Pedal Power

“Working for a Bluer World”
Problem

• Our goal:

   *Energy conservation and recovery*

• An estimated **33.8 million people** in the US belong to a health club¹

• The average member works out **93 days per year**¹

• Our problem:

   *How to harvest the energy expended during exercise into a useable form?*

¹http://cms.ihrsa.org/index.cfm?fuseaction=Page.viewPage&pageId=18810&nodeID=15
Market

- $3 billion industry
- Over 21,000 Health Clubs nationwide
- 20,000 new bikes purchased annually
- Primary Contact:
  Ed.Trainor@toen-sports.com

Design Requirements

• Comparable Performance
  *Aesthetics, Ergonomics, Operation*

• Comparable Price Range
  \$2000 - \$3000³

³usafitnessdirect.com, efitnessdirect.com, ironcompany.com
Feasibility

8.6 million gym goers per day
\times
100 \text{ Watts per member}
\times
30 \text{ minute workout}
=
430 \text{ MW*hrs Electricity}
<
1/24 \text{ Daily output of smallest U.S. nuclear plant (12 GW*hrs)}^4

^4 \text{ Nuclear Regulatory Commission <http://www.nrc.gov/info-finder/reactor/fcs.html>
Product Benefits

- Zero Emission Power Generation
- Eliminates CO$_2$ from the atmosphere daily
- Health Clubs market themselves as “Green”