly priced at \$4300

Interactive User Interface

- Users can view sensing & distribution
- LED displays material type



Recyclable Collection

- Recyclables stored in a large plastic bin
- Bins accessible through locked service door



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