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.

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

Sorting

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

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Induction</th>
<th>Transparency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Glass</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Plastic</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Trash</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Distribution

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

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

Cost Breakdown

![Pie chart showing percentage of cost breakdown](chart.png)

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

Solar Recycl-o-Sort