

**FORESIGHT  
DESIGN  
INITIATIVE**



**SUSTAINABLE 05**

**C H A L L E N G E**



**Sustainable  
Design Challenge**

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**12.1.05**

# Introduction

## Background

Plastic bags were introduced to stores 25 years ago and have since become a staple in the way shoppers transport their groceries home. Today, 4 out of every 5 grocery bags are plastic. Worldwide, between 500 billion and one trillion plastic bags are consumed each year, while Americans alone use 84 to 100 billion of them annually. Of this huge number, only 1 to 3% are recycled into new products. The rest go from the consumer to the landfill where they take an estimated 500 years to decompose. Each year plastic bag manufacturing consumes 12 million barrels of oil. The city of San Francisco spends \$8.5 million annually to clean up and deal with plastic bags. Chicago, with a population almost 4 times that of San Francisco, certainly spends more.

Retail industries spend a significant amount on plastic bags, costs that are ultimately passed on to consumers. Considering Americans throw away up to one hundred billion plastic bags each year, and each bag costs stores roughly four cents, the annual impact adds up to \$4 billion! Despite this, when consumers at local grocery stores were asked to consider how they might transport their groceries if there were no plastic bags, few were able to think of a viable alternative.

## Paper or Plastic?

So what is preferable, paper or plastic? According to a report by the Institute for Lifecycle Environmental Assessment, updating and summarizing an analysis by Franklin and Associates Inc.<sup>1</sup>, at 2002 recycling rates “two plastic bags use less energy and produce less solid, atmospheric, and waterborne waste than a single paper bag.”<sup>2</sup> Most people have a sense of the problems with plastic bags, but no viable solution. The bottom line is neither paper nor plastic offers a sustainable and environmentally sound answer to the problem of transporting groceries home from the store. An alternative must be sought.

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<sup>1</sup> Resource and Environmental Profile Analysis of Poly ethylene and Unbleached Paper Grocery Sacks, 1990

<sup>2</sup> <http://www.ilea.org/lcas/franklin1990.html>

## Paper, Plastic or . . . ?

Consider Jane Consumer as she proceeds through the check-out line of any grocery store. What factors are at play when she hears the question asked, “Paper or plastic?” Does she consider which bag is easier to re-use; or which one will make her 15-minute trip home easier? Does she think about the growing bulge of bags under her sink or the expansive landfills inundated with once-used and discarded bags? And what about the retail store? What questions are they asking about Jane’s use of grocery bags? Why is it that they don’t seem to care how many double bags are used to carry a can of tuna? Industry and policy are shaped to accommodate the misconception that bags are free and must remain so. The key to success in this challenge is understanding which parties are invested in maintaining this notion.

Your task is to propose a viable alternative to “Paper or Plastic” from policy-, advocacy-, and product-based perspectives (all three or just one). Solutions should consider the social, economic, and environmental factors involved. More than merely a design exercise, the Challenge is expected to generate a wealth of ideas to inspire change in Chicago, as well as in other locations around the world. All entries and related resources will be posted online at [www.betterbags.org](http://www.betterbags.org) with the winners in each category receiving special recognition. Foresight will also choose from among the submitted ideas and attempt to implement its selection(s) over the coming year in Chicago.

Let the (sustainable) designing begin!



Peter Nicholson  
*Executive Director*  
Foresight Design Initiative

# 2005 CHALLENGE— Paper or Plastic or . . . ?

## PREMISE

*The existing grocery bag paradigm is unsustainable.*

Design an alternative system to reduce the vast consumption of grocery bags in the city of Chicago. The solution should be able to be implemented, entirely or in part, over the course of next year. The plan should adhere to the following definition of sustainability:

*Sustainability occurs when a society can meet the needs of people today without compromising its ability to meet the needs of tomorrow. In a sustainable society, economic, social and environmental concerns are adequately addressed, in a way that does not ignore the interconnected, systemic, and often, global nature of these concerns.*

## SCOPE

Propose a plan for resolving the “Paper or Plastic?” conundrum. While we strongly encourage teams to formulate holistic solutions addressing each of the three areas below, they may opt to focus their entries on just one. Awards will be given to best solution in each category as well as best overall/holistic approach. Teams may win in more than one category.

- Policy
- Advocacy
- Product Design

Conceiving “a better bag,” while admirable and desirable, is not enough. How will the bag come into widespread use? Where will it be made? How? By whom? Economic, environmental and social factors should be adequately considered and balanced.

## DELIVERABLES

- Detailed Design Brief
  - Should clearly and concisely describe and/or illustrate the proposed solutions in all three (strongly encouraged) or any one of the following areas: Policy, Advocacy, and Product Design.
  - Should be well developed and contain enough detail to be readily implemented (sketches, charts, diagrams encouraged).
  - Should include supporting research and analysis.
- 3-minute oral presentation with the purpose of selling your solution is optional, though encouraged. It will not be considered during the review process. Submissions will be judged on the design brief alone. If you cannot be physically present, other forms of audio-visual presentations will be accepted and viewed (e.g. video).
- Prototypes (as applicable)

## CULMINATING EVENT

Foresight's Chicago Green Drinks on Thursday, January 19, 2006 will be devoted to presenting information about the problem of grocery bags in general, and the proposed solutions specifically. Teams are encouraged to prepare a 3-minute presentation to be delivered live or else projected (e.g. digital video) at the event. All teams will receive free admission to the gathering. For more information about Chicago Green Drinks, including exact location and time, visit: [www.chicagogreendrinks.org](http://www.chicagogreendrinks.org)

## REVIEW CRITERIA

An independent panel of prominent professionals will evaluate proposed solutions in each area (Policy, Advocacy, Product Design), as well as those addressing all three, according to the following criteria:

- *Economic Viability*: How feasible is the plan from an economic point of view? What are the costs? How will the plan generate income? Is it self-sustaining?
- *Social Sensitivity*: Who will it impact? How? Does the implementation address social inequities?
- *Environmental Sustainability*: How environmentally sustainable is the solution? Does it merely mitigate the vast consumption or actually reverse the environmental damage done thus far?

## AWARDS

The Chicago Sustainable Design Challenge isn't about winning. It's about doing. The process is ultimately its own reward. The Challenge promises an opportunity for significant public exposure. Four winners will be named, one in each category and one for the best approach to all three. Teams may win in more than one category. The winner of each category will receive a bottle of (organic) merlot from Bonterra Vineyards as well as a year's worth of carbon offsets purchased and retired from the Chicago Climate Exchange (up to 100 tons total). They will also be prominently featured on the [betterbags.org](http://betterbags.org) website. More important than winning, the Foresight Sustainable Design Studio will consider all ideas submitted for implementation over the next year. *Foresight reserves the right to select from among all proposed solutions, not just the winning entries.*

## PROCESS

Each team will devise their own method for completing their entry. An early start is strongly encouraged. Sustainable design is often compromised when confronted by time constraints. Effective project management is a key component to producing an outstanding entry.

### How to Participate:

1. *Assemble*: Form a team (groups of 3-4 members are recommended, but there is no minimum or maximum size). Team diversity is highly recommended.
2. *Register*: Complete and submit the entry form, along with a \$50/team registration fee, as soon as possible (no later than Tuesday, November 1).
3. *Create*: Design your alternative grocery bag system and submit your design brief, including product prototypes, if applicable, by the deadline (Thursday, December 1).
4. *Present (as applicable)*: We will host presentations at Chicago Green Drinks on Thursday, January 19, 2006. All teams will receive free admission and three minutes to present their solutions.

## THE DETAILS

### Eligibility

The Chicago Sustainable Design Challenge is open to all. Foresight encourages entries representing different perspectives; diverse teams are strongly encouraged. The staff and board of the Foresight Design Initiative and the competition jury are not eligible to participate in the Challenge.

### Deadlines

*REGISTRATION*: received by Tuesday, November 1, 2005

*ENTRIES*: received by Thursday, December 1, 2005

*PRESENTATIONS*: Thursday, January 19, 2005.

### Copyright Information/Intellectual Property

- Foresight Design Initiative Inc. assumes all entries are original and are the works and property of the entrant, with all rights granted therein.
- Foresight is not liable for any copyright infringement on the part of the entrant.
- By submitting an entry, the team acknowledges the right of the Foresight Design Initiative, Inc. to exhibit, publish, and otherwise disseminate the entries in whole or in part.
- Foresight requests the right from teams to work toward implementing any proposed solutions. In the case of product design, Foresight will request a rights waiver before pursuing implementation.

### Multiple Submissions

One submission per team is allowed. However, participants may contribute to the work of an additional team if the second team shares less than half of the same participants.

### Returns

All submitted materials become the property of the Foresight Design Initiative, Inc. and will not be returned.

## **Contact**

For more information contact:

Rob Olden

*Program Assistant*

Foresight Design Initiative, Inc.

2255 West Giddings, Bsmt.

Chicago, IL 60657

(312) 670-7812

rob@foresightdesign.org

And/or visit the Challenge website:

[www.foresightdesign.org/challenge](http://www.foresightdesign.org/challenge)

## **ABOUT—Foresight Design Initiative, Inc. (a.k.a. o2-Chicago)**

The Foresight Design Initiative, Inc. seeks to foster a more sustainable future by altering the practices of industry, focus of design professions, and patterns of consumption. The organization acts as both catalyst and embodiment of the evolution it is pursuing. It aims to:

- Encourage adoption of sustainability and eco-design principles through educational opportunities for professionals and the public;
- Create more responsible design-related policies by supporting research, raising awareness, and promoting action;
- Implement current knowledge through projects that employ more sustainable services, technologies and ideas.
- These objectives are accomplished by a broad network of students, design practitioners, related professionals, public officials, and leaders from the business and non-profit arenas.

## **ABOUT—Reviewers**

Jonathan Boyer,

*Principal*

Farr Associates

Sadhu Johnston

*Commissioner*

Department of Environment, City of Chicago

Stephen Madul-Williams

*President*

Chicago Community Ventures

Judith Stockdale

*Executive Director*

Gaylord & Dorothy Donnelley Foundation



## Chicago Sustainable Design Challenge 2005 REGISTRATION

Please send an email to Program Assistant Rob Olden ([rob@foresightdesign.org](mailto:rob@foresightdesign.org)) upon deciding to participate informing the Foresight Design Initiative of your intent to register. You will be added to the expected registration list and sent important additional information.

1

Team/Project Name: \_\_\_\_\_

2

### TEAM CONTACT (primary)

3

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
(e.g. organization/school/business (if applicable))

Address: \_\_\_\_\_  
Street Apt/Suite City St. Zip

Email: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

### TEAM CONTACT (secondary)

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
(e.g. organization/school/business (if applicable))

Address: \_\_\_\_\_  
Street Apt/Suite City St. Zip

Email: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

### ADDITIONAL TEAM MEMBERS

*(Note: all team members need not be identified prior to registration.)*

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
(e.g. organization/school/business (if applicable))

Email: \_\_\_\_\_

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
(e.g. organization/school/business (if applicable))

Email: \_\_\_\_\_

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_  
(e.g. organization/school/business (if applicable))

Email: \_\_\_\_\_

*(Attach additional sheet, if necessary, for more team members)*

